UNCLASSIFIED

Department of Defense
Fiscal Year (FY) 2024 Budget Estimates

March 2023

Navy

Justification Book Volume 2 of 5

Other Procurement, Navy

Budget Activity 02

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Other Procurement, Navy

For procurement, production, and modernization of support equipment and materials not otherwise provided for, Navy ordnance (except ordnance for new aircraft, new ships, and ships authorized for conversion); the purchase of passenger motor vehicles for replacement only; expansion of public and private plants, including the land necessary therefore, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway, $14,535,257,000, to remain available for obligation until September 30, 2026, of which $1,027,000 shall be available for the Navy Reserve and the Marine Corps Reserve: Provided, That such funds are also available for the maintenance, repair, and modernization of ships.

Fiscal Year (FY) 2024 Overseas Operations Costs funding accounted for in the Base budget total [$46,435,000].

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Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1810N BA Summary

(Dollars in Thousands)

Appropriation: **Other Procurement, Navy**	FY 2022 Actuals	FY 2023 Less Supplementals Enacted	FY 2023 Supplementals Enacted*	FY 2023 Total Enacted	FY 2024 Request
Budget Activity					
01. Ships support equipment	4,267,668	4,714,192		4,714,192	5,776,998
02. Communications and electronics equipment	3,281,303	3,299,809		3,299,809	3,967,071
03. Aviation support equipment	737,556	957,476		957,476	924,487
04. Ordnance support equipment	1,043,088	1,209,869		1,209,869	1,256,530
05. Civil engineering support equipment	156,510	159,226		159,226	183,019
06. Supply support equipment	690,832	651,632		651,632	699,764
07. Personnel and command support equipment	502,251	564,073	2,170	566,243	611,488
08. Spares and repair parts	445,621	582,313		582,313	1,115,900
Total Other Procurement, Navy	**11,124,829**	**12,138,590**	**2,170**	**12,140,760**	**14,535,257**

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
Budget Activity 01: Ships support equipment									
Ship Propulsion Equipment									
1	Surface Power Equipment	A	U	0	41,414	0	46,478		
Generators									
2	Surface Combatant HM&E	A	U	0	78,054	0	74,585		
Navigation Equipment									
3	Other Navigation Equipment	A	U	0	72,300	0	87,800		
Other Shipboard Equipment									
4	Sub Periscope, Imaging and Supt Equip Prog	A	U	0	209,792	0	261,011		
5	DDG Mod	A	U	0	535,667	0	744,341		
6	Firefighting Equipment	A	U	0	13,970	0	18,552		
7	Command and Control Switchboard	A	U	0	2,194	0	2,406		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
Budget Activity 01: Ships support equipment							
Ship Propulsion Equipment							
1	Surface Power Equipment	A	U	0	46,478	0	14,003
Generators							
2	Surface Combatant HM&E	A	U	0	74,585	0	105,441
Navigation Equipment							
3	Other Navigation Equipment	A	U	0	87,800	0	110,286
Other Shipboard Equipment							
4	Sub Periscope, Imaging and Supt Equip Prog	A	U	0	261,011	0	262,951
5	DDG Mod	A	U	0	744,341	0	628,532
6	Firefighting Equipment	A	U	0	18,552	0	34,782
7	Command and Control Switchboard	A	U	0	2,406	0	2,458

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
8	LHA/LHD Midlife	A	U	0	119,428	0	38,200		
9	LCC 19/20 Extended Service Life Program	A	U	0	1,401	0	20,028		
10	Pollution Control Equipment	B	U	0	15,659	0	11,607		
11	Submarine Support Equipment	A	U	0	88,284	0	116,575		
12	Virginia Class Support Equipment	A	U	0	22,669	0	32,300		
13	LCS Class Support Equipment		U	0	9,640	0	22,238		
14	Submarine Batteries		U	0	21,834	0	24,137		
15	LPD Class Support Equipment		U	0	22,093	0	53,350		
16	DDG 1000 Class Support Equipment	A	U	0	71,561	0	314,333		
17	Strategic Platform Support Equip	A	U	0	12,256	0	13,504		
18	DSSP Equipment	A	U	0	3,282	0	3,660		
19	CG Modernization	A	U	0	138,926	0	59,054		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
8	LHA/LHD Midlife	A	U	0	38,200	0	104,369
9	LCC 19/20 Extended Service Life Program	A	U	0	20,028	0	10,529
10	Pollution Control Equipment	B	U	0	11,607	0	23,272
11	Submarine Support Equipment	A	U	0	116,575	0	112,526
12	Virginia Class Support Equipment	A	U	0	32,300	0	32,076
13	LCS Class Support Equipment		U	0	22,238	0	18,832
14	Submarine Batteries		U	0	24,137	0	28,221
15	LPD Class Support Equipment		U	0	53,350	0	91,890
16	DDG 1000 Class Support Equipment	A	U	0	314,333	0	232,124
17	Strategic Platform Support Equip	A	U	0	13,504	0	25,058
18	DSSP Equipment	A	U	0	3,660	0	4,623
19	CG Modernization	A	U	0	59,054		

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1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
20	LCAC	A	U	0	21,314	0	17,452		
21	Underwater EOD Equipment		U	0	24,146	0	35,417		
22	Items Less Than $5 Million	A	U	0	86,045	0	60,812		
23	Chemical Warfare Detectors	A	U	0	2,429	0	3,202		
Reactor Plant Equipment									
24	Ship Maintenance, Repair and Modernization	A	U	0	1,307,651	0	1,642,532		
25	Reactor Power Units	A	U	0	3,270	0	4,690		
26	Reactor Components	A	U	0	438,729	0	408,989		
Ocean Engineering									
27	Diving and Salvage Equipment	A	U	0	10,772	0	11,773		
Small Boats									
28	Standard Boats	A	U	0	135,226	0	88,562		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
20	LCAC	A	U	0	17,452	0	10,794
21	Underwater EOD Equipment		U	0	35,417	0	19,549
22	Items Less Than $5 Million	A	U	0	60,812	0	86,001
23	Chemical Warfare Detectors	A	U	0	3,202	0	3,288
Reactor Plant Equipment							
24	Ship Maintenance, Repair and Modernization	A	U	0	1,642,532	0	2,746,313
25	Reactor Power Units	A	U	0	4,690	0	2,016
26	Reactor Components	A	U	0	408,989	0	390,148
Ocean Engineering							
27	Diving and Salvage Equipment	A	U	0	11,773	0	18,086
Small Boats							
28	Standard Boats	A	U	0	88,562	0	74,963

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
Production Facilities Equipment									
29	Operating Forces Ipe	A	U	0	460,822	0	174,743		
Other Ship Support									
30	LCS Common Mission Modules Equipment		U	0	63,501	0	54,883		
31	LCS MCM Mission Modules		U	0	30,119	0	92,495		
32	LCS ASW Mission Modules		U	0	1,565	0	3,594		
33	LCS SUW Mission Modules		U	0	3,395	0	5,100		
34	LCS In-Service Modernization	A	U	0	153,726	0	116,026		
35	Small & Medium UUV	A	U	0	44,534	0	49,763		
Logistic Support									
36	LSD Midlife & Modernization		U						
Total Ships support equipment					**4,267,668**		**4,714,192**		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
Production Facilities Equipment							
29	Operating Forces Ipe	A	U	0	174,743	0	187,495
Other Ship Support							
30	LCS Common Mission Modules Equipment		U	0	54,883	0	49,060
31	LCS MCM Mission Modules		U	0	92,495	0	93,961
32	LCS ASW Mission Modules		U	0	3,594		
33	LCS SUW Mission Modules		U	0	5,100	0	12,102
34	LCS In-Service Modernization	A	U	0	116,026	0	171,704
35	Small & Medium UUV	A	U	0	49,763	0	61,951
Logistic Support							
36	LSD Midlife & Modernization		U			0	7,594
Total Ships support equipment					**4,714,192**		**5,776,998**

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
Budget Activity 02: Communications and electronics equipment									
Ship Sonars									
37	SPQ-9B Radar	A	U	0	14,209	0	12,063		
38	AN/SQQ-89 Surf ASW Combat System	A	U	0	126,871	0	140,157		
39	SSN Acoustic Equipment	A	U	0	379,492	0	446,653		
40	Undersea Warfare Support Equipment	A	U	0	13,965	0	17,424		
ASW Electronic Equipment									
41	Submarine Acoustic Warfare System	A	U	0	24,578	0	31,708		
42	SSTD	A	U	0	11,010	0	14,325		
43	Fixed Surveillance System	A	U	0	363,651	0	266,228		
44	SURTASS	A	U	0	67,500	0	25,030		
Electronic Warfare Equipment									

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
Budget Activity 02: Communications and electronics equipment							
Ship Sonars							
37	SPQ-9B Radar	A	U	0	12,063	0	7,267
38	AN/SQQ-89 Surf ASW Combat System	A	U	0	140,157	0	138,065
39	SSN Acoustic Equipment	A	U	0	446,653	0	463,577
40	Undersea Warfare Support Equipment	A	U	0	17,424	0	23,452
ASW Electronic Equipment							
41	Submarine Acoustic Warfare System	A	U	0	31,708	0	46,726
42	SSTD	A	U	0	14,325	0	14,560
43	Fixed Surveillance System	A	U	0	266,228	0	420,069
44	SURTASS	A	U	0	25,030	0	33,910
Electronic Warfare Equipment							

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
45	AN/SLQ-32	A	U	0	313,817	0	292,417		
Reconnaissance Equipment									
46	Shipboard IW Exploit	A	U	0	261,735	0	289,974		
47	Automated Identification System (AIS)		U	0	3,777	0	2,487		
Other Ship Electronic Equipment									
48	Cooperative Engagement Capability	B	U	0	24,641	0	33,200		
49	Naval Tactical Command Support System (NTCSS)	A	U	0	14,439	0	19,038		
50	ATDLS	A	U	0	100,888	0	73,675		
51	Navy Command and Control System (NCCS)		U	0	4,242	0	3,435		
52	Minesweeping System Replacement	A	U	0	15,640	0	16,336		
53	Shallow Water MCM	B	U	0	5,610				
54	Navstar GPS Receivers (SPACE)	A	U	0	33,097	0	30,439		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
45	AN/SLQ-32	A	U	0	292,417	0	329,513
Reconnaissance Equipment							
46	Shipboard IW Exploit	A	U	0	289,974	0	379,230
47	Automated Identification System (AIS)		U	0	2,487	0	4,082
Other Ship Electronic Equipment							
48	Cooperative Engagement Capability	B	U	0	33,200	0	37,677
49	Naval Tactical Command Support System (NTCSS)	A	U	0	19,038	0	15,374
50	ATDLS	A	U	0	73,675	0	50,148
51	Navy Command and Control System (NCCS)		U	0	3,435	0	3,918
52	Minesweeping System Replacement	A	U	0	16,336	0	16,814
53	Shallow Water MCM	B	U				
54	Navstar GPS Receivers (SPACE)	A	U	0	30,439	0	37,319

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
55	American Forces Radio and TV Service	A	U	0	2,513	0	2,724		
56	Strategic Platform Support Equip	A	U	0	4,823	0	6,266		
Aviation Electronic Equipment									
57	Ashore ATC Equipment	A	U	0	82,510	0	89,396		
58	Afloat ATC Equipment	A	U	0	61,502	0	79,591		
59	ID Systems	A	U	0	46,918	0	59,226		
60	Joint Precision Approach And Landing System (		U	0	35,386	0	8,186		
61	Naval Mission Planning Systems	A	U	0	16,777	0	25,092		
Other Shore Electronic Equipment									
62	Maritime Integrated Broadcast System		U	0	1,760	0	3,520		
63	Tactical/Mobile C4I Systems	A	U	0	18,790	0	27,434		
64	DCGS-N	A	U	0	16,691	0	15,606		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
55	American Forces Radio and TV Service	A	U	0	2,724	0	2,750
56	Strategic Platform Support Equip	A	U	0	6,266	0	6,437
Aviation Electronic Equipment							
57	Ashore ATC Equipment	A	U	0	89,396	0	89,237
58	Afloat ATC Equipment	A	U	0	79,591	0	90,487
59	ID Systems	A	U	0	59,226	0	59,234
60	Joint Precision Approach And Landing System (		U	0	8,186	0	3,343
61	Naval Mission Planning Systems	A	U	0	25,092	0	39,180
Other Shore Electronic Equipment							
62	Maritime Integrated Broadcast System		U	0	3,520	0	6,994
63	Tactical/Mobile C4I Systems	A	U	0	27,434	0	52,026
64	DCGS-N	A	U	0	15,606	0	16,579

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
65	CANES		U	0	412,002	0	402,550		
66	RADIAC	A	U	0	7,828	0	7,647		
67	CANES-Intell		U	0	51,593	0	48,665		
68	GPETE	A	U	0	23,930	0	23,479		
69	MASF		U	0	8,795	0	11,792		
70	Integ Combat System Test Facility	A	U	0	5,829	0	6,053		
71	EMI Control Instrumentation	A	U	0	3,925	0	4,219		
72	Items Less Than $5 Million	A	U	0	87,475	0	88,951		
73	In-Service Radars and Sensors	A	U						
Shipboard Communications									
74	Battle Force Tactical Network	A	U						
75	Shipboard Tactical Communications	A	U	0	43,212	0	36,941		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
65	CANES		U	0	402,550	0	467,587
66	RADIAC	A	U	0	7,647	0	16,475
67	CANES-Intell		U	0	48,665	0	48,207
68	GPETE	A	U	0	23,479	0	25,761
69	MASF		U	0	11,792	0	16,475
70	Integ Combat System Test Facility	A	U	0	6,053	0	6,345
71	EMI Control Instrumentation	A	U	0	4,219	0	4,282
72	Items Less Than $5 Million	A	U	0	88,951		
73	In-Service Radars and Sensors	A	U			0	255,256
Shipboard Communications							
74	Battle Force Tactical Network	A	U			0	74,180
75	Shipboard Tactical Communications	A	U	0	36,941	0	29,776

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Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
76	Ship Communications Automation	A	U	0	90,073	0	101,691		
77	Communications Items Under $5M	A	U	0	44,447	0	54,140		
Submarine Communications									
78	Submarine Broadcast Support	A	U	0	47,579	0	91,150		
79	Submarine Communication Equipment	A	U	0	64,642	0	74,569		
Satellite Communications									
80	Satellite Communications Systems	A	U	0	30,136	0	39,827		
81	Navy Multiband Terminal (NMT)		U	0	34,723	0	24,586		
Shore Communications									
82	Joint Communications Support Element (JCSE)	A	U	0	2,651	0	2,651		
Cryptographic Equipment									
83	Info Systems Security Program (ISSP)	A	U	0	145,311	0	156,034		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
76	Ship Communications Automation	A	U	0	101,691	0	96,916
77	Communications Items Under $5M	A	U	0	54,140	0	14,107
	Submarine Communications						
78	Submarine Broadcast Support	A	U	0	91,150	0	73,791
79	Submarine Communication Equipment	A	U	0	74,569	0	83,178
	Satellite Communications						
80	Satellite Communications Systems	A	U	0	39,827	0	72,871
81	Navy Multiband Terminal (NMT)		U	0	24,586	0	37,921
	Shore Communications						
82	Joint Communications Support Element (JCSE)	A	U	0	2,651	0	5,065
	Cryptographic Equipment						
83	Info Systems Security Program (ISSP)	A	U	0	156,034	0	154,890

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
84	MIO Intel Exploitation Team	A	U	0	977	0	1,055		
	Cryptologic Equipment								
85	Cryptologic Communications Equip	A	U	0	17,809	0	28,832		
	Other Electronic Support								
86	Coast Guard Equipment	A	U	0	81,464	0	63,347		
	Drug Interdiction Support								
87	Other Drug Interdiction Support	A	U	0	10,070				
	Total Communications and electronics equipment				**3,281,303**		**3,299,809**		
	Budget Activity 03: Aviation support equipment								
	Sonobuoys								
88	Sonobuoys - All Types	A	U	0	296,871	0	303,520		
	Aircraft Support Equipment								
89	Minotaur	A	U	0	4,963	0	5,247		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
84	MIO Intel Exploitation Team	A	U	0	1,055	0	1,079
	Cryptologic Equipment						
85	Cryptologic Communications Equip	A	U	0	28,832	0	17,483
	Other Electronic Support						
86	Coast Guard Equipment	A	U	0	63,347	0	77,458
	Drug Interdiction Support						
87	Other Drug Interdiction Support	A	U				
	Total Communications and electronics equipment				**3,299,809**		**3,967,071**
	Budget Activity 03: Aviation support equipment						
	Sonobuoys						
88	Sonobuoys - All Types	A	U	0	303,520	0	311,177
	Aircraft Support Equipment						
89	Minotaur	A	U	0	5,247	0	5,396

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Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
90	Weapons Range Support Equipment	A	U	0	87,748	0	106,209		
91	Aircraft Support Equipment	A	U	0	176,387	0	272,044		
92	Advanced Arresting Gear (AAG)	A	U	0	22,265	0	13,544		
93	Electromagnetic Aircraft Launch System (EMALS	A	U			0	18,594		
94	Meteorological Equipment	A	U	0	13,687	0	15,175		
95	Legacy Airborne MCM	A	U	0	4,443	0	4,689		
96	Lamps Equipment		U	0	1,470	0	1,610		
97	Aviation Support Equipment	A	U	0	62,496	0	82,118		
98	UMCS-Unman Carrier Aviation(UCA)Mission Cntrl	A	U	0	67,226	0	134,726		
99	Architect & Cap for Autonomy in Nav Enter (AR	A	U						
Total Aviation support equipment					**737,556**		**957,476**		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
90	Weapons Range Support Equipment	A	U	0	106,209	0	147,556
91	Aircraft Support Equipment	A	U	0	272,044	0	162,273
92	Advanced Arresting Gear (AAG)	A	U	0	13,544	0	11,930
93	Electromagnetic Aircraft Launch System (EMALS	A	U	0	18,594	0	17,836
94	Meteorological Equipment	A	U	0	15,175	0	19,703
95	Legacy Airborne MCM	A	U	0	4,689	0	12,202
96	Lamps Equipment		U	0	1,610		
97	Aviation Support Equipment	A	U	0	82,118	0	82,115
98	UMCS-Unman Carrier Aviation(UCA)Mission Cntrl	A	U	0	134,726	0	152,687
99	Architect & Cap for Autonomy in Nav Enter (AR	A	U			0	1,612
Total Aviation support equipment					**957,476**		**924,487**

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Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
Budget Activity 04: Ordnance support equipment									
Ship Gun System Equipment									
100	Ship Gun Systems Equipment	A	U	0	5,536	0	5,902		
Ship Missile Systems Equipment									
101	Harpoon Support Equipment	A	U	0	204	0	217		
102	Ship Missile Support Equipment	A	U	0	221,463	0	276,632		
103	Tomahawk Support Equipment	A	U	0	87,147	0	92,270		
FBM Support Equipment									
104	Strategic Missile Systems Equip	A	U	0	276,430	0	279,430		
ASW Support Equipment									
105	SSN Combat Control Systems	A	U	0	128,117	0	128,874		
106	ASW Support Equipment	A	U	0	26,852	0	35,720		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

Department of the Navy
FY 2024 President's Budget
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Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
Budget Activity 04: Ordnance support equipment							
Ship Gun System Equipment							
100	Ship Gun Systems Equipment	A	U	0	5,902	0	6,404
Ship Missile Systems Equipment							
101	Harpoon Support Equipment	A	U	0	217	0	227
102	Ship Missile Support Equipment	A	U	0	276,632	0	294,511
103	Tomahawk Support Equipment	A	U	0	92,270	0	92,432
FBM Support Equipment							
104	Strategic Missile Systems Equip	A	U	0	279,430	0	325,318
ASW Support Equipment							
105	SSN Combat Control Systems	A	U	0	128,874	0	133,063
106	ASW Support Equipment	A	U	0	35,720	0	27,469

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
Other Ordnance Support Equipment									
107	Explosive Ordnance Disposal Equip	B	U	0	1,721	0	14,336		
108	Items Less Than $5 Million	A	U	0	6,997	0	5,938		
Other Expendable Ordnance									
109	Anti-Ship Missile Decoy System	A	U	0	76,994	0	86,264		
110	Submarine Training Device Mods	A	U	0	75,813	0	80,591		
111	Surface Training Equipment	A	U	0	135,814	0	203,695		
Total Ordnance support equipment					**1,043,088**		**1,209,869**		
Budget Activity 05: Civil engineering support equipment									
Civil Engineering Support Equipment									
112	Passenger Carrying Vehicles	A	U	0	4,290	0	4,799		
113	General Purpose Trucks	A	U	0	2,805	0	2,542		
114	Construction & Maintenance Equip	A	U	0	51,477	0	50,001		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

Department of the Navy
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Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
Other Ordnance Support Equipment							
107	Explosive Ordnance Disposal Equip	B	U	0	14,336	0	27,864
108	Items Less Than $5 Million	A	U	0	5,938	0	6,171
Other Expendable Ordnance							
109	Anti-Ship Missile Decoy System	A	U	0	86,264	0	56,630
110	Submarine Training Device Mods	A	U	0	80,591	0	76,954
111	Surface Training Equipment	A	U	0	203,695	0	209,487
Total Ordnance support equipment					**1,209,869**		**1,256,530**
Budget Activity 05: Civil engineering support equipment							
Civil Engineering Support Equipment							
112	Passenger Carrying Vehicles	A	U	0	4,799	0	3,827
113	General Purpose Trucks	A	U	0	2,542	0	4,570
114	Construction & Maintenance Equip	A	U	0	50,001	0	56,829

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
115	Fire Fighting Equipment	A	U	0	15,084	0	16,305		
116	Tactical Vehicles	B	U	0	24,900	0	26,276		
117	Amphibious Equipment	A	U						
118	Pollution Control Equipment	A	U	0	5,369	0	2,840		
119	Items less than $5 Million	A	U	0	51,420	0	55,200		
120	Physical Security Vehicles	A	U	0	1,165	0	1,263		
Total Civil engineering support equipment					**156,510**		**159,226**		
Budget Activity 06: Supply support equipment									
Supply Support Equipment									
121	Supply Equipment	A	U	0	24,697	0	32,338		
122	First Destination Transportation	A	U	0	5,385	0	6,255		
123	Special Purpose Supply Systems	A	U	0	660,750	0	613,039		
Total Supply support equipment					**690,832**		**651,632**		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

Department of the Navy
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Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
115	Fire Fighting Equipment	A	U	0	16,305	0	16,583
116	Tactical Vehicles	B	U	0	26,276	0	24,236
117	Amphibious Equipment	A	U			0	4,504
118	Pollution Control Equipment	A	U	0	2,840	0	3,898
119	Items less than $5 Million	A	U	0	55,200	0	67,286
120	Physical Security Vehicles	A	U	0	1,263	0	1,286
Total Civil engineering support equipment					**159,226**		**183,019**
Budget Activity 06: Supply support equipment							
Supply Support Equipment							
121	Supply Equipment	A	U	0	32,338	0	33,258
122	First Destination Transportation	A	U	0	6,255	0	6,977
123	Special Purpose Supply Systems	A	U	0	613,039	0	659,529
Total Supply support equipment					**651,632**		**699,764**

Department of the Navy
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1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
Budget Activity 07: Personnel and command support equipment									
Training Devices									
124	Training Support Equipment	A	U	0	3,202	0	1,285		
125	Training and Education Equipment	A	U	0	58,823	0	44,618		
Command Support Equipment									
126	Command Support Equipment	A	U	0	30,387	0	38,774		
127	Medical Support Equipment	A	U	0	14,346	0	25,325		
129	Naval MIP Support Equipment	A	U	0	2,887	0	6,077		
130	Operating Forces Support Equipment	A	U	0	12,815	0	13,784		
131	C4ISR Equipment	A	U	0	6,324	0	6,497		
132	Environmental Support Equipment	A	U	0	25,098	0	36,592		
133	Physical Security Equipment	A	U	0	107,448	0	107,372		

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
Budget Activity 07: Personnel and command support equipment							
Training Devices							
124	Training Support Equipment	A	U	0	1,285	0	2,083
125	Training and Education Equipment	A	U	0	44,618	0	106,542
Command Support Equipment							
126	Command Support Equipment	A	U	0	38,774	0	44,448
127	Medical Support Equipment	A	U	0	25,325	0	12,529
129	Naval MIP Support Equipment	A	U	0	6,077	0	5,408
130	Operating Forces Support Equipment	A	U	0	13,784	0	12,105
131	C4ISR Equipment	A	U	0	6,497	0	7,670
132	Environmental Support Equipment	A	U	0	36,592	0	52,597
133	Physical Security Equipment	A	U	0	107,372	0	108,901

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Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
134	Enterprise Information Technology	A	U	0	31,709	0	29,407		
Productivity Programs									
137	Judgment Fund Reimbursement	A	U	0	3				
Other									
138	Cancelled Account Adjustments	A	U	0	251				
139	Next Generation Enterprise Service	A	U	0	175,041	0	201,314		
140	Cyberspace Activities	A	U	0	12,859	0	5,018		
141	Cyber Mission Forces	A	U			0	17,115		
Classified Programs									
999	Classified Programs		U		21,058		30,895		2,170
Total Personnel and command support equipment					**502,251**		**564,073**		**2,170**

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
134	Enterprise Information Technology	A	U	0	29,407	0	42,154
Productivity Programs							
137	Judgment Fund Reimbursement	A	U				
Other							
138	Cancelled Account Adjustments	A	U				
139	Next Generation Enterprise Service	A	U	0	201,314	0	177,585
140	Cyberspace Activities	A	U	0	5,018	0	23,176
141	Cyber Mission Forces	A	U	0	17,115		
Classified Programs							
999	Classified Programs		U		33,065		16,290
Total Personnel and command support equipment					**566,243**		**611,488**

Department of the Navy
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1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enacted		FY 2023 Supplementals Enacted	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost	Quantity	Cost*
Budget Activity 08: Spares and repair parts									
Spares and Repair Parts									
142	Spares and Repair Parts	A	U	0	445,621	0	582,313		
143	VIRGINIA Class (VACL) Spares and Repair parts	A	U						
Total Spares and repair parts					**445,621**		**582,313**		
Total Other Procurement, Navy					**11,124,829**		**12,138,590**		**2,170**

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Total Obligational Authority
1810N Detail

(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy			FY 2023 Total Enacted		FY 2024 Request	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost	Quantity	Cost
Budget Activity 08: Spares and repair parts							
Spares and Repair Parts							
142	Spares and Repair Parts	A	U	0	582,313	0	645,900
143	VIRGINIA Class (VACL) Spares and Repair parts	A	U			0	470,000
Total Spares and repair parts					**582,313**		**1,115,900**
Total Other Procurement, Navy					**12,140,760**		**14,535,257**

Department of Defense
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
DoD Component Summary
(Dollars in Thousands)

Appropriation Summary	FY 2023 Overseas Operations Costs (OOC)*	FY 2024 Overseas Operations Costs (OOC)*
Other Procurement, Navy	69,277	46,435
Total Department of the Navy	**69,277**	**46,435**
Grand Total Department of Defense	**69,277**	**46,435**

*FY 2023 and FY 2024 Overseas Operations Costs (OOC) numbers are a subset of the baseline submission.

Department of the Navy
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Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
Navy Summary
(Dollars in Thousands)

Appropriation Summary	FY 2023 Overseas Operations Costs (OOC)*	FY 2024 Overseas Operations Costs (OOC)*
Other Procurement, Navy	69,277	46,435
Total Department of the Navy	**69,277**	**46,435**

*FY 2023 and FY 2024 Overseas Operations Costs (OOC) numbers are a subset of the baseline submission.

Department of the Navy
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Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1810N BA Summary
(Dollars in Thousands)

Appropriation: **Other Procurement, Navy**	FY 2023 Overseas Operations Costs (OOC)*	FY 2024 Overseas Operations Costs (OOC)*
Budget Activity		
02. Communications and electronics equipment	54,995	
03. Aviation support equipment	11,052	46,435
07. Personnel and command support equipment	3,230	
Total Other Procurement, Navy	**69,277**	**46,435**

*FY 2023 and FY 2024 Overseas Operations Costs (OOC) numbers are a subset of the baseline submission.

Department of the Navy
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Total Obligational Authority
1810N Detail
(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy				FY 2023 Overseas Operations Costs (OOC)		FY 2024 Overseas Operations Costs (OOC)	
Line No	Item Nomenclature	Ident Code	Sec	Quantity	Cost*	Quantity	Cost*
Budget Activity 02: Communications and electronics equipment							
ASW Electronic Equipment							
43	Fixed Surveillance System	A	U	0	54,995		
Total Communications and electronics equipment				**0**	**54,995**		
Budget Activity 03: Aviation support equipment							
Sonobuoys							
88	Sonobuoys - All Types	A	U	0	11,052	0	10,206
Aircraft Support Equipment							
91	Aircraft Support Equipment	A	U			0	36,229
Total Aviation support equipment				**0**	**11,052**	**0**	**46,435**
Budget Activity 07: Personnel and command support equipment							
Command Support Equipment							
126	Command Support Equipment	A	U	0	3,230		
Total Personnel and command support equipment				**0**	**3,230**		

*FY 2023 and FY 2024 Overseas Operations Costs (OOC) numbers are a subset of the baseline submission.

Department of the Navy
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Total Obligational Authority
1810N Detail
(Dollars in Thousands)

Appropriation: 1810 Other Procurement, Navy			FY 2023 Overseas Operations Costs (OOC)		FY 2024 Overseas Operations Costs (OOC)	
Line No	Item Nomenclature	Ident Code / Sec	Quantity	Cost*	Quantity	Cost*
Total Other Procurement, Navy			0	69,277	0	46,435

*FY 2023 and FY 2024 Overseas Operations Costs (OOC) numbers are a subset of the baseline submission.

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Appropriation 1810N: Other Procurement, Navy

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49	02	07	2611	Naval Tact Cmd Supt Sys (NTCSS)	Volume 2 - 271
50	02	07	2614	Adv Tact Data Link Sys (ATDLS)	Volume 2 - 283
51	02	07	2618	Navy Command and Control System (NCCS)	Volume 2 - 295
52	02	07	2622	Minesweeping System Replacement	Volume 2 - 303
53	02	07	2624	Shallow Water MCM	Volume 2 - 307
54	02	07	2657	NAVSTAR GPS Receivers (Space)	Volume 2 - 315
55	02	07	2666	American Forces Radio and TV Service (AFRTS)	Volume 2 - 325
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58	02	09	2830	Afloat ATC Equipment	Volume 2 - 407
59	02	09	2851	ID Systems	Volume 2 - 439
60	02	09	2867	Joint Precision Approach and Landing System(JPALS)	Volume 2 - 479
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67	02	10	2925	CANES Intell	Volume 2 - 561
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69	02	10	2950	Network Tactical Common Data Link (CDL)	Volume 2 - 583
70	02	10	2960	Integ Combat System Test Facility	Volume 2 - 591
71	02	10	2970	EMI Control Instrumentation	Volume 2 - 595
72	02	10	2980	Items less than $5 Million	Volume 2 - 599
73	02	10	2981	In-Service Radars and Sensors	Volume 2 - 635
74	02	11	2437	Battle Force Tactical Network	Volume 2 - 663
75	02	11	3010	Shipboard Tactical Comms	Volume 2 - 667
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77	02	11	3057	Communications Items under $5M	Volume 2 - 707
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79	02	12	3130	Submarine Communication Equipment	Volume 2 - 725
80	02	13	3215	Satellite Communications Systems	Volume 2 - 729
81	02	13	3216	Navy Multiband Terminal (NMT)	Volume 2 - 749
82	02	14	3302	Joint Communications Support Element (JCSE)	Volume 2 - 763
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91	03	03	4213	Aircraft Support Equipment	Volume 3 - 37
92	03	03	4217	Advanced Arresting Gear (AAG)	Volume 3 - 79
93	03	03	4219	Electromagnetic Aircraft Launch System (EMALS)	Volume 3 - 89
94	03	03	4226	Meteorological Equipment	Volume 3 - 105
95	03	03	4248	Legacy Airborne MCM	Volume 3 - 117
96	03	03	4250	Common Control System	Volume 3 - 123
97	03	03	4268	Aviation Support Equipment	Volume 3 - 127

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ASW Support Equipment	5429	106	04	05	Volume 4 - 129
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Advanced Arresting Gear (AAG)	4217	92	03	03	Volume 3 - 79
Afloat ATC Equipment	2830	58	02	09	Volume 2 - 407
Aircraft Support Equipment	4213	91	03	03	Volume 3 - 37
American Forces Radio and TV Service (AFRTS)	2666	55	02	07	Volume 2 - 325
Amphibious Equipment	6033	117	05	01	Volume 5 - 65
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In-Service Radars and Sensors	2981	73	02	10	Volume 2 - 635
Info Systems Security Program (ISSP)	3415	83	02	15	Volume 2 - 767
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MIO Intel Exploitation Team	3417	84	02	15	Volume 2 - 805
Maritime Integrated Broadcast System	2900	62	02	10	Volume 2 - 497
Medical Support Equipment	8109	127	07	02	Volume 5 - 179
Meteorological Equipment	4226	94	03	03	Volume 3 - 105
Minesweeping System Replacement	2622	52	02	07	Volume 2 - 303
Minotaur	3640	89	03	03	Volume 3 - 19
NAVSTAR GPS Receivers (Space)	2657	54	02	07	Volume 2 - 315
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Navy Multiband Terminal (NMT)	3216	81	02	13	Volume 2 - 749
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Pollution Control Equipment	6058	118	05	01	Volume 5 - 69
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Ship Missile Support Equipment	5231	102	04	03	Volume 4 - 11
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Sonobuoys - All Types	4048	88	03	01	Volume 3 - 1
Spares and Repair Parts	9020	142	08	01	Volume 5 - 269
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Surface Power Equipment	0131	1	01	01	Volume 1 - 1
Surface Ship Torpedo Def (SSTD)	2213	42	02	03	Volume 2 - 129
Surface Training Equipment	5664	111	04	07	Volume 4 - 189
Tactical Vehicles	6028	116	05	01	Volume 5 - 57
Tactical/Mobile C4I Systems	2906	63	02	10	Volume 2 - 501
Tomahawk Support Equipment	5253	103	04	03	Volume 4 - 61
Training Support Equipment	8081	124	07	01	Volume 5 - 127
Training and Education Equipment	8101	125	07	01	Volume 5 - 133
UMCS-Unman Carrier Aviation(UCA)Mission Cntrl Stn	4269	98	03	03	Volume 3 - 159
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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2026 / SPQ-9B Radar

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	288.111	14.209	12.063	7.267	0.000	7.267	7.648	7.820	7.972	7.991	46.727	399.808
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	288.111	14.209	12.063	7.267	0.000	7.267	7.648	7.820	7.972	7.991	46.727	399.808
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**288.111**	**14.209**	**12.063**	**7.267**	**0.000**	**7.267**	**7.648**	**7.820**	**7.972**	**7.991**	**46.727**	**399.808**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	1.593	-	0.524	-	0.524	0.531	0.550	0.552	0.573	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This program provides for procurement of AN/SPQ-9B radars whose primary mission is to detect and track low flying Anti-Ship Missile targets in heavy clutter. The mission of the AN/SPQ-9B has been expanded to include the capability to detect and classify periscopes. The Periscope Detection and Discrimination (PDD) capability has been designed and incorporated to operate concurrently with the Anti-Ship Missile Defense (ASMD) capability. Funding is reduced between FY23 and FY24 due to cancellation of DDG Modernization installations.

[BR5IN AN/SPQ-9B FMP INSTALLATIONS]: AN/SPQ-9B systems are installed using Alteration Installation Teams (AITs) that customarily require funding for planning yard Design Services Allocation (DSA) up to two years prior to the year of installation and funding for Advanced Planning (AP) one year prior to installation, to support individual ship class drawing packages, ship checks and long lead material unique to the installation in order to maintain alignment with ship availability schedules. Radars continue to be procured for new construction DDGs and improvements to these and in-service systems continue to be deployed to pace the threat.

[BR6IN AN/SPQ-9B NON FMP INSTALLATIONS]: Provided funding for the installation of equipment for Land Based Test Sites (LBTS).

[P40A / BR040 TRANSMITTER UPGRADE FMP]: Funding was provided for installations of AN/SPQ-9B Transmitter Upgrades on LPD-17.

[P40A / BR040 TRANSMITTER UPGRADE NON-FMP EQUIPMENT]: Funding provided for Transmitter Upgrade Processor installations at Surface Warfare Engineering Facility (SWEF) and Combat Systems Engineering Development Site (CSEDS) (both non-FMP).

[P40A / BR042 AN/SPQ-9B ENGINEERING CHANGE PROPOSALS (ECP)]: Procures product improvements generated by Engineering Change Proposals (ECPs); corrects problems reported by Fleet units; upgrades unreliable components and replaces obsolete components and parts no longer in production for AN/SPQ-9B Radar; and addresses supportability concerns. Purchases and installs ECPs, including Antenna Shock Upgrade Kits, Antenna Radar Components, Digital Signal Processor (DSP) Kits, Periscope Detection and Discrimination (PDD) Kits and engineering change kit hardware components. Antenna Shock Upgrade Kits are installed during Antenna Restorations. DSP and PDD kits are installed conjunctively via Alteration Installation Team (AIT) and can be accomplished outside of a CNO Availability.

[P40A / BR830 AN/SPQ-9B PRODUCTION SUPPORT]: Provides support for production of hardware and hardware components and is composed primarily of Warfare Center Activity support, Software Support Activity (SSA), Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), Technical Design Agent (TDA) and Professional Support Services (PSS). Also includes support for cybersecurity compliance and software certification.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2026 / SPQ-9B Radar	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P3A / BR040 AN/SPQ-9B RADAR FMP EQUIPMENT]: Procures AN/SPQ-9B Radars to add Anti-Ship Missile Defense (ASMD) capability to Shipboard Combat Systems. Procures radars to support combat systems on the following ship classes: CG, LHA, DDG, CVN, LHD, LPD, U.S. Coast Guard National Security Cutter and a Training Unit. Systems procured for Cruisers/Destroyers (CRUDES) and Amphibious Ships in FY14 and beyond include the Periscope Detection and Discrimination (PDD) capability.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2026 / SPQ-9B Radar

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	SPQ-9B Radar				- / 155.958	- / 6.027	- / 4.851	- / 5.006	- / -	- / 5.006
P-3a	1 / BR040 AN/SPQ-9B RADAR FMP EQUIPMENT (TBD)				- / 132.153	- / 8.182	- / 7.212	- / 2.261	- / 0.000	- / 2.261
P-40	**Total Gross/Weapon System Cost**				**- / 288.111**	**- / 14.209**	**- / 12.063**	**- / 7.267**	**- / 0.000**	**- / 7.267**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	SPQ-9B Radar				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / BR040 AN/SPQ-9B RADAR FMP EQUIPMENT (TBD)				- / 1.401	- / 0.122	- / 0.000	- / 0.000	- / 0.000	- / 151.331
P-40	**Total Gross/Weapon System Cost**				**- / 7.648**	**- / 7.820**	**- / 7.972**	**- / 7.991**	**- / 46.727**	**- / 399.808**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	P-1 Line Item Number / Title: 2026 / SPQ-9B Radar	Aggregated Items Title: SPQ-9B Radar

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) BR040 AN/SPQ-9B RADAR																				
1.1) BR040 ANTENNA	A		2,529K	7	17.701	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) BR040 ANTENNA TEST STAND	A		1,025K	1	1.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3) BR040 TRANSMITTER UPGRADE FMP	A		-	-	12.961	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) BR040 TRANSMITTER UPGRADE NON-FMP EQUIPMENT	A		-	-	2.958	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) BR040 AN/SPQ-9B RADAR			**-**	**-**	***34.645***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2) BR042 AN/SPQ-9B ENGINEERING CHANGE PROPOSALS (ECP)																				
2.1) BR042 MISCELLANEOUS ECPs (1)	A		-	-	46.641	-	-	1.644	-	-	1.606	-	-	1.659	-	-	-	-	-	1.659
2.2) BR042 ANTENNA SHOCK UPGRADE KITS (2)	A		527,428.57	7	3.692	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.3) BR042 DIGITAL SIGNAL PROCESSOR KITS - PROCUREMENTS	A		190,350.00	20	3.807	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4) BR042 DIGITAL SIGNAL PROCESSOR KITS - INSTALLS	A		56,000.00	5	0.280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5) BR042 PDD KITS - PROCUREMENT (3)	A		495,964.29	28	13.887	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.6) BR042 PDD KITS - INSTALLS (4)	A		281,000.00	12	3.372	786,500.00	2	1.573	802,000.00	1	0.802	853,000.00	1	0.853	-	-	-	853,000.00	1	0.853
Subtotal: 2) BR042 AN/SPQ-9B ENGINEERING CHANGE PROPOSALS (ECP)			**-**	**-**	***71.679***	**-**	**-**	***3.217***	**-**	**-**	***2.408***	**-**	**-**	***2.512***	**-**	**-**	**-**	**-**	**-**	***2.512***
3) BR830 AN/SPQ-9B PRODUCTION SUPPORT																				
3.1) BR830 AN/SPQ-9B PRODUCTION SUPPORT (5)	A		-	-	28.007	-	-	2.810	-	-	2.443	-	-	2.494	-	-	-	-	-	2.494
Subtotal: 3) BR830 AN/SPQ-9B PRODUCTION SUPPORT			**-**	**-**	***28.007***	**-**	**-**	***2.810***	**-**	**-**	***2.443***	**-**	**-**	***2.494***	**-**	**-**	**-**	**-**	**-**	***2.494***
4) BRCA1 AN/SPQ-9B RADAR COMPONENTS																				

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	P-1 Line Item Number / Title: 2026 / SPQ-9B Radar	Aggregated Items Title: SPQ-9B Radar

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
4.1) BRCA1 AN/ SPQ-9B RADAR COMPONENTS	A		7,400K	2	14.800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) BRCA1 AN/SPQ-9B RADAR COMPONENTS			**-**	**-**	***14.800***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
5) BRCA2 AN/SPQ-9B RADAR COMPONENTS																				
5.1) BRCA2 AN/ SPQ-9B RADAR COMPONENTS	A		6,800K	1	6.800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) BRCA2 AN/SPQ-9B RADAR COMPONENTS			**-**	**-**	***6.800***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
6) WAXXX ACQUISITION WORKFORCE FUND																				
6.1) WAXXX ACQUISITION WORKFORCE FUND-2009	A		-	-	0.027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) WAXXX ACQUISITION WORKFORCE FUND			**-**	**-**	***0.027***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total			**-**	**-**	**155.958**	**-**	**-**	**6.027**	**-**	**-**	**4.851**	**-**	**-**	**5.006**	**-**	**-**	**-**	**-**	**-**	**5.006**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

(1) Miscellaneous ECP funding across the FYDP primarily funds product improvements, corrects problems reported by Fleet units, upgrades unreliable components, replaces obsolete components/parts no longer in production, and addresses supportability concerns. Since the FY23 budget request, FY22 and FY23 Miscellaneous ECP funding decreased in order to fund significantly higher than planned PDD kit installation costs and higher DDG 89 and DDG 81 installation costs. FY24 Miscellaneous ECP funding covers required Cybersecurity and Advanced Training Domain (ATD) efforts which includes Port Operational Software to new Linux Operating System, Software Regression Testing (Build 08.03.00 for ATD interface), Signal Processor Touchdown SIGPRO (TD) final design and testing, and Aegis BL10 Integration testing.

(2) Since the FY23 budget request, FY23 quantity two (2) Antenna Shock Upgrade Kit procurements have been delayed beyond the FYDP in order to fund significantly higher than planned and higher priority PDD kit installations and increased DDG 89, DDG 81, LHD 3 and LHD 5 Radar installation costs.

(3) Since the FY23 budget request, FY22-FY25 planned PDD kit procurements were zeroed out and the majority of procurements shifted to beyond the FYDP given higher than planned PDD kit installation costs, and significantly higher DDG 89, DDG 81, LHD 3 and LHD 5 Radar installation costs.

(4) Since the FY23 budget request, FY22-FY24 PDD kit installations have decreased based on actual FY22 costs of CVN 70 and CVN 71 PDD installations (actual installation unit cost increased from estimated $309K each to $786K), as well as higher than planned DDG 89, DDG 81, LHD 3 and LHD 5 Radar installation costs. FY22 PDD installations decreased from three (3) to two (2), FY23 PDD kit installations decreased from five (5) to one (1) and FY24 PDD installations decreased from four (4) to one (1).

(5) AN/SPQ-9B Production Support funding across the FYDP provides support for production of hardware and production of hardware components and is composed primarily of Warfare Center Activity support, Software Support Activity (SSA), Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), Technical Design Agent (TDA) and Professional Support Services (PSS). Also includes support for cybersecurity compliance packages in the enterprise mission assurance support service (eMASS), element, and combat system certifications. Starting in FY23, Production Support funding has been reduced due to radar installation requirements being higher than planned for DDG 89, DDG 81, LHD 3 and LHD 5.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2026 / SPQ-9B Radar	**Modification Number / Title:** 1 / BR040 AN/SPQ-9B RADAR FMP EQUIPMENT
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	132.153	8.182	7.212	2.261	0.000	2.261	1.401	0.122	0.000	0.000	0.000	151.331
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	132.153	8.182	7.212	2.261	0.000	2.261	1.401	0.122	0.000	0.000	0.000	151.331
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**132.153**	**8.182**	**7.212**	**2.261**	**0.000**	**2.261**	**1.401**	**0.122**	**0.000**	**0.000**	**0.000**	**151.331**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[BR040 AN/SPQ-9B RADAR FMP EQUIPMENT] Procures AN/SPQ-9B Radars to add Anti-Ship Missile Defense (ASMD) capability to Shipboard Combat Systems. Procures radars to support combat systems on the following ship classes: CG, LHA, DDG, CVN, LHD, LPD, U.S. Coast Guard National Security Cutter and a Training Unit. Systems procured for Cruisers/Destroyer (CRUDES) and Amphibious Ships in FY14 and beyond also include the Periscope Detection and Discrimination (PDD) capability.

1) AN/SPQ-9B was moved from BLI 5110 to BLI 2026 in FY04. Prior to 2004, procurement of the first five AN/SPQ-9B systems was funded under the Mk 86 program under BLI 5110. The installation costs for four out of five of these installs were included in the 2026 budget. This budget results in 14 procurements and 18 installations (delta 4).

2) AN/SPQ-9B systems are installed using Alteration Installation Teams (AITs) that customarily require funding for planning yard Design Services Allocation (DSA) up to two years prior to the year of installation and funding for Advanced Planning (AP) one year prior to installation, to support individual ship class drawing packages, ship checks and long lead material unique to the installation in order to maintain alignment with ship availability schedules. Since the FY23 budget request, the FY23 and FY24 planning FMP installation costs have increased due to Contractor costs for AIT efforts significantly increasing. FY25 LHD 5 Waterfront Testing funding has been delayed to FY26 given the end of the LHD 5 availability (1 APR 2024 - 13 FEB 2026).

3) FY23 funding requirement ($1M) has been added to the budget for DRS for a Basic Ordering Agreement (BOA) Life Time Buy (LTB) for Stepped Exciters. As DRS began SPQ-9B production, the Dual Channel Stepped Exciter had a digital-to-analog converter chip (DAC) that is now obsolete, with a redesign effort impacting cost and schedule. To resolve this issue, relief was given to the OEM for a portion of the stepped exciter production requirements. This procurement is going to be a Diminishing Manufacturing Sources (DMS) bridge buy to provide risk reduction for the incurred asset shortages and any further DMS redesigns in order to obtain the critical part for fielding the Periscope Detection capability.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2026 / SPQ-9B Radar	**Modification Number / Title:** 1 / BR040 AN/SPQ-9B RADAR FMP EQUIPMENT
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/SPQ-9B RADAR FMP EQUIPMENT	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: BR040 AN/SPQ-9B RADAR FMP EQUIPMENT												
B Kits												
Recurring												
1.1.1) BR040 AN/SPQ-9B RADAR FMP EQUIPMENT - NonOrganic (6)	14 / 73.193	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / 73.193
1.1.2) BR040 AN/SPQ-9B NON-RECURRING (TDP) - Organic	- / 1.888	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.888
1.1.3) BR040 AN/SPQ-9B DMSMS LIFETIME BUY - Organic	- / 1.129	- / -	- / 1.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.129
Subtotal: Recurring	*- / 76.210*	*- / -*	*- / 1.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 77.210*
Subtotal: BR040 AN/SPQ-9B RADAR FMP EQUIPMENT	*14 / 76.210*	*- / -*	*- / 1.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*14 / 77.210*
Subtotal: Procurement, All Modification Items	*- / 76.210*	*- / -*	*- / 1.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 77.210*
Installation												
Modification Item 1 of 1: BR040 AN/SPQ-9B RADAR FMP EQUIPMENT	- / 55.943	- / 8.182	- / 6.212	- / 2.261	- / 0.000	- / 2.261	- / 1.401	- / 0.122	- / 0.000	- / 0.000	- / 0.000	- / 74.121
Subtotal: Installation	*- / 55.943*	*- / 8.182*	*- / 6.212*	*- / 2.261*	*- / -*	*- / 2.261*	*- / 1.401*	*- / 0.122*	*- / -*	*- / -*	*- / 0.000*	*- / 74.121*
Total												
Total Cost (Procurement + Support + Installation)	**132.153**	**8.182**	**7.212**	**2.261**	**0.000**	**2.261**	**1.401**	**0.122**	**0.000**	**0.000**	**0.000**	**151.331**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2026 / SPQ-9B Radar	**Modification Number / Title:** 1 / BR040 AN/SPQ-9B RADAR FMP EQUIPMENT

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: BR040 AN/SPQ-9B RADAR FMP EQUIPMENT

Manufacturer Information

Manufacturer Name: DRS Laurel Technologies	Manufacturer Location: Largo, FL
Administrative Leadtime *(in Months)*: 0	Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: [none specified]:: Installation Name: BR040 AN/SPQ-9B RADAR FMP EQUIPMENT

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	15 / 55.943	1 / 8.182	1 / 6.212	1 / 2.261	0 / 0.000	1 / 2.261	0 / 1.401	0 / 0.122	- / -	- / -	0 / 0.000	18 / 74.121
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	15 / 55.943	1 / 8.182	1 / 6.212	1 / 2.261	0 / 0.000	1 / 2.261	0 / 1.401	0 / 0.122	- / -	- / -	0 / 0.000	18 / 74.121

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	15	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
Out	15	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	18

Footnotes:

(6) 1) SPQ-9B was moved from BLI 5110 to BLI 2026 in FY04. Prior to 2004, procurement of the first five AN/SPQ-9B systems was funded under the Mk 86 program under BLI 5110. The installation costs for four out of five of these installs were included in the 2026 budget. This budget results in 14 procurements and 18 installations (delta 4). 2) AN/SPQ-9B systems are installed using Alteration Installation Teams (AITs) that customarily require funding for planning yard Design Services Allocation (DSA) up to two years prior to the year of installation and funding for Advanced Planning (AP) one year prior to installation, to

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2026 / SPQ-9B Radar	**Modification Number / Title:** 1 / BR040 AN/SPQ-9B RADAR FMP EQUIPMENT
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

support individual ship class drawing packages, ship checks and long lead material unique to the installation in order to maintain alignment with ship availability schedules. Since the FY23 budget request, the FY23 and FY24 planning FMP installation costs have increased due to Contractor costs for AIT efforts significantly increasing. FY25 LHD 5 Waterfront Testing funding has been delayed to FY26 given the end of the LHD 5 availability (1 APR 2024 - 13 FEB 2026). 3) FY23 funding requirement ($1M) has been added to the budget for DRS for a Basic Ordering Agreement (BOA) Life Time Buy (LTB) for Stepped Exciters. As DRS began SPQ-9B production, the Dual Channel Stepped Exciter had a digital-to-analog converter chip (DAC) that is now obsolete, with a redesign effort impacting cost and schedule. To resolve this issue, relief was given to the OEM for a portion of the stepped exciter production requirements. This procurement is going to be a Diminishing Manufacturing Sources (DMS) bridge buy to provide risk reduction for the incurred asset shortages and any further DMS redesigns in order to obtain the critical part for fielding the Periscope Detection capability.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0205620N, 0603553N
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	2,343.443	126.871	140.157	138.065	0.000	138.065	139.468	140.799	143.627	146.896	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	2,343.443	126.871	140.157	138.065	0.000	138.065	139.468	140.799	143.627	146.896	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**2,343.443**	**126.871**	**140.157**	**138.065**	**0.000**	**138.065**	**139.468**	**140.799**	**143.627**	**146.896**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	2.532	2.903	5.881	-	5.881	4.168	5.615	5.613	0.568	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY 2023 to FY 2024 budget decrease ($-2.092M) is comprised of the following:

Hardware Buys (+5):
-1 less AN/SQQ-89A(V)15 DDG79-112 FLT IIA Upgrade shipset buy
-2 less AN/SQQ-89A(V)15 DDG51-78 FLT I/II Upgrade shipset buys
+8 additional AN/SQQ-89A(V)15 Technology Insertion/Refresh and Build-In-Place shipset buys

Installations (-3):
-1 less AN/SQQ-89A(V)15 DDG79-112 FLT IIA Upgrade shipset install
-2 less AN/SQQ-89A(V)15 Technology Insertion/Refresh shipset installs

Test Events (-3):
-1 less Follow-On Operational Test & Evaluation (FOT&E) event
-2 less Combat System Ship Qualification Trial (CSSQT) events

Anti-Submarine Warfare (ASW) remains a Navy core competency in a dynamic and uncertain maritime environment. U.S. adversaries continue to develop asymmetric capabilities and capacities to deter, disrupt, or delay the entry of U.S. and allied naval forces, and pose a constant challenge as the Maritime Strategy is implemented. Evolving submarine technologies offer enhanced stealth, speed, endurance, weapons, and operational proficiency, trends foretelling that the adversary submarine of the future will have a significantly larger sphere of influence, while presenting less vulnerability to ASW forces. The effective offensive engagement range of the adversary submarine of the future will continue to match or outrange individual U.S. and multinational platform sensors and weapons in many tactical environments. Submarines are an increasing threat to all Naval and Allied ships, particularly modern diesel and state-of-the-art nuclear submarines, and faster, more accurate torpedoes. Not only can the presence of potential hostile submarines delay naval combatant action until they are located and neutralized, submarines can also disrupt all seaborne logistics supply for any ground campaign as well as maritime commerce. ASW forces must be effective in all operating environments, ranging from the deep open ocean to the littorals, and are key to countering adversarial anti-access and area denial strategies.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0205620N, 0603553N
Line Item MDAP/MAIS Code: N/A		

The AN/SQQ-89(V) Surface Ship ASW Combat System provides integrated Undersea Warfare (USW) combat management, fire control, command and control, and on-board training to enable surface combatants to engage USW targets in both open ocean and littoral environments. The AN/SQQ-89(V) is a system comprised of many subsystems, which integrate the helo and its sensors, the ship's own organic sensors, weapons, torpedo detection, and a high fidelity Surface ASW Synthetic Trainer (SAST). Variants of the AN/SQQ-89(V) are currently in operation on in-service CG47 and DDG51 Class Surface Combatants.

AN/SQQ-89A(V)15 Surface Ship ASW Combat System Upgrade - Detailed Description:

A major upgrade to the AN/SQQ-89(V) legacy system, the AN/SQQ-89A(V)15 significantly decreases ship vulnerability to torpedo attack, improves surface ship USW lethality, and mitigates Commercial-Off-The-Shelf (COTS) obsolescence and supportability issues. The need for the AN/SQQ-89A(V)15 is articulated in Operational Requirements Document (ORD) #667-76-05 titled 'AN/SQQ-89 Improvement Program'.

The AN/SQQ-89A(V)15 upgrade is programmed for backfit on: Select CG47 Class Baseline 3 and 4 (CGs 59-73) ships budgeted under OPN BLI 0960 (Cruiser Modernization); DDG51 Class Flight I/II (DDGs 51-78) ships budgeted under OPN BLI 0900 (DDG Modernization) and OPN BLI 2136 (represented here); and DDG51 Class Flight IIA and onward via OPN BLI 2136 (for DDGs 79-132 represented here) and SCN BLI 2122 (DDG51 Class Forward Fit for DDGs 133 and follow).

The AN/SQQ-89A(V)15 upgrade, developed under the RDT&EN Program Element (PE) 0205620N Project 1916 Surface ASW System Improvement program, capitalizes on previously fielded AN/SQQ-89(V) systems. The AN/SQQ-89A(V)15 is comprised of a tactical towed array sensor, the Multi-Function Towed Array (MFTA), and replaces standard, militarized, legacy components with Commercial-Off-The-Shelf (COTS) hardware. The AN/SQQ-89A(V)15 features hull/towed Sonar Echo Tracker Classifier (ETC); hull/towed Sonar with Acoustic Intercept (ACI) fused data for significantly improved torpedo defense; Handling & Stowage Group (H&SG) for MFTA operation; Torpedo Setting Panel (TSP); passive towed array processing; common sub/surface sensor performance and prediction; common NAVAIR/Surface Light Airborne Multi-Purpose System (LAMPS) processing; portable software; integrated supportability; and on-board training via the Surface ASW Synthetic Trainer (SAST). The AN/SQQ-89A(V)15 is interoperable with AEGIS Weapons System (AWS) baselines; is Open Architecture (OA) compliant (meeting OA Level 3 requirements); provides significant reductions in weight, space, cooling, and power requirements over legacy AN/SQQ-89(V) systems; is Grade A shock qualified; supports Digital Fire Control Integration (DFCI) capability; and is integrated with the Battle Force Tactical Trainer (BFTT).

AN/SQQ-89A(V)15 Technology Insertion/Refresh and Technology Insertion/Refresh Build-In-Place - Detailed Description:

Additionally, to be effective against increasingly stealthy threats in an often ambiguous undersea environment, future sensors must be environmentally adaptive, have very low false alarm rates, and exploit the full range of current and future submarine detection vulnerabilities. Via the Advanced Capability Build (ACB) process under RDT&EN PE 0205620N Project 1916, these types of maturing/proven USW technologies will be folded into the AN/SQQ-89A(V)15 production and future technology insertion/refresh and build-in place programs. Leveraging the submarine community's Acoustic Rapid Commercial-off-the-Shelf (COTS) Insertion (ARCI) process, the AN/SQQ-89A(V)15 Technology Insertion/Refresh program procures upgraded software/hardware technology for all DDG51 Class surface combatant platforms with a previously fielded AN/SQQ-89A(V)15. This process has proven to manage obsolescence, take advantage of commercial development efforts, and continue to pace the threat to ensure systems remain effective well into the 21st century. Studies of the submarine and surface ASW technology show that system upgrades are most critical six to nine (6 to 9) years after initial installation of the AN/SQQ-89A(V)15, as failure rates within this period begin to rise. Establishing a stable technology refresh program ensures the Fleet maintains critical Undersea Warfare capability (threat-pacing improvements) and productivity (Increased Operational Availability (Ao)) while reducing the Total Ownership Cost (TOC) to the Navy.

AN/SQQ-89A(V)15 YEAR-TO-YEAR FUNDING PROFILE FROM PROCUREMENT TO INSTALL:
1st Budget Year - Procurement of equipment.
2nd Budget Year - Ordering of incidental installation material and performance of mandatory advance planning yard design tasks and ship checks, which are required to be budgeted in the year *prior* to the physical installation of equipment. These installation costs are depicted in the P-3a exhibit with a quantity of "0".
3rd Budget Year - Installation of equipment.

An average, aggregate AN/SQQ-89A(V)15 shipset unit cost is comprised of multiple contract/funding vehicles. Additionally, these unit costs can vary as they are dependent on the pre-existing legacy AN/SQQ-89(V) configuration of each ship.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0205620N, 0603553N
Line Item MDAP/MAIS Code: N/A		

AN/SQQ-89A(V)15 production shipset delivery time is 18 months after contract award. Delivery of equipment to the shipyard is preferably no later than 30 days prior to a CONUS (Continental U.S.) installation start date, and no later than 90 days prior to a non-CONUS installation start date. Installations are assigned to specific ships as per Fleet priorities/requirements, and based on ship availabilities. Fleet availability periods to support a major upgrade such as the AN/SQQ-89A(V)15 normally occur only once every three years in a ship's schedule.

[P40A / DB400 - DDG51 CLASS SYSTEM COMPONENTS - SQQ-89A(V)15]: DB400 Cost Elements/Descriptions as Follows:

[P40A / SYSTEM UPDATES (NON RECURRING ENGINEERING)]: Item Number 1.1 - Consists of the NRE efforts associated with the technology refresh/replacement of legacy AN/SQQ-89(V) equipment with updated Commercial-Off-The-Shelf (COTS) processors, including material procurement, fabrication, and integration of Government Furnished Property (GFP), as performed by the prime contractor. Hardware reviews will be conducted on an annual basis to determine if hardware changes are warranted based on Commercial-Off-The-Shelf (COTS) obsolescence and to identify applicable state-of-the-practice hardware components. This line also includes start-up/transition funding required for the AN/SQQ-89(V) prime in the first year of each new production/design agent contract.

[P40A / ENGINEERING CHANGES (ECs)]: Item Number 1.2 - Consists of Engineering Change Proposals (ECPs) and hardware/software changes/upgrades to previously fielded and in-production AN/SQQ-89A(V)15 systems. Funding will be used to support non-recurring first article test efforts associated with the changing Commercial-Off-The-Shelf (COTS) environment as well as Reliability, Maintainability, and Availability (RM&A) modifications requested by the Fleet; correct deficiencies identified through Fleet use; upgrade unreliable components; replace obsolete components; and correct design errors found during testing. Additionally, this line includes funding to productize and backfit a cyber mitigation to the software for the Technical Insertion/Advanced Capability Build (TI/ACB) configurations of the AN/SQQ-89A(V)15 Surface Ship ASW Combat System. Other high priority Fleet Incident Reports (IRs) will be addressed in conjunction with these cyber upgrades, as they arise. These upgrades proactively increase the level of complexity for an adversary to develop and employ cyber exploits against AN/SQQ-89 TI/ACBs with this capability (rather than reactively patching software after a cyber threat is detected).

[P40A / INTEGRATED LOGISTICS SUPPORT (ILS)]: Item Number 1.3 - Funding is provided for all ILS planning and coordination elements associated with every AN/SQQ-89A(V)15 modification/procurement/installation, including: configuration management and control of the hardware and software associated with each modification such as Maintenance and Material Management (3M); planned and corrective maintenance procedures and drawings; supporting the procurement of upgrades to Technical Training Equipment (TTE) for shore training sites; changes to maintenance concepts and associated updates to technical documentation, such as technical manuals; development of revisions to both operator and maintenance training materials as part of the initial training curriculum development; revisions to the Navy Training System Plan; initial conduct of instructor training (train-the-trainer) until such time that the training community assumes the responsibility; modifications to supply support related provisioning data and identification of related changes to Allowance Parts Lists (APLs) and Program Support Data (PSD) spares procurement lists; and Packaging, Handling, Storage and Transportation (PHST) support during the procurement, Installation and Checkout (INCO), and testing stages of the AN/SQQ-89A(V)15 to meet evolving capabilities.

[P40A / AEGIS INTEGRATION EVENTS (AIE)]: Item Number 1.4 - Recurring engineering support services associated with AN/SQQ-89A(V)15 Surface Ship ASW Combat System equipment at the Surface Combatant Systems Center (SCSC) Wallops Island, VA test facility to support land-based testing, external interface testing, and AEGIS Integration Event (AIE) production systems testing for interoperability risk reduction analysis purposes as necessary to certify that each incremental AN/SQQ-89A(V)15 hardware/software build is compatible with multiple AEGIS Weapons System (AWS) baselines prior to installation.

- The FY 2023 ($2.015M) to FY 2024 ($3.715M) increase ($+1.700M) is driven by the rise in the number of AEGIS Weapon System (AWS) production baseline and AN/SQQ-89A(V)15 hardware/software build configurations/combinations for testing at the SCSC Wallops land-based test facility, as both AEGIS AWS and the AN/SQQ-89A(V)15 continue to evolve and field additional capability to the Fleet. The number of AIE events required to be conducted to certify the various AEGIS AWS and AN/SQQ-89A(V)15 build combinations prior to delivery to the Fleet will increase by four (4) events each year starting in FY 2024. The increased number of platforms being upgraded each year, in combination with ship availabilities and the slowing of the upgrade of legacy AEGIS AWS baselines to a single production baseline, is leading to the creation of more configurations/combinations to certify.

[P40A / COMBAT SYSTEMS SHIP QUALIFICATION TRIALS (CSSQTs)]: Item Number 1.5 - CSSQTs are required per Naval Sea Systems Instruction 90963.1C for all ships undergoing significant conversion/modernization availabilities. CSSQTs consist of a series of at-sea exercises and tests to verify/certify the AN/SQQ-89A(V)15 or AN/SQQ-89A(V)15 Technology Refresh system has been installed properly and can be operated and maintained safely and effectively. CSSQTs follow every AN/SQQ-89A(V)15 DDG51-78 FLT I/II and DDG79-112 FLT IIA first-of-its-kind or AN/SQQ-89A(V)15 Technology Insertion/Refresh installation. CSSQT costs are dependent on the number, scope, and complexity of CSSQTs planned per Fiscal Year. CSSQTs planned for AN/SQQ-89A(V)15 DDG51-78 FLT I/II and DDG79-112 FLT IIA installs are higher in cost, scope and complexity than those for AN/SQQ-89A(V)15 Technology Insertion/Refreshes.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0205620N, 0603553N
Line Item MDAP/MAIS Code: N/A		

FY 2023 and FY 2024 costs are broken down as follows:

- In FY 2023 ($8.048M in total), eight CSSQTs are planned (two after major AN/SQQ-89A(V)15 DDG51-78 FLT I/II installs at $1.237M per CSSQT = $2.474M, and six after AN/SQQ-89A(V)15 Technology Insertion/Refresh installs at $0.929M per CSSQT = $5.574M).

- In FY 2024 ($6.312M in total), six CSSQTs are planned (two after major AN/SQQ-89A(V)15 DDG51-78 FLT I/II installs at $1.262M per CSSQT = $2.524M, and four after AN/SQQ-89A(V)15 Technology Insertion/Refresh installs at $0.947M per CSSQT = $3.788M).

[P40A / FOLLOW-ON OPERATIONAL TEST & EVALUATION (FOT&E)]: Item Number 1.6 - Represents the final independent test of each new increment of the AN/SQQ-89A(V)15 production baseline. Follow-On Operational Test & Evaluation (FOT&E) events are conducted to ensure each increment meets the operational effectiveness and suitability requirements for each incremental AN/SQQ-89A(V)15 Advanced Capability Build (ACB) production baseline, along with its readiness and performance goals. Each test cycle is planned the year after initial ACB baseline fielding to allow time for installation and to verify performance prior to conducting the FOT&E. FOT&E costs are primarily biennial driven, and dependent on the scope and complexity of the next new AN/SQQ-89A(V)15 ACB production baseline release being tested.

FY 2023 and FY 2024 costs are broken down as follows:

- In FY 2023, funding ($2.217M) is required to conduct an FOT&E event on the next new AN/SQQ-89A(V)15 ACB production baseline release.

- In FY 2024, there is no requirement to conduct an FOT&E event.

[P40A / FLEET ASW TRAINING CENTER (FLTASWTRACEN)]: Item Number 1.7 - Upgrade and virtualization of AN/SQQ-89A(V)15 training equipment for the Fleet ASW Training Center, San Diego, CA. Training system improvements are a critical factor in achieving warfighter competencies and mission readiness. Equipment must be upgraded periodically to ensure continued support of the latest backfit Advanced Capability Build (ACB) and AEGIS Weapon System (AWS) baselines and to implement Fleet prioritized warfighting training improvements to meet evolving capabilities. FLTASWTRACEN costs are primarily biennial driven, and are dependent on the scope and complexity of training equipment to be upgraded.

FY 2023 and FY 2024 costs are broken down as follows:

- In FY 2023, there is no requirement to upgrade the equipment at the Fleet ASW Training Center.

- In FY 2024, funding ($1.074M) is required to upgrade the equipment at the Fleet ASW Training Center.

[P40A / SURFACE SHIP ENGINEERING SITE (SSES)]: Item Number 1.8 - Procurement of AN/SQQ-89A(V)15 equipment for land-based sites, including the SSES at the AN/SQQ-89(V) prime vendor's facility, to support production system integration and interoperability testing. Equipment includes simulation hardware, test tools, fabrication and test of mod kits (hardware and operational software), and laboratory equipment. Equipment must be upgraded periodically to ensure continued support of the latest backfit AN/SQQ-89A(V)15 Advanced Capability Build (ACB) and AEGIS Weapon System (AWS) production baselines. SSES costs are primarily biennial driven, and dependent on the scope and complexity of shore site equipment production to be upgraded.

FY 2023 and FY 2024 costs are broken down as follows:

- In FY 2023, there is no requirement to upgrade the equipment at the SSES land-based site.

- In FY 2024, funding ($3.191M) is required to upgrade the equipment at the SSES land-based site.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0205620N, 0603553N
Line Item MDAP/MAIS Code: N/A		

[P40A / SURFACE COMBATANT SYSTEMS CENTER (SCSC)]: Item Number 1.9 - Procurement of AN/SQQ-89A(V)15 equipment for land-based sites including the Surface Combatant Systems Center (SCSC) at Wallops Island, VA, to support production system integration and interoperability testing. Equipment includes simulation hardware, test tools, fabrication and test of mod kits (hardware and operational software), and laboratory equipment. Equipment must be upgraded periodically to ensure continued support of the latest backfit Advanced Capability Build (ACB) and AEGIS Weapon System (AWS) productions baselines. SCSC Wallops costs are primarily biennial driven, and dependent on the scope and complexity of shore site equipment to be upgraded.

FY 2023 and FY 2024 costs are broken down as follows:

- In FY 2023, funding ($1.381M) is required to upgrade the equipment at the SCSC Wallops Island land-based site.

- In FY 2024, there is no requirement to upgrade equipment at the SCSC Wallops Island land-based site.

[P40A / MULTI-FUNCTION TOWED ARRAY (MFTA) MAJOR EQUIPMENT]: Item Number 1.10 - Procurement of Multi-Function Towed Array (MFTA) full module sets required for expeditious replacement in the event of major damage (the MFTA is considered a principle item). The MFTA is a key component of the AN/SQQ-89A(V)15 USW Combat System upgrade and enables ships to have active bi-statics, Continuous Active Sonar (CAS), adaptive beamforming, passive bellringers, and the use of new sensors for advanced torpedo detection. MFTA procurements are of the improved TB-37A version which is required to address and resolve deficiencies in the current MFTA TB-37 version's reliability (by changing from a Towed Array Integrated Product Team (TAIPT) telemetry to a more reliable telemetry), address and resolve parts obsolescence issues, as well as procure additional MFTA TB-37A handling sensors and non-acoustic node (NAS) hardware, and the packaging modifications needed to fit the new components.

[P40A / DB830 - PRODUCTION ENGINEERING - SQQ-89A(V)15]: DB830 Cost Element/Description as Follows:

[P40A / PRODUCTION ENGINEERING]: Item Number 2.1 - Funding is for AN/SQQ-89A(V)15 program In-Service Engineering Agent (ISEA), Software Support Activity (SSA), Acquisition Engineering Agent (AEA), and Technical Design Agent (TDA) efforts in performing the following functions: writing of contracts; review and evaluation of production design data, documentation and Contract Data Requirements Lists (CDRLs); letting of production contract awards; on-site engineering support at the prime integrator's facility; production configuration control and quality assurance (Production Inspection Test (PIT) and Production Reliability Acceptance Test (PRAT)); witnessing of segment/system integration tests and preparation of reports; conduct of first article and factory acceptance tests; collection of performance metrics; generation/assessment of Software Problem Reports (SPRs) and coordination with vendors; value and maintenance engineering; coordination with AEGIS regarding interface definition and ship integration; support safety review and AEGIS Integration Events (AIE); provide plans, procedures and inputs to support Information Assurance (IA) mandates; provide status reports and technical briefings; support meetings with program office; and all other production support efforts directly related to delivery of AN/SQQ-89A(V)15 software and hardware.

[P40A / DB900 - CONSULTING SERVICES - SQQ-89A(V)15]: DB900 Cost Element/Description as Follows:

[P40A / CONSULTING SERVICES]: Item Number 3.1 - Funding to provide assistance in the following areas: program and financial management; system specification validation; production planning; business case and market analyses; vendor cost, schedule, performance, production, and contract deliverable monitoring; installation planning and coordination; Integrated Logistics Support (ILS) asset management, planning, documentation, and coordination; and evaluation of Engineering Change Proposals (ECPs).

[P3A / AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE]: See the following:

AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE - COST CODE DB400 PROCUREMENT: Procurement of AN/SQQ-89A(V)15 equipment for subsequent backfit installation on all DDG79-112 Flight IIA ships. An average, aggregate AN/SQQ-89A(V)15 unit cost is indicated, however, it should be noted that this cost is comprised of multiple contract/funding vehicles. Additionally, the subdivision of these unit costs to a specific ship can vary as they are dependent on the pre-existing configuration of each ship.

AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE - COST CODE DB6IN INSTALLATION: Funding is for the full-up physical installation of the major AN/SQQ-89A(V)15 upgrade, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0205620N, 0603553N
Line Item MDAP/MAIS Code: N/A		

[P3A / AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE]: See the following:

AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE - COST CODE DB400 PROCUREMENT: Procurement of AN/SQQ-89A(V)15 equipment for subsequent backfit installation on select DDG51-78 FLT I/II ships. An average, aggregate AN/SQQ-89A(V)15 unit cost is indicated, however, it should be noted that this cost is comprised of multiple contract/funding vehicles. Additionally, the subdivision of these unit costs to a specific ship can vary as they are dependent on the pre-existing configuration of each ship.

AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE - COST CODE DB6IN INSTALLATION: Funding is for the full-up physical installation of the major AN/SQQ-89A(V)15 upgrade, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard.

[P3A - 3 / AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE]: See the following:

AN/SQQ-89A(V)15 - DDG113 AND FOLLOW MFTA/HANDLER UPGRADE - COST CODE DB400 PROCUREMENT: Procurement of a subset of AN/SQQ-89A(V)15 equipment, specifically the Multi-Function Towed Array (MFTA) and OK-410 Handling & Stowage Group (H&SG), for subsequent installation on all DDG113-132 ships during their Post Delivery Availability (PDA) or Post Shakedown Availability (PSA) periods, to upgrade the ASW sonar suite from an AN/SQQ-89(V)15 configuration to the AN/SQQ-89A(V)15 configuration.

AN/SQQ-89A(V)15 - DDG113 AND FOLLOW MFTA/HANDLER UPGRADE - COST CODE DB6IN INSTALLATION: Physical installation of the MFTA and OK-410 H&SG on DDG113-132 ships during their PDA or PSA period which includes the installation of an egress, under-deck stiffeners, cables, bulkheads, opening and closing of the transom, the winch, levelwind, fairlead and control station, decking, painting, and final system testing, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard.

[P3A - 4 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH]: See the following:

AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - COST CODE DB400 PROCUREMENT: Procurement of software/hardware technology upgrades for all DDG51 Class surface combatant platforms with a previously fielded AN/SQQ-89A(V)15 with a current hardware configuration that is prior to the Technical Insertion-14 (TI-14) production baseline, as necessary to manage obsolescence, take advantage of commercial development efforts, and continue to pace the threat and ensure the system remains effective well into the 21st century. Updating the hardware and software will ensure the Fleet maintains critical Undersea Warfare capability while reducing obsolescence. Establishing a technology refresh program provides a method for rapid response to meet Fleet Anti-Submarine Warfare (ASW) requirements.

AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - COST CODE DB6IN INSTALLATION: Funding is for the physical installation of the AN/SQQ-89A(V)15 Technology Refresh upgrade, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard.

[P3A - 5 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE]: See the following:

AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE - COST CODE DB400 PROCUREMENT: Funding is to commence, starting in FY 2024, the Build-In-Place Technology Insertion/ Refresh procurement of software/hardware technology upgrades for all platforms with a previously fielded AN/SQQ-89A(V)15 with a current Technical Insertion-14 (TI-14) production baseline or above, as necessary to manage obsolescence, take advantage of commercial development efforts, and continue to pace the threat and ensure the system remains effective well into the 21st century. The TI-14 and above (TI-14 through TI-20) production baselines have a consistent architecture and configuration which allows a similar strategy that submarine Acoustic Rapid Commercial Off The Shelf (COTS) Insertion (ARCI) programs employ in order to retain equipment racks and upgrade processing, storage, and network capability onboard the platform during installation, which allows for reuse of the cabinet infrastructure.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0205620N, 0603553N
Line Item MDAP/MAIS Code: N/A		

AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE - COST CODE DB6IN INSTALLATION: Funding is for the physical installation of the AN/SQQ-89A(V)15 Build-In-Place Technology Insertion/Refresh upgrade, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard. Installation of a Build-In-Place Technology Insertion/Refresh upgrade eliminates the need for intrusive access hull cuts.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0205620N, 0603553N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	AN/SQQ-89(V) SURFACE ASW COMBAT SYSTEM	P-5a			- / 1,447.001	- / 35.420	- / 31.671	- / 32.662	- / -	- / 32.662
P-3a	1 / AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE (Warfighting Capability)				- / 476.525	- / 5.921	- / 12.882	- / 1.262	- / 0.000	- / 1.262
P-3a	2 / AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE (Warfighting Capability)				- / 109.196	- / 28.963	- / 33.027	- / 11.092	- / 0.000	- / 11.092
P-3a	3 / AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE (Warfighting Capability)				- / 100.256	- / 16.655	- / 16.988	- / 17.326	- / 0.000	- / 17.326
P-3a	4 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH (Warfighting Capability)				- / 210.465	- / 39.912	- / 45.589	- / 16.347	- / 0.000	- / 16.347
P-3a	5 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE (Warfighting Capability)				- / 0.000	- / 0.000	- / 0.000	- / 59.376	- / 0.000	- / 59.376
P-40	**Total Gross/Weapon System Cost**				**- / 2,343.443**	**- / 126.871**	**- / 140.157**	**- / 138.065**	**- / 0.000**	**- / 138.065**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	AN/SQQ-89(V) SURFACE ASW COMBAT SYSTEM	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE (Warfighting Capability)				- / 6.283	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 502.873
P-3a	2 / AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE (Warfighting Capability)				- / 9.093	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 191.371
P-3a	3 / AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE (Warfighting Capability)				- / 4.127	- / 3.704	- / 0.000	- / 0.000	- / 0.000	- / 159.056
P-3a	4 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH (Warfighting Capability)				- / 20.374	- / 8.147	- / 2.836	- / 2.628	- / 0.000	- / 346.298
P-3a	5 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE (Warfighting Capability)				- / 63.801	- / 92.996	- / 104.549	- / 107.169	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 139.468**	**- / 140.799**	**- / 143.627**	**- / 146.896**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY 2024 budget request supports the upgrade of legacy, in-service AN/SQQ-89(V) systems to the AN/SQQ-89A(V)15 USW Combat System baseline. Additionally, this budget line item is responsible for periodic technology refresh initiatives (every 6-9 years per AN/SQQ-89A(V)15 equipped ship) in conjunction with previously fielded AN/SQQ-89A(V)15 systems across all DDG 51 Class platforms (software/ hardware technology upgrades/insertions) to pace peer threats and remain effective well into the 21st century.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Aggregated Items Title:** AN/SQQ-89(V) SURFACE ASW COMBAT SYSTEM

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) DB400 - DDG51 CLASS SYSTEM COMPONENTS - SQQ-89A(V)15																				
1.1) SYSTEM UPDATES (NON RECURRING ENGINEERING)			-	-	24.031	-	-	1.639	-	-	1.672	-	-	1.705	-	-	-	-	-	1.705
1.2) ENGINEERING CHANGES (ECs)			-	-	1,122.113	-	-	5.878	-	-	4.090	-	-	4.172	-	-	-	-	-	4.172
1.3) INTEGRATED LOGISTICS SUPPORT (ILS)			-	-	52.324	-	-	3.189	-	-	3.253	-	-	3.318	-	-	-	-	-	3.318
1.4) AEGIS INTEGRATION EVENTS (AIE) (1)			-	-	31.626	-	-	2.082	-	-	2.015	-	-	3.715	-	-	-	-	-	3.715
1.5) COMBAT SYSTEMS SHIP QUALIFICATION TRIALS (CSSQTs) (2)			-	-	54.465	-	-	9.714	-	-	8.048	-	-	6.312	-	-	-	-	-	6.312
1.6) FOLLOW-ON OPERATIONAL TEST & EVALUATION (FOT&E) (3)			-	-	10.664	-	-	-	-	-	2.217	-	-	-	-	-	-	-	-	-
1.7) FLEET ASW TRAINING CENTER (FLTASWTRACEN) (4)			-	-	7.394	-	-	1.032	-	-	-	-	-	1.074	-	-	-	-	-	1.074
1.8) SURFACE SHIP ENGINEERING SITE (SSES) (5)			-	-	17.145	-	-	3.067	-	-	-	-	-	3.191	-	-	-	-	-	3.191
1.9) SURFACE COMBATANT SYSTEMS CENTER (SCSC) (6)			-	-	8.195	-	-	-	-	-	1.381	-	-	-	-	-	-	-	-	-
1.10) MULTI-FUNCTION TOWED ARRAY (MFTA) MAJOR EQUIPMENT(†)	A		4,161K	3	12.484	4,301K	1	4.301	4,387K	1	4.387	4,475K	1	4.475	-	-	-	4,475K	1	4.475
Subtotal: 1) DB400 - DDG51 CLASS SYSTEM COMPONENTS - SQQ-89A(V)15			**-**	**-**	***1,340.441***	**-**	**-**	***30.902***	**-**	**-**	***27.063***	**-**	**-**	***27.962***	**-**	**-**	**-**	**-**	**-**	***27.962***
2) DB830 - PRODUCTION ENGINEERING - SQQ-89A(V)15																				
2.1) PRODUCTION ENGINEERING			-	-	82.167	-	-	3.248	-	-	3.313	-	-	3.379	-	-	-	-	-	3.379
Subtotal: 2) DB830 - PRODUCTION ENGINEERING - SQQ-89A(V)15			**-**	**-**	***82.167***	**-**	**-**	***3.248***	**-**	**-**	***3.313***	**-**	**-**	***3.379***	**-**	**-**	**-**	**-**	**-**	***3.379***

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Aggregated Items Title:** AN/SQQ-89(V) SURFACE ASW COMBAT SYSTEM

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
3) DB900 - CONSULTING SERVICES - SQQ-89A(V)15																				
3.1) CONSULTING SERVICES			-	-	24.393	-	-	1.270	-	-	1.295	-	-	1.321	-	-	-	-	-	1.321
Subtotal: 3) DB900 - CONSULTING SERVICES - SQQ-89A(V)15			**-**	**-**	***24.393***	**-**	**-**	***1.270***	**-**	**-**	***1.295***	**-**	**-**	***1.321***	**-**	**-**	**-**	**-**	**-**	***1.321***
Total			**-**	**-**	**1,447.001**	**-**	**-**	**35.420**	**-**	**-**	**31.671**	**-**	**-**	**32.662**	**-**	**-**	**-**	**-**	**-**	**32.662**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) Item Number 1.4 - AEGIS INTEGRATION EVENTS (AIE): The FY 2023 ($2.015M) to FY 2024 ($3.715M) increase ($+1.700M) is driven by the rise in the number of AEGIS Weapon System (AWS) production baseline and AN/SQQ-89A(V)15 hardware/software build configurations/combinations for testing at the SCSC Wallops land-based test facility, as both AEGIS AWS and the AN/SQQ-89A(V)15 continue to evolve and field additional capability to the Fleet. The number of AIE events required to be conducted to certify the various AEGIS AWS and AN/SQQ-89A(V)15 build combinations prior to delivery to the Fleet will increase by four (4) events each year starting in FY 2024. The increased number of platforms being upgraded each year, in combination with ship availabilities and the slowing of the upgrade of legacy AEGIS AWS baselines to a single production baseline, is leading to the creation of more configurations/combinations to certify.

(2) Item Number 1.5 - COMBAT SYSTEMS QUALIFICATIONS TRIALS (CSSQTs): CSSQTs are required per Naval Sea Systems Instruction 90963.1C for all ships undergoing significant conversion/modernization availabilities. CSSQTs consist of a series of at-sea exercises and tests to verify/certify the AN/SQQ-89A(V)15 or AN/SQQ-89A(V)15 Technology Refresh system has been installed properly and can be operated and maintained safely and effectively. CSSQTs follow every AN/SQQ-89A(V)15 DDG51-78 FLT I/II and DDG79-112 FLT IIA first-of-its-kind or AN/SQQ-89A(V)15 Technology Insertion/Refresh installation. CSSQT costs are dependent on the number, scope, and complexity of CSSQTs planned per Fiscal Year. CSSQTs planned for AN/SQQ-89A(V)15 DDG51-78 FLT I/II and DDG79-112 FLT IIA installs are higher in cost, scope and complexity than those for AN/SQQ-89A(V)15 Technology Insertion/Refreshes. FY 2023 and FY 2024 costs are broken down as follows: In FY 2023 ($8.048M in total), eight CSSQTs are planned (two after major AN/SQQ-89A(V)15 DDG51-78 FLT I/II installs at $1.237M per CSSQT = $2.474M, and six after AN/SQQ-89A(V)15 Technology Insertion/Refresh installs at $0.929M per CSSQT = $5.574M). In FY 2024 ($6.312M in total), six CSSQTs are planned (two after major AN/SQQ-89A(V)15 DDG51-78 FLT I/II installs at $1.262M per CSSQT = $2.524M, and four after AN/SQQ-89A(V)15 Technology Insertion/Refresh installs at $0.947M per CSSQT = $3.788M).

(3) Item Number 1.6 - FOLLOW-ON OPERATIONAL TEST & EVALUATION (FOT&E): Represents the final independent test of each new increment of the AN/SQQ-89A(V)15 production baseline. Follow-On Operational Test & Evaluation (FOT&E) events are conducted to ensure each increment meets the operational effectiveness and suitability requirements for each incremental AN/SQQ-89A(V)15 Advanced Capability Build (ACB) production baseline, along with its readiness and performance goals. Each test cycle is planned the year after initial ACB baseline fielding to allow time for installation and to verify performance prior to conducting the FOT&E. FOT&E costs are primarily biennial driven, and dependent on the scope and complexity of the next new AN/SQQ-89A(V)15 ACB production baseline release being tested. FY 2023 and FY 2024 costs are broken down as follows: In FY 2023, funding ($2.217M) is required to conduct an FOT&E event on the next new AN/SQQ-89A(V)15 ACB production baseline release. In FY 2024, there is no requirement to conduct an FOT&E event.

(4) Item Number 1.7 - FLEET ASW TRAINING CENTER (FLTASWTRACEN): Upgrade and virtualization of AN/SQQ-89A(V)15 training equipment for the Fleet ASW Training Center, San Diego, CA. Training system improvements are a critical factor in achieving warfighter competencies and mission readiness. Equipment must be upgraded periodically to ensure continued support of the latest backfit Advanced Capability Build (ACB) and AEGIS Weapon System (AWS) production baselines and to implement Fleet prioritized warfighting training improvements to meet evolving capabilities. FLTASWTRACEN costs are primarily biennial driven, and are dependent on the scope and complexity of training equipment to be upgraded. FY 2023 and FY 2023 costs are broken down as follows: In FY 2023, there is no requirement to upgrade the equipment at the Fleet ASW Training Center. In FY 2024, funding ($1.074M) is required to upgrade the equipment at the Fleet ASW Training Center.

(5) Item Number 1.8 - SURFACE SHIP ENGINEERING SITE (SSES), AN/SQQ-89(V) Prime Vendor's Facility): Procurement of AN/SQQ-89A(V)15 equipment for land-based sites, including the SSES at the prime vendor's facility, to support production system integration and interoperability testing. Equipment includes simulation hardware, test tools, fabrication and test of mod kits (hardware and operational software), and laboratory equipment. Equipment must be upgraded periodically to ensure continued support of the latest backfit AN/SQQ-89A(V)15 Advanced Capability Build (ACB) and AEGIS Weapon System (AWS) production baselines. SSES costs are primarily biennial driven, and dependent on the scope and complexity of shore site equipment to be upgraded. FY 2023 and FY 2024 costs are broken down as follows: In FY 2023, there is no requirement to upgrade the equipment at the SSES land-based site. In FY 2024, funding ($3.191M) is required to upgrade the equipment at the SSES land-based site.

(6) Item Number 1.9 - SURFACE COMBATANT SYSTEMS CENTER (SCSC), Wallops Island, VA): Procurement of AN/SQQ-89A(V)15 equipment for land-based sites including the Surface Combatant Systems Center (SCSC) at Wallops Island, VA, to support production system integration and interoperability testing. Equipment includes simulation hardware, test tools, fabrication and test of mod kits (hardware and operational software), and laboratory equipment. Equipment must be upgraded periodically to ensure continued support of the latest backfit Advanced Capability Build (ACB) and AEGIS Weapon System (AWS) production baselines. SCSC Wallops costs are primarily biennial driven, and dependent on the scope and complexity of shore site equipment to be upgraded. FY 2023 and FY 2024 costs are broken down as follows: In FY 2023, funding ($1.309M) is required to upgrade the equipment at the SCSC Wallops Island land-based site. In FY 2024, there is no requirement to upgrade equipment at the SCSC Wallops Island land-based site.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	P-1 Line Item Number / Title: 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	Aggregated Items: AN/SQQ-89(V) SURFACE ASW COMBAT SYSTEM

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) DB400 - DDG51 CLASS SYSTEM COMPONENTS - SQQ-89A(V)15												
1.10) MULTI-FUNCTION TOWED ARRAY (MFTA) MAJOR EQUIPMENT		2020	Lockheed Martin / Syracuse, NY	C / FFP	NAVSEA	Mar 2020	Sep 2021	1	4,134K	Y		Mar 2018
1.10) MULTI-FUNCTION TOWED ARRAY (MFTA) MAJOR EQUIPMENT		2021	Lockheed Martin / Syracuse, NY	C / FFP	NAVSEA	Jun 2021	Dec 2022	1	4,217K	Y		Mar 2018
1.10) MULTI-FUNCTION TOWED ARRAY (MFTA) MAJOR EQUIPMENT		2022	Lockheed Martin / Syracuse, NY	C / FFP	NAVSEA	Jun 2022	Dec 2023	1	4,301K	Y		Mar 2018
1.10) MULTI-FUNCTION TOWED ARRAY (MFTA) MAJOR EQUIPMENT		2023	Lockheed Martin / Syracuse, NY	C / FFP	NAVSEA	Apr 2023	Oct 2024	1	4,387K	Y		Mar 2018
1.10) MULTI-FUNCTION TOWED ARRAY (MFTA) MAJOR EQUIPMENT		2024	Lockheed Martin / Syracuse, NY	C / FFP	NAVSEA	Mar 2024	Sep 2025	1	4,475K	Y		Mar 2018

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 1 / AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	476.525	5.921	12.882	1.262	0.000	1.262	6.283	0.000	0.000	0.000	0.000	502.873
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	476.525	5.921	12.882	1.262	0.000	1.262	6.283	0.000	0.000	0.000	0.000	502.873
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**476.525**	**5.921**	**12.882**	**1.262**	**0.000**	**1.262**	**6.283**	**0.000**	**0.000**	**0.000**	**0.000**	**502.873**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE] See the following:

AN/SQQ-89A(V)15 YEAR-TO-YEAR FUNDING PROFILE FROM PROCUREMENT TO INSTALL:
1st Budget Year - Procurement of equipment.
2nd Budget Year - Ordering of incidental installation material and performance of mandatory advance planning yard design tasks and ship checks, which are required to be budgeted in the year *prior* to the physical installation of equipment. These costs are depicted in the P-3a exhibit with a quantity of "0".
3rd Budget Year - Installation of equipment.

AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE - COST CODE DB400 PROCUREMENT: Procurement of AN/SQQ-89A(V)15 equipment for subsequent backfit installation on all DDG79-112 Flight IIA ships. An average, aggregate AN/SQQ-89A(V)15 unit cost is indicated, however, it should be noted that this cost is comprised of multiple contract/funding vehicles. Additionally, the subdivision of these unit costs to a specific ship can vary as they are dependent on the pre-existing configuration of each ship.

NOTE: Procurement cost of an AN/SQQ-89A(V)15 upgrade for DDG51 Class FLT IIA ships is greater than that for DDG51 Class FLT I/II ships because the DDG51 Class FLT IIA ships require the OK-410 Handling & Stowage Group (H&SG) subsystem (whereas the OK-410 is not a requirement for the DDG51 Class FLT I/II ships due to it already being previously procured/installed as part of the legacy AN/SQQ-89(V) program).

AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE - COST CODE DB6IN INSTALLATION: Funding is for the full-up physical installation of the major AN/SQQ-89A(V)15 upgrade, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard.

NOTE: Physical installation cost of an AN/SQQ-89A(V)15 upgrade for DDG51 Class FLT IIA ships is greater than that for DDG51 Class FLT I/II ships because the DDG51 Class FLT IIA ships require the OK-410 Handling & Stowage Group (H&SG) subsystem (whereas the OK-410 is not a requirement for the DDG51 Class FLT I/II ships due to it already being previously procured/installed as part of the legacy AN/SQQ-89(V) program).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 1 / AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

The AN/SQQ-89A(V)15 requires a CNO (Chief of Naval Operations) availability period. The installation is accomplished by Alteration Installation Team (AIT) and shipyard personnel together. The AIT personnel are responsible for the removal of all AN/SQQ-89(V) legacy equipment, addition and modification of foundations, and installation, connectorization, and test of all new AN/SQQ-89A(V)15 equipment. The shipyard personnel are responsible for all rigging activities, hull access cuts, and installation of the Handling & Stowage Gear (H&SG) on non-tailed (i.e. no towed array) DDG51 Class Flight IIA hulls, which is required for the operation of the tactical towed sonar, the Multi-Function Towed Array (MFTA).

AN/SQQ-89A(V)15 production shipset delivery time is 18 months after contract award. Delivery of equipment to the shipyard is preferably no later than 30 days prior to a CONUS (Continental U.S.) installation start date and no later than 90 days prior to a non-CONUS installation start date. Installations are assigned to specific ships as per Fleet priorities/requirements, and based on ship availabilities, as identified in the Fleet Modernization Program Management Information System (FMPMIS). Significant maintenance availability periods to support a major upgrade such as the AN/SQQ-89A(V)15 normally occur only once every three years in a ship's schedule.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 1 / AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Upgrade of legacy AN/SQQ-89(V) systems on all DDG79-112 ships to AN/SQQ-89A(V)15 configuration	**Modification Type:** Warfighting Capability	**Related RDT&E PEs:** 0205620N, 0603553N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE												
B Kits												
Recurring												
1.1.1) AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE - NonOrganic (7)	33 / 310.189	- / -	1 / 12.882	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	34 / 323.071
Subtotal: Recurring	*- / 310.189*	*- / -*	*- / 12.882*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 323.071*
Subtotal: AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE	*33 / 310.189*	*- / -*	*1 / 12.882*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*34 / 323.071*
Subtotal: Procurement, All Modification Items	*- / 310.189*	*- / -*	*- / 12.882*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 323.071*
Installation												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE	- / 166.336	- / 5.921	- / 0.000	- / 1.262	- / 0.000	- / 1.262	- / 6.283	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 179.802
Subtotal: Installation	*- / 166.336*	*- / 5.921*	*- / -*	*- / 1.262*	*- / -*	*- / 1.262*	*- / 6.283*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 179.802*
Total												
Total Cost (Procurement + Support + Installation)	**476.525**	**5.921**	**12.882**	**1.262**	**0.000**	**1.262**	**6.283**	**0.000**	**0.000**	**0.000**	**0.000**	**502.873**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 1 / AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: Manassas, VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Apr 2023					
Delivery Dates		Oct 2024					

Installation Information

Method of Implementation: AIT and SHIPYARD:: Installation Name: AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	32 / 166.336	1 / 5.921	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	33 / 172.257
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	0 / 1.262	0 / 0.000	0 / 1.262	1 / 6.283	- / -	- / -	- / -	0 / 0.000	1 / 7.545
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	32 / 166.336	1 / 5.921	- / -	0 / 1.262	0 / 0.000	0 / 1.262	1 / 6.283	- / -	- / -	- / -	0 / 0.000	34 / 179.802

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	32	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34
Out	32	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	34

Footnotes:

(7) AN/SQQ-89A(V)15 installation funding is phased across two budget years. Performance of planning yard design tasks, ship checks, and the ordering of incidental installation material, depicted in the P-3a exhibit with a quantity of "0", are budgeted in the year *prior* to the actual physical installation of equipment. In the second budget year, costs associated with the actual physical installation of equipment on ship

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 1 / AN/SQQ-89A(V)15 - DDG79-112 FLT IIA UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

are shown with a quantity other than "0". FY 2024 installation costs depicted with a quantity of "0" are derived as follows: One (1) set of planning yard design tasks/ship checks/installation material (required one year prior to physical installation shown in FY 2025) * $1.262M per set = $1.262M.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 2 / AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	109.196	28.963	33.027	11.092	0.000	11.092	9.093	0.000	0.000	0.000	0.000	191.371
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	109.196	28.963	33.027	11.092	0.000	11.092	9.093	0.000	0.000	0.000	0.000	191.371
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**109.196**	**28.963**	**33.027**	**11.092**	**0.000**	**11.092**	**9.093**	**0.000**	**0.000**	**0.000**	**0.000**	**191.371**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE] See the following:

AN/SQQ-89A(V)15 YEAR-TO-YEAR FUNDING PROFILE FROM PROCUREMENT TO INSTALL:
1st Budget Year - Procurement of equipment.
2nd Budget Year - Ordering of incidental installation material and performance of mandatory advance planning yard design tasks and ship checks, which are required to be budgeted in the year *prior* to the physical installation of equipment. These costs are depicted in the P-3a exhibit with a quantity of "0".
3rd Budget Year - Installation of equipment.

AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE - COST CODE DB400 PROCUREMENT: Procurement of AN/SQQ-89A(V)15 equipment for subsequent backfit installation on select DDG51-78 FLT I/II ships. An average, aggregate AN/SQQ-89A(V)15 unit cost is indicated, however, it should be noted that this cost is comprised of multiple contract/funding vehicles. Additionally, the subdivision of these unit costs to a specific ship can vary as they are dependent on the pre-existing configuration of each ship.

NOTE: Procurement cost of an AN/SQQ-89A(V)15 upgrade for DDG51 Class FLT I/II ships is less than that for DDG51 Class FLT IIA ships because the DDG51 Class FLT I/II ships do not require the OK-410 Handling & Stowage Group (H&SG) subsystem due to it already being previously procured/installed as part of the legacy AN/SQQ-89(V) program (whereas the OK-410 is a requirement for the DDG51 Class FLT IIA ships).

AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE - COST CODE DB6IN INSTALLATION: Funding is for the full-up physical installation of the major AN/SQQ-89A(V)15 upgrade, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard.

NOTE: Physical installation cost of an AN/SQQ-89A(V)15 upgrade for DDG51 Class FLT I/II ships is less than that for DDG51 Class FLT IIA ships because the DDG51 Class FLT I/II ships do not require the OK-410 Handling & Stowage Group (H&SG) subsystem due to it already being previously procured/installed as part of the legacy AN/SQQ-89(V) program (whereas the OK-410 is a requirement for the DDG51 Class FLT IIA ships).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 2 / AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

The AN/SQQ-89A(V)15 requires a CNO (Chief of Naval Operations) availability period. The installation is accomplished by Alteration Installation Team (AIT) and shipyard personnel together. The AIT personnel are responsible for the removal of all AN/SQQ-89(V) legacy equipment, addition and modification of foundations, and installation, connectorization, and test of all new AN/SQQ-89A(V)15 equipment. The shipyard personnel are responsible for all rigging activities and hull access cuts.

AN/SQQ-89A(V)15 production shipset delivery time is 18 months after contract award. Delivery of equipment to the shipyard is preferably no later than 30 days prior to a CONUS (Continental U.S.) installation start date and no later than 90 days prior to a non-CONUS installation start date. Installations are assigned to specific ships as per Fleet priorities/requirements, and based on ship availabilities, as identified in the Fleet Modernization Program Management Information System (FMPMIS). Significant maintenance availability periods to support a major upgrade such as the AN/SQQ-89A(V)15 normally occur only once every three years in a ship's schedule.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 2 / AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Upgrade of legacy AN/SQQ-89(V) systems on select DDG51-78 ships to AN/SQQ-89A(V)15 configuration	**Modification Type:** Warfighting Capability	**Related RDT&E PEs:** 0205620N, 0603553N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE												
B Kits												
Recurring												
1.1.1) AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE - NonOrganic [8]	8 / 79.383	2 / 21.720	2 / 22.154	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 123.257
Subtotal: Recurring	*- / 79.383*	*- / 21.720*	*- / 22.154*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 123.257*
Subtotal: AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE	*8 / 79.383*	*2 / 21.720*	*2 / 22.154*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*12 / 123.257*
Subtotal: Procurement, All Modification Items	*- / 79.383*	*- / 21.720*	*- / 22.154*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 123.257*
Installation												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE	- / 29.813	- / 7.243	- / 10.873	- / 11.092	- / 0.000	- / 11.092	- / 9.093	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 68.114
Subtotal: Installation	*- / 29.813*	*- / 7.243*	*- / 10.873*	*- / 11.092*	*- / -*	*- / 11.092*	*- / 9.093*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 68.114*
Total												
Total Cost (Procurement + Support + Installation)	**109.196**	**28.963**	**33.027**	**11.092**	**0.000**	**11.092**	**9.093**	**0.000**	**0.000**	**0.000**	**0.000**	**191.371**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 2 / AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: Manassas, VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	May 2022	Apr 2023					
Delivery Dates	Nov 2023	Oct 2024					

Installation Information

Method of Implementation: AIT and SHIPYARD:: Installation Name: AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	5 / 29.813	1 / 7.243	2 / 8.739	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	8 / 45.795
FY 2022	- / -	- / -	0 / 2.134	2 / 8.915	0 / 0.000	2 / 8.915	- / -	- / -	- / -	- / -	0 / 0.000	2 / 11.049
FY 2023	- / -	- / -	- / -	0 / 2.177	0 / 0.000	0 / 2.177	2 / 9.093	- / -	- / -	- / -	0 / 0.000	2 / 11.270
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 29.813	1 / 7.243	2 / 10.873	2 / 11.092	0 / 0.000	2 / 11.092	2 / 9.093	- / -	- / -	- / -	0 / 0.000	12 / 68.114

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	5	-	-	1	-	-	1	1	-	-	1	1	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Out	4	1	-	-	1	-	-	1	1	-	-	1	1	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	12

Footnotes:

(8) AN/SQQ-89A(V)15 installation funding is phased across two budget years. Performance of planning yard design tasks, ship checks, and the ordering of incidental installation material, depicted in the P-3a exhibit with a quantity of "0", are budgeted in the year *prior* to the actual physical installation of equipment. In the second budget year, costs associated with the actual physical installation of equipment on ship are shown with a quantity other than "0". FY 2023 installation costs depicted with a quantity of "0" are derived as follows: Two (2) sets of planning yard design tasks/ship checks/installation material (required one

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 2 / AN/SQQ-89A(V)15 - DDG51-78 (SELECT) FLT I/II UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

year prior to physical installation shown in FY 2024) * $1.067M per set = $2.134M. FY 2024 installation costs depicted with a quantity of "0" are derived as follows: Two (2) sets of planning yard design tasks/ship checks/installation material (required one year prior to physical installation shown in FY 2025) * $1.088M per set = $2.177M.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 3 / AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	100.256	16.655	16.988	17.326	0.000	17.326	4.127	3.704	0.000	0.000	0.000	159.056
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	100.256	16.655	16.988	17.326	0.000	17.326	4.127	3.704	0.000	0.000	0.000	159.056
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**100.256**	**16.655**	**16.988**	**17.326**	**0.000**	**17.326**	**4.127**	**3.704**	**0.000**	**0.000**	**0.000**	**159.056**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE] See the following:

AN/SQQ-89A(V)15 YEAR-TO-YEAR FUNDING PROFILE FROM PROCUREMENT TO INSTALL:
1st Budget Year - Procurement of equipment.
2nd Budget Year - Ordering of incidental installation material and performance of mandatory advance planning yard design tasks and ship checks, which are required to be budgeted in the year *prior* to the physical installation of equipment. These costs are depicted in the P-3a exhibit with a quantity of "0".
3rd Budget Year - Installation of equipment.

AN/SQQ-89A(V)15 - DDG113 AND FOLLOW MFTA/HANDLER UPGRADE - COST CODE DB400 PROCUREMENT: Procurement of a subset of AN/SQQ-89A(V)15 equipment, specifically the Multi-Function Towed Array (MFTA) and OK-410 Handling & Stowage Group (H&SG), for subsequent installation on all DDG113-132 ships during their Post Delivery Availability (PDA) or Post Shakedown Availability (PSA) periods, to upgrade the ASW sonar suite from an AN/SQQ-89(V)15 configuration to the AN/SQQ-89A(V)15 configuration.

AN/SQQ-89A(V)15 - DDG113 AND FOLLOW MFTA/HANDLER UPGRADE - COST CODE DB6IN INSTALLATION: Physical installation of the MFTA and OK-410 H&SG on DDG113-132 ships during their PDA or PSA period which includes the installation of an egress, under-deck stiffeners, cables, bulkheads, opening and closing of the transom, the winch, levelwind, fairlead and control station, decking, painting, and final system testing, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 3 / AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Upgrade of in-line AN/SQQ-89(V)15 on all DDG113-132 ships to AN/SQQ-89A(V)15 configuration	**Modification Type:** Warfighting Capability	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE												
B Kits												
Recurring												
1.1.1) AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE - NonOrganic [9]	14 / 79.488	2 / 12.764	2 / 13.020	2 / 13.280	- / -	2 / 13.280	- / -	- / -	- / -	- / -	- / -	20 / 118.552
Subtotal: Recurring	*- / 79.488*	*- / 12.764*	*- / 13.020*	*- / 13.280*	*- / -*	*- / 13.280*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 118.552*
Subtotal: AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE	*14 / 79.488*	*2 / 12.764*	*2 / 13.020*	*2 / 13.280*	*- / -*	*2 / 13.280*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*20 / 118.552*
Subtotal: Procurement, All Modification Items	*- / 79.488*	*- / 12.764*	*- / 13.020*	*- / 13.280*	*- / -*	*- / 13.280*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 118.552*
Installation												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE	- / 20.768	- / 3.891	- / 3.968	- / 4.046	- / 0.000	- / 4.046	- / 4.127	- / 3.704	- / 0.000	- / 0.000	- / 0.000	- / 40.504
Subtotal: Installation	*- / 20.768*	*- / 3.891*	*- / 3.968*	*- / 4.046*	*- / -*	*- / 4.046*	*- / 4.127*	*- / 3.704*	*- / -*	*- / -*	*- / 0.000*	*- / 40.504*
Total												
Total Cost (Procurement + Support + Installation)	**100.256**	**16.655**	**16.988**	**17.326**	**0.000**	**17.326**	**4.127**	**3.704**	**0.000**	**0.000**	**0.000**	**159.056**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 3 / AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: Syracuse, NY

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	May 2022	Apr 2023	Mar 2024				
Delivery Dates	Nov 2023	Oct 2024	Sep 2025				

Installation Information

Method of Implementation: AIT and SHIPYARD:: Installation Name: AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	10 / 20.768	2 / 3.891	2 / 3.490	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	14 / 28.149
FY 2022	- / -	- / -	0 / 0.478	2 / 3.560	0 / 0.000	2 / 3.560	- / -	- / -	- / -	- / -	0 / 0.000	2 / 4.038
FY 2023	- / -	- / -	- / -	0 / 0.486	0 / 0.000	0 / 0.486	2 / 3.632	- / -	- / -	- / -	0 / 0.000	2 / 4.118
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.495	2 / 3.704	- / -	- / -	0 / 0.000	2 / 4.199
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	10 / 20.768	2 / 3.891	2 / 3.968	2 / 4.046	0 / 0.000	2 / 4.046	2 / 4.127	2 / 3.704	- / -	- / -	0 / 0.000	20 / 40.504

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	10	-	1	1	-	-	1	1	-	-	-	1	1	-	-	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	20
Out	10	-	1	1	-	-	1	1	-	-	-	1	1	-	-	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-	20

Footnotes:

(9) AN/SQQ-89A(V)15 installation funding is phased across two budget years. Performance of planning yard design tasks, ship checks, and the ordering of incidental installation material, depicted in the P-3a exhibit with a quantity of "0", are budgeted in the year *prior* to the actual physical installation of equipment. In the second budget year, costs associated with the actual physical installation of equipment on ship are shown with a quantity other than "0". FY 2023 installation costs depicted with a quantity of "0" are derived as follows: Two (2) sets of planning yard design tasks/ship checks/installation material (required one

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 3 / AN/SQQ-89A(V)15 - DDG113-132 MFTA/HANDLER UPGRADE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

year prior to physical installation shown in FY 2024) * $0.239M per set = $0.478M. FY 2024 installation costs depicted with a quantity of "0" are derived as follows: Two (2) sets of planning yard design tasks/ship checks/installation material (required one year prior to physical installation shown in FY 2025) * $0.243M per set = $0.486M.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 4 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	210.465	39.912	45.589	16.347	0.000	16.347	20.374	8.147	2.836	2.628	0.000	346.298
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	210.465	39.912	45.589	16.347	0.000	16.347	20.374	8.147	2.836	2.628	0.000	346.298
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**210.465**	**39.912**	**45.589**	**16.347**	**0.000**	**16.347**	**20.374**	**8.147**	**2.836**	**2.628**	**0.000**	**346.298**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH] See the following:

AN/SQQ-89A(V)15 YEAR-TO-YEAR FUNDING PROFILE FROM PROCUREMENT TO INSTALL:
1st Budget Year - Procurement of equipment.
2nd Budget Year - Ordering of incidental installation material and performance of mandatory advance planning yard design tasks and ship checks, which are required to be budgeted in the year *prior* to the physical installation of equipment. These costs are depicted in the P-3a exhibit with a quantity of "0".
3rd Budget Year - Installation of equipment.

AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - COST CODE DB400 PROCUREMENT: Leveraging the submarine community's Acoustic Rapid Commercial-off-the-Shelf (COTS) Insertion (ARCI) process, the AN/SQQ-89A(V)15 Tech Refresh program procures upgraded software/hardware technology for all DDG51 Class surface combatant platforms with a previously fielded AN/SQQ-89A(V)15 with a current hardware configuration that is prior to the Technical Insertion-14 (TI-14) production baseline. This process has proven to manage obsolescence, take advantage of commercial development efforts, and continue to pace the threat to ensure systems remain effective well into the 21st century. Studies of the submarine and surface ASW technology show that system upgrades are most critical 6-9 years after initial installation of the AN/SQQ-89A(V)15, as failure rates within this period begin to rise. Establishing a stable technology refresh program will ensure the Fleet maintains critical Undersea Warfare capability (threat-pacing improvements) and productivity (Increased Operational Availability (Ao)) while reducing the Total Ownership Cost (TOC) to the Navy.

AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - COST CODE DB6IN INSTALLATION: Funding is for the physical installation of the AN/SQQ-89A(V)15 Technology Refresh upgrade, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 4 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Technology refresh of previously fielded AN/SQQ-89A(V)15 USW Combat Systems	**Modification Type:** Warfighting Capability	**Related RDT&E PEs:** 0205620N, 0603553N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH												
B Kits												
Recurring												
1.1.1) AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - NonOrganic (10)	34 / 158.077	4 / 19.833	6 / 30.342	1 / 5.164	- / -	1 / 5.164	1 / 5.262	1 / 5.367	- / -	- / -	- / -	47 / 224.045
Subtotal: Recurring	*- / 158.077*	*- / 19.833*	*- / 30.342*	*- / 5.164*	*- / -*	*- / 5.164*	*- / 5.262*	*- / 5.367*	*- / -*	*- / -*	*- / 0.000*	*- / 224.045*
Subtotal: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH	*34 / 158.077*	*4 / 19.833*	*6 / 30.342*	*1 / 5.164*	*- / -*	*1 / 5.164*	*1 / 5.262*	*1 / 5.367*	*- / -*	*- / -*	*- / -*	*47 / 224.045*
Subtotal: Procurement, All Modification Items	*- / 158.077*	*- / 19.833*	*- / 30.342*	*- / 5.164*	*- / -*	*- / 5.164*	*- / 5.262*	*- / 5.367*	*- / -*	*- / -*	*- / 0.000*	*- / 224.045*
Installation												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH	- / 52.388	- / 20.079	- / 15.247	- / 11.183	- / 0.000	- / 11.183	- / 15.112	- / 2.780	- / 2.836	- / 2.628	- / 0.000	- / 122.253
Subtotal: Installation	*- / 52.388*	*- / 20.079*	*- / 15.247*	*- / 11.183*	*- / -*	*- / 11.183*	*- / 15.112*	*- / 2.780*	*- / 2.836*	*- / 2.628*	*- / 0.000*	*- / 122.253*
Total												
Total Cost (Procurement + Support + Installation)	**210.465**	**39.912**	**45.589**	**16.347**	**0.000**	**16.347**	**20.374**	**8.147**	**2.836**	**2.628**	**0.000**	**346.298**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 4 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: Manassas, VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	May 2022	Apr 2023	Mar 2024	Mar 2025	Mar 2026		
Delivery Dates	Nov 2023	Oct 2024	Sep 2025	Sep 2026	Sep 2027		

Installation Information

Method of Implementation: AIT and SHIPYARD:: Installation Name: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	20 / 52.388	8 / 20.079	6 / 14.286	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	34 / 86.753
FY 2022	- / -	- / -	0 / 0.961	4 / 9.714	0 / 0.000	4 / 9.714	- / -	- / -	- / -	- / -	0 / 0.000	4 / 10.675
FY 2023	- / -	- / -	- / -	0 / 1.469	0 / 0.000	0 / 1.469	6 / 14.863	- / -	- / -	- / -	0 / 0.000	6 / 16.332
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.249	1 / 2.526	- / -	- / -	0 / 0.000	1 / 2.775
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.254	1 / 2.577	- / -	0 / 0.000	1 / 2.831
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.259	1 / 2.628	0 / 0.000	1 / 2.887
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	20 / 52.388	8 / 20.079	6 / 15.247	4 / 11.183	0 / 0.000	4 / 11.183	6 / 15.112	1 / 2.780	1 / 2.836	1 / 2.628	0 / 0.000	47 / 122.253

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	20	1	2	3	2	-	1	2	3	-	1	2	1	-	2	2	2	-	1	-	-	-	-	1	-	-	1	-	-	-	47
Out	20	1	2	3	2	-	1	2	3	-	1	2	1	-	2	2	2	-	1	-	-	-	-	1	-	-	1	-	-	-	47

Footnotes:

(10) AN/SQQ-89A(V)15 installation funding is phased across two budget years. Performance of planning yard design tasks, ship checks, and the ordering of incidental installation material, depicted in the P-3a exhibit with a quantity of "0", are budgeted in the year *prior* to the actual physical installation of equipment. In the second budget year, costs associated with the actual physical installation of equipment on ship are shown with a quantity other than "0". FY 2023 installation costs depicted with a quantity of "0" are derived as follows: Four (4) sets of planning yard design tasks/ship checks/installation material (required one

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 4 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

year prior to physical installation shown in FY 2024) * $0.240M per set = $0.961M. FY 2024 installation costs depicted with a quantity of "0" are derived as follows: Six (6) sets of planning yard design tasks/ship checks/installation material (required one year prior to physical installation shown in FY 2025) * $0.244M per set = $1.469M.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 5 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	59.376	0.000	59.376	63.801	92.996	104.549	107.169	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	59.376	0.000	59.376	63.801	92.996	104.549	107.169	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**59.376**	**0.000**	**59.376**	**63.801**	**92.996**	**104.549**	**107.169**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE] See the following:

AN/SQQ-89A(V)15 YEAR-TO-YEAR FUNDING PROFILE FROM PROCUREMENT TO INSTALL:
1st Budget Year - Procurement of equipment.
2nd Budget Year - Ordering of incidental installation material and performance of mandatory advance planning yard design tasks and ship checks, which are required to be budgeted in the year *prior* to the physical installation of equipment. These costs are depicted in the P-3a exhibit with a quantity of "0".
3rd Budget Year - Installation of equipment.

AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE - COST CODE DB400 PROCUREMENT: Funding is to commence, starting in FY 2024, the Build-In-Place Technology Insertion/ Refresh procurement of software/hardware technology upgrades for all platforms with a previously fielded AN/SQQ-89A(V)15 with a current Technical Insertion-14 (TI-14) production baseline or above, as necessary to manage obsolescence, take advantage of commercial development efforts, and continue to pace the threat and ensure the system remains effective well into the 21st century. The TI-14 and above (TI-14 through TI-20) production baselines have a consistent architecture and configuration which allows a similar strategy that submarine Acoustic Rapid Commercial Off The Shelf (COTS) Insertion (ARCI) programs employ in order to retain equipment racks and upgrade processing, storage, and network capability onboard the platform during installation, which allows for reuse of the cabinet infrastructure.

AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE - COST CODE DB6IN INSTALLATION: Funding is for the physical installation of the AN/SQQ-89A(V)15 Build-In-Place Technology Insertion/Refresh upgrade, the ordering of incidental installation material in the year prior to the actual installation, and Design Services Allocation (DSA) required for mandatory planning yard design tasks and ship checks that must be completed within the one year period leading up to the actual installation in the shipyard. Installation of a Build-In-Place Technology Insertion/Refresh upgrade eliminates the need for intrusive access hull cuts.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 5 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Build-In-Place Technology Refresh of Previously Fielded AN/SQQ-89A(V)15 USW Combat Systems	**Modification Type:** Warfighting Capability	**Related RDT&E PEs:** 0205620N, 0603553N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE												
B Kits												
Recurring												
2.1.1) AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE - NonOrganic (11)	- / -	- / -	- / -	13 / 59.376	- / -	13 / 59.376	13 / 60.564	13 / 61.775	15 / 72.704	15 / 74.158	Continuing	Continuing
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / 59.376*	*- / -*	*- / 59.376*	*- / 60.564*	*- / 61.775*	*- / 72.704*	*- / 74.158*	*Continuing*	*Continuing*
Subtotal: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE	*- / -*	*- / -*	*- / -*	*13 / 59.376*	*- / -*	*13 / 59.376*	*13 / 60.564*	*13 / 61.775*	*15 / 72.704*	*15 / 74.158*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / 59.376*	*- / -*	*- / 59.376*	*- / 60.564*	*- / 61.775*	*- / 72.704*	*- / 74.158*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 3.237	- / 31.221	- / 31.845	- / 33.011	- / 73.099	- / 172.413
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 3.237*	*- / 31.221*	*- / 31.845*	*- / 33.011*	*- / 73.099*	*- / 172.413*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**59.376**	**0.000**	**59.376**	**63.801**	**92.996**	**104.549**	**107.169**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 5 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: Manassas, VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Mar 2024	Mar 2025	Mar 2026	Mar 2027	Mar 2028
Delivery Dates			Sep 2025	Sep 2026	Sep 2027	Sep 2028	Sep 2029

Installation Information

Method of Implementation: AIT and SHIPYARD:: Installation Name: AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLAC

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	0 / 3.237	13 / 27.914	- / -	- / -	0 / 0.000	13 / 31.151
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 3.307	13 / 28.472	- / -	0 / 0.000	13 / 31.779
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 3.373	13 / 29.042	0 / 0.000	13 / 32.415
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 3.969	15 / 34.180	15 / 38.149
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 38.919	15 / 38.919
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	0 / 3.237	13 / 31.221	13 / 31.845	13 / 33.011	30 / 73.099	69 / 172.413

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	4	3	2	4	3	4	2	3	4	4	30	69
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	4	3	2	4	3	4	2	3	4	4	30	69

Footnotes:

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2136 / AN/SQQ-89 Surf ASW Cmbt Sys	**Modification Number / Title:** 5 / AN/SQQ-89A(V)15 - TECHNOLOGY INSERTION/REFRESH - BUILD-IN-PLACE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(11) AN/SQQ-89A(V)15 installation funding is phased across two budget years. Performance of planning yard design tasks, ship checks, and the ordering of incidental installation material, depicted in the P-3a exhibit with a quantity of "0", are budgeted in the year *prior* to the actual physical installation of equipment. In the second budget year, costs associated with the actual physical installation of equipment on ship are shown with a quantity other than "0".

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment

ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1,688.180	379.492	446.653	463.577	0.000	463.577	463.967	452.440	461.424	475.872	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1,688.180	379.492	446.653	463.577	0.000	463.577	463.967	452.440	461.424	475.872	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1,688.180**	**379.492**	**446.653**	**463.577**	**0.000**	**463.577**	**463.967**	**452.440**	**461.424**	**475.872**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	19.544	22.016	26.348	-	26.348	25.510	28.143	28.236	32.856	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The FY 2024 funding request was reduced by $5 million to account for the availability of prior year execution balances.

FY 2024 reflects a net increase of $16.924 million from FY 2023 to FY 2024. The increase is primarily associated with the increase of procurement and installation of VA Mod (Blk I/II and Blk III/IV) Tech Insertions; procurement of Low Cost Conformal Array Kits for VIRGINIA Class submarines, and Tech refresh for Light Weight Wide Aperture Array (LWWAA)

MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program procures submarine systems and equipment for installation on all classes of submarines to maintain clear acoustical, tactical, and operational superiority over submarine and surface combatants in all scenarios through detection, classification, localization, and contact following. All future acoustic upgrades of Acoustic Rapid COTS Insertion (A-RCI) equipment are incorporated into this budget item. Future procurements, detailed below, are focused on supporting Littoral Warfare, Regional Sea Denial, Strike Group Support, Diesel Submarine Detection, Surveillance, and Peacetime Engagement. A-RCI is a multi-phased, evolutionary development effort geared toward addressing acoustic superiority issues through the rapid introduction of interim products applicable to SSN 688, 688I Flight, SSN21, SSGN, VIRGINIA Class, and OHIO Class Submarines. A-RCI Phase II provided towed array processing improvements; A-RCI Phase III provides spherical array processing improvements, and A-RCI Phase IV provides AN/BSY-1 High Frequency Upgrades for SSN 688I, SSGN, and SEAWOLF Classes. As part of Navy's plan to maintain acoustic superiority for in-service submarines, reduce obsolescence, and provide increased capability, the A-RCI program will modernize and sustain approximately 8-12 SSNs and 2-3 SSBNs per year through executing bi-annual software Advanced Processing Builds (APBs) and bi-annual hardware Technical Insertions (TIs). A-RCI annual funding varies based on the number of modernizations funded as well as the particular class of submarine being modernized.

Towed System procurements of TB-29C and TB-34A provide reliability improvements to maintain Acoustic Superiority, increase the service life, reduce failures, and maintain the inventory of arrays available for fleet use. Towed Array Refurbishment & Reliability Upgrades sustain current in-service TB-16/34 Fatline and TB-23/29A Thinline towed arrays. Towed System procurements provide upgrade/support for OK-276, OK-634, OK-542 and OA-9070 Series Towed Array Handlers installed on SSN688, SSN 688I, SSN21, SSGN, VIRGINIA Class, and OHIO Class Submarines.

Procurement of Low Cost Conformal Array (LCCA) provides enhanced situational awareness and collision avoidance capability in high contact density environments experienced in the littorals. Procurement of VA Unique Sensors sustains unique hull sensor systems for the VA platforms under the Critical Transducer Program as VIRGINIA Class submarines transition into fleet service.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Procurement of the OHIO Class Large Vertical Array (LVA) provides improved detection and enhanced tactical situational awareness capability for tracking targets of interest and supports acoustic superiority objectives for the OHIO class submarines. SSBN systems will be approximately half the width of their SSN counterparts. This variance reflects the difference in mission, expected environment, and requirements.

Procurement of the VIRGINIA Class Large Vertical Array (LVA) and installation provides improved detection and enhanced tactical situational awareness capability for tracking targets of interest and supports acoustic superiority objectives for the VIRGINIA class submarines. SSN systems will be approximately twice the width of their SSBN counterparts. This variance reflects the difference in mission, expected environment, and requirements.

Procurement of the High Frequency Sail Array (HFSA) provides high frequency active and passive capability supporting ASW and ASUW for SSNs, and contact avoidance for SSNs and SSBNs. This capability enables close in situational awareness with high bearing accuracy. HFSA improves situational awareness and tactical control in high -density contact areas, of particular importance for Pacific Fleet SSBNs based at Bangor, WA inside the Puget Sound with three major commercial shipping ports as well as the Atlantic Fleet SSBNs based at Kings Bay, GA as increased global shipping density has increased the risk posed to SSBNs from merchant traffic.

Procurement of hydrophones, transducers, cables, associated Out-Board Electronics bottles (OBE), and acoustic windows for In-Service Undersea Warfare Sonars on all classes of submarines are required to support units in the fleet on a replacement basis, at regularly scheduled ship overhauls, and at interim availabilities when units are defective, and for upgrades.

Procurement of Light Weight Wide Aperture Array (LWWAA) Unit 6512 receiver hardware for technology refresh for Software and Hardware updates to accommodate shifts in technology to counter obsolescence on Block I/II VIRGINIA Class submarines. The LWWAA on Block I/II VIRGINIA Class submarines will no longer be operable without this technology refresh.

Installation funds are for actual hardware installations during shipyard and pier-side availabilities. Procurements support a 12-24 month lead-time for installations.

[P40A / SA102 TOWED SYSTEMS]: Procures TB-34A Fatline and TB-29C Thinline Arrays to provide increased acoustic capability and reliability to the fleet. The program supports refurbishment/upgrades and reliability improvements to TB-16 series, TB-23, TB-29A to maintain in-service Towed Array inventory and increased array availability. Reliability improvements include new telemetry, hose material, improved internal connectors, hydrophones, tow cables, Vibration Isolation Modules (VIMS), and Heading Sensors.

[P40A / SA105 SONAR SUPPORT EQUIPMENT]: Funds provided to procure BQN-17(A) and associated equipment.

[P40A / SA106 HULL SENSORS]: Procurement of Low Cost Conformal Array (LCCA), which provides enhanced situational awareness and collision avoidance capability, Large Vertical Array (LVA), which provides improved detection and enhanced tactical situational awareness capability, and VA Unique Sensors required to sustain unique hull sensor systems for the VA platforms under the Critical Transducer Program.

[P40A / SA201 BLOCK CHANGES]: Minor Engineering Change Proposals (ECP's) and hardware changes affecting all classes of submarines are procured through this line. Funding will be used to support non-recurring first article test efforts associated with the changing COTS environment as well as Reliability, Maintainability, and Availability modifications requested by the Fleet. This line also supports the procurement of hardware necessary to implement the ECP's into the System or end item being procured.

[P40A / SA202 PRODUCTION/ENGINEERING SUPPORT]: Funding supports the procurement of Acoustic Upgrades equipment, Towed Systems hardware, Large Vertical Array in-board processing equipment, Large Vertical Array shipyard installation support & support equipment, and Low Cost Conformal Array engineering and production to support the reduced weight variant.

[P40A / SA203 TOWED ARRAY UNIQUE TEST EQUIPMENT]: Funding procures various Towed Array test equipment simulators and handling system/stowage tube inspection test equipment.

[P40A / SA302 OP TRAINER UPGRADES]: Funding procures hardware upgrades and production engineering for Acoustic Upgrades operational trainer sites.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P40A / SA303 COTS SUPPORTABILITY UPGRADES]: Provides for Technology Refresh/Insertion for A-RCI kits. Tech Refresh provides for Software and Hardware updates to accommodate shifts in technology to the execution procurement years' "current state-of-the-practice" hardware. A-RCI has already undergone several technology insertion phases to accommodate integrating Advanced Processing Builds (APBs). Updates are necessary for signal and display processing hardware as APBs are introduced or as commercial support for the hardware is phased out. Tech Insertion procures the hardware necessary to upgrade and back fit the A-RCI kits. When A-RCI systems are being upgraded to subsequent phases of A-RCI, signal processing and display hardware will be procured from this line to accommodate common technology consistent with the APB being implemented in the year of introduction. In future years, requirements include additional equipment in technology insertion to prevent COTS hardware from becoming unsupportable/obsolete. Funding also supports the procurement and engineering for COTS Underwater Comms.

[P40A / SA401 INITIAL TRAINING]: Provides for initial training curriculum development, training management materials, exercise control group development, pilot services, and services to the Fleet.

[P40A / SA900 CONSULTING SERVICES]: Includes specification validation, contract deliverable monitoring, prime contractor monitoring for cost, schedule, and performance slips, ILS planning, and coordination of GFI. Additional support will include production planning, business case analysis, technical refresh and insertion planning and market analysis to review implementation strategies for procurement of current year "state of the practice" hardware in Acoustics programs. Consulting services will also provide production monitoring, installation planning and coordination support.

[P40A - 2 / PU100 SONAR SWITCHES AND TRANSDUCERS]: Included in this line are procurements of transducers, hydrophones, windows, cables, accelerometers, Out-Board Electronics (OBE), domes and their associated mounting hardware, and other support equipment and materials for the following Undersea Warfare Sonars: BSY-1, BSY-2, BQQ-5, BQQ-6, BQQ-10, BQG-5, BQS-15, BQS-14A, WQC-2, WLR-9/12, BQN-13, BQN-17, BQA-8, BQH-1 and BQS-25.

[P40A - 2 / PU200 ENGINEERING CHANGES]: Funds ECPs, Value Engineering awards, and hardware changes affecting the SSN 688, 688I, SEAWOLF, SSBN 726 (TRIDENT), SSGN/SSBN, and VA Class submarines.

[P40A - 2 / PU300 PROGRAM SUPPORT]: Supports the procurement of equipment of sonar hydrophones, transducers, cables, Out-Board Electronics (OBEs), and acoustic windows for In-Service Undersea Warfare Sonars.

[P3A / SA101 LWWAA TECH REFRESH]: Funding supports procurement of Light Weight Wide Aperature Array (LWWAA) Unit 6512 receiver hardware for technology refresh for Software and Hardware updates to accommodate shifts in technology to counter obsolescence on Block I/II VIRGINIA Class submarines.

[P3A - 2 / SA101 SSBN LEGACY INTERFACE HARDWARE]: Procurement of hardware to accommodate increased power requirements of SSBN modernization equipment.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	SSN Acoustics				- / 745.887	- / 205.880	- / 200.304	- / 190.373	- / -	- / 190.373
P-40a	Sonar Switches and Transducers				- / 60.153	- / 14.191	- / 14.477	- / 14.767	- / -	- / 14.767
P-3a	1 / SA101 LWWAA TECH REFRESH (SHIPALT)				- / 0.000	- / 0.000	- / 10.150	- / 12.313	- / 0.000	- / 12.313
P-3a	2 / SA101 SSBN LEGACY INTERFACE HARDWARE (SHIPALT)				- / 60.081	- / 5.046	- / 6.304	- / 5.250	- / 0.000	- / 5.250
P-3a	3 / SA106 LOW COST CONFORMAL ARRAY KITS (SHIPALT)				- / 47.024	- / 14.325	- / 25.239	- / 24.387	- / 0.000	- / 24.387
P-3a	4 / SA106 HIGH FREQUENCY SAIL ARRAY (SHIPALT)				- / 30.980	- / 4.372	- / 4.460	- / 4.549	- / 0.000	- / 4.549
P-3a	5 / SA106 OHIO CLASS LARGE VERTICAL ARRAY (SHIPALT)				- / 66.821	- / 10.330	- / 30.588	- / 20.453	- / 0.000	- / 20.453
P-3a	6 / SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY (SHIPALT)				- / 87.678	- / 65.077	- / 66.379	- / 67.683	- / 0.000	- / 67.683
P-3a	7 / SA303 688/688I TECHNOLOGY INSERTION KITS (SWFTS) (SHIPALT)				- / 191.247	- / 8.630	- / 64.108	- / 26.767	- / 0.000	- / 26.767
P-3a	8 / SA303 SSGN TECHNOLOGY INSERTION KITS (SWFTS) (SHIPALT)				- / 42.335	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	9 / SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS) (SHIPALT)				- / 27.730	- / 9.666	- / 13.555	- / 13.826	- / 0.000	- / 13.826
P-3a	10 / SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS) (SHIPALT)				- / 207.324	- / 37.452	- / 11.089	- / 60.338	- / 0.000	- / 60.338
P-3a	11 / SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS) (SHIPALT)				- / 120.920	- / 4.523	- / 0.000	- / 22.871	- / 0.000	- / 22.871
P-40	**Total Gross/Weapon System Cost**				**- / 1,688.180**	**- / 379.492**	**- / 446.653**	**- / 463.577**	**- / 0.000**	**- / 463.577**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	SSN Acoustics				- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Sonar Switches and Transducers				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / SA101 LWWAA TECH REFRESH (SHIPALT)				- / 12.559	- / 12.810	- / 13.067	- / 13.328	- / 2.164	- / 76.391
P-3a	2 / SA101 SSBN LEGACY INTERFACE HARDWARE (SHIPALT)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 76.681
P-3a	3 / SA106 LOW COST CONFORMAL ARRAY KITS (SHIPALT)				- / 22.801	- / 23.257	- / 23.722	- / 24.196	Continuing	Continuing
P-3a	4 / SA106 HIGH FREQUENCY SAIL ARRAY (SHIPALT)				- / 4.640	- / 4.732	- / 2.483	- / 0.000	- / 0.000	- / 56.216
P-3a	5 / SA106 OHIO CLASS LARGE VERTICAL ARRAY (SHIPALT)				- / 31.824	- / 32.460	- / 33.110	- / 33.772	- / 23.969	- / 283.327
P-3a	6 / SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY (SHIPALT)				- / 69.036	- / 70.417	- / 71.825	- / 73.262	Continuing	Continuing
P-3a	7 / SA303 688/688I TECHNOLOGY INSERTION KITS (SWFTS) (SHIPALT)				- / 2.592	- / 37.365	- / 48.900	- / 30.442	Continuing	Continuing
P-3a	8 / SA303 SSGN TECHNOLOGY INSERTION KITS (SWFTS) (SHIPALT)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 42.335
P-3a	9 / SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS) (SHIPALT)				- / 3.845	- / 0.000	- / 0.000	- / 0.000	Continuing	Continuing

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-3a	10 / SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS) (SHIPALT)				- / 101.289	- / 73.285	- / 58.692	- / 89.799	Continuing	Continuing
P-3a	11 / SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS) (SHIPALT)				- / 21.953	- / 28.595	- / 34.269	- / 18.203	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 463.967**	**- / 452.440**	**- / 461.424**	**- / 475.872**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY24 funding provides the following procurement requirements in support of submarine modernizations: Acoustic Rapid COTS Insertion (A-RCI) equipment (688/688i Class (1), VA Mod (Blk I/II and Blk III/IV) (6), SSBN Class (3), and SSN21 Class (1)); TB-34A Fatline (5) and TB-29C Thinline (4) Towed Arrays; Towed Array refurbishment & reliability upgrades to sustain current in-service TB-16/34 Fatline and TB-23/29A Thinline arrays; OK-276, OK-634, OK-542, and OA-9070 Series Towed Array Handlers; HFSA (1) for SSBN, LCCA (4 SSN); and various hull sensors, transducers, and associated equipment for all classes of In-Service submarines.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	P-1 Line Item Number / Title: 2150 / SSN Acoustic Equipment	Aggregated Items Title: SSN Acoustics

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) SA102 TOWED SYSTEMS																				
1.1) TB-34A FATLINE TOWED ARRAYS	B		1,289K	37	47.692	1,378K	5	6.892	1,406K	5	7.030	1,434K	5	7.171	-	-	-	1,434K	5	7.171
1.2) TB-29C THIN LINE TOWED ARRAYS	B		4,351K	39	169.695	4,637K	11	51.009	4,730K	8	37.839	4,824K	4	19.298	-	-	-	4,824K	4	19.298
1.3) TOWED ARRAY REFURBISHMENT & UPGRADES (1)	A		-	-	146.290	-	-	35.197	-	-	41.732	-	-	52.855	-	-	-	-	-	52.855
1.4) TOWED ARRAY HANDLER SYSTEM UPGRADE	A		-	-	38.553	-	-	8.179	-	-	8.343	-	-	8.510	-	-	-	-	-	8.510
Subtotal: 1) SA102 TOWED SYSTEMS			**-**	**-**	***402.230***	**-**	**-**	***101.277***	**-**	**-**	***94.944***	**-**	**-**	***87.834***	**-**	**-**	**-**	**-**	**-**	***87.834***
2) SA105 SONAR SUPPORT EQUIPMENT																				
2.1) BQN-17	A		-	-	4.616	-	-	0.979	-	-	0.999	-	-	1.019	-	-	-	-	-	1.019
Subtotal: 2) SA105 SONAR SUPPORT EQUIPMENT			**-**	**-**	***4.616***	**-**	**-**	***0.979***	**-**	**-**	***0.999***	**-**	**-**	***1.019***	**-**	**-**	**-**	**-**	**-**	***1.019***
3) SA106 HULL SENSORS																				
3.1) VA UNIQUE SENSOR	A		-	-	28.126	-	-	5.967	-	-	6.086	-	-	6.208	-	-	-	-	-	6.208
Subtotal: 3) SA106 HULL SENSORS			**-**	**-**	***28.126***	**-**	**-**	***5.967***	**-**	**-**	***6.086***	**-**	**-**	***6.208***	**-**	**-**	**-**	**-**	**-**	***6.208***
4) SA201 BLOCK CHANGES																				
4.1) TOWED SYSTEMS ECP'S	A		-	-	9.721	-	-	1.878	-	-	1.916	-	-	1.954	-	-	-	-	-	1.954
4.2) ACOUSTICS	A		-	-	17.969	-	-	3.337	-	-	3.404	-	-	3.472	-	-	-	-	-	3.472
Subtotal: 4) SA201 BLOCK CHANGES			**-**	**-**	***27.690***	**-**	**-**	***5.215***	**-**	**-**	***5.320***	**-**	**-**	***5.426***	**-**	**-**	**-**	**-**	**-**	***5.426***
5) SA202 PRODUCTION/ENGINEERING SUPPORT																				
5.1) ACOUSTICS	A		-	-	18.834	-	-	3.498	-	-	3.568	-	-	3.639	-	-	-	-	-	3.639
5.2) TOWED ARRAYS/HANDLING EQUIPMENT	A		-	-	17.777	-	-	3.434	-	-	3.503	-	-	3.573	-	-	-	-	-	3.573
5.3) LARGE VERTICAL ARRAY	A		-	-	4.040	-	-	2.081	-	-	2.123	-	-	2.165	-	-	-	-	-	2.165
5.4) LARGE VERTICAL ARRAY SHIPYARD INSTALLATION INDUSTRIAL SUPPORT (2)	A		-	-	16.080	-	-	21.910	-	-	27.415	-	-	27.772	-	-	-	-	-	27.772
5.5) LOW COST CONFORMAL ARRAY	A		-	-	-	-	-	-	-	-	6.366	-	-	1.757	-	-	-	-	-	1.757

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	P-1 Line Item Number / Title: 2150 / SSN Acoustic Equipment	Aggregated Items Title: SSN Acoustics

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Subtotal: 5) SA202 PRODUCTION/ ENGINEERING SUPPORT			**-**	**-**	***56.731***	**-**	**-**	***30.923***	**-**	**-**	***42.975***	**-**	**-**	***38.906***	**-**	**-**	**-**	**-**	**-**	***38.906***
6) SA203 TOWED ARRAY UNIQUE TEST EQUIPMENT																				
6.1) TOWED ARRAY UNIQUE TEST EQUIPMENT	A		-	-	7.195	-	-	1.390	-	-	1.418	-	-	1.446	-	-	-	-	-	1.446
Subtotal: 6) SA203 TOWED ARRAY UNIQUE TEST EQUIPMENT			**-**	**-**	***7.195***	**-**	**-**	***1.390***	**-**	**-**	***1.418***	**-**	**-**	***1.446***	**-**	**-**	**-**	**-**	**-**	***1.446***
7) SA302 OP TRAINER UPGRADES																				
7.1) OP TRAINER GFE	A		-	-	5.787	-	-	1.228	-	-	1.253	-	-	1.278	-	-	-	-	-	1.278
Subtotal: 7) SA302 OP TRAINER UPGRADES			**-**	**-**	***5.787***	**-**	**-**	***1.228***	**-**	**-**	***1.253***	**-**	**-**	***1.278***	**-**	**-**	**-**	**-**	**-**	***1.278***
8) SA303 COTS SUPPORTABILITY UPGRADES																				
8.1) INSTALL SUPPORT (3)	A		-	-	9.120	-	-	2.694	-	-	1.728	-	-	1.763	-	-	-	-	-	1.763
8.2) AEMP	A		-	-	28.928	-	-	6.137	-	-	6.260	-	-	6.385	-	-	-	-	-	6.385
8.3) COTS UWC ENGINEERING SUPPORT (4)	A		-	-	10.486	-	-	3.947	-	-	1.986	-	-	2.026	-	-	-	-	-	2.026
8.4) COTS TECH INSERTION (5)	A		-	-	104.458	-	-	29.776	-	-	21.983	-	-	22.423	-	-	-	-	-	22.423
8.5) SHIPYARD INSTALLATION INDUSTRIAL SUPPORT (6)	A		-	-	33.963	-	-	11.307	-	-	10.211	-	-	10.415	-	-	-	-	-	10.415
8.6) INTEL, SURVEILLANCE, AND RECONNAISSANCE	A		-	-	2.100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 8) SA303 COTS SUPPORTABILITY UPGRADES			**-**	**-**	***189.055***	**-**	**-**	***53.861***	**-**	**-**	***42.168***	**-**	**-**	***43.012***	**-**	**-**	**-**	**-**	**-**	***43.012***
9) SA401 INITIAL TRAINING																				
9.1) ACOUSTICS	A		-	-	9.245	-	-	1.961	-	-	2.000	-	-	2.040	-	-	-	-	-	2.040
9.2) TOWED ARRAY	A		-	-	3.812	-	-	0.736	-	-	0.751	-	-	0.766	-	-	-	-	-	0.766
Subtotal: 9) SA401 INITIAL TRAINING			**-**	**-**	***13.057***	**-**	**-**	***2.697***	**-**	**-**	***2.751***	**-**	**-**	***2.806***	**-**	**-**	**-**	**-**	**-**	***2.806***
10) SA900 CONSULTING SERVICES																				
10.1) ACOUSTICS	A		-	-	7.384	-	-	1.567	-	-	1.598	-	-	1.630	-	-	-	-	-	1.630
10.2) TOWED SYSTEMS	A		-	-	4.016	-	-	0.776	-	-	0.792	-	-	0.808	-	-	-	-	-	0.808
Subtotal: 10) SA900 CONSULTING SERVICES			**-**	**-**	***11.400***	**-**	**-**	***2.343***	**-**	**-**	***2.390***	**-**	**-**	***2.438***	**-**	**-**	**-**	**-**	**-**	***2.438***

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Aggregated Items Title:** SSN Acoustics

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Total			-	-	745.887	-	-	205.880	-	-	200.304	-	-	190.373	-	-	-	-	-	190.373

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

(1) SA102 TOWED SYSTEMS - Refurbishment & Upgrades are variable year-to-year based on projected Towed Array inventory requirements necessary to support submarine deployment schedules. Refurbishment/upgrade of TB-16, TB-34, TB-34A, TB-23, TB-23 iPEN, TB-29A, and TB-29C series arrays consists of procurement and assembly activities for over 375 module upgrades per year, over 600 array on-load and off-load evolutions per year; as well as, more than 150 array/module calibrations per year to increase reliability and address End-of-Life (EOL) upgrade requirements.

(2) SA202 LARGE VERTICAL ARRAY SHIPYARD INSTALLATION INDUSTRIAL SUPPORT - Funding provides Large Vertical Array (LVA) shipyard infrastructure alterations required to integrate the array and its subcomponents, alterations to the SSBN superstructure, environmental enclosures, and the installation of new hull penetrators.

(3) Funding increase in FY22 supports improvements and modifications to current Fleet installations.

(4) Funding increase in FY22 supports investment in Long Lead Time Material (LLTM) and non-recurring engineering for improvements and modifications to current Fleet capabilities.

(5) Funding increase in FY22 supports investment in Long Lead Time Material (LLTM) and non-recurring engineering for improvements and modifications to current Fleet capabilities.

(6) Funding increases in FY22 and FY23 support modifications to current Fleet installations.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	P-1 Line Item Number / Title: 2150 / SSN Acoustic Equipment	Aggregated Items Title: Sonar Switches and Transducers

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) PU100 SONAR SWITCHES AND TRANSDUCERS (7)																				
1.1) TR-353	A		6,560.00	400	2.624	6,892.00	100	0.689	7,030.00	100	0.703	7,171.00	100	0.717	-	-	-	7,171.00	100	0.717
1.2) CW-1147 DOME	A		19,500.00	50	0.975	20,676.00	10	0.207	21,090.00	10	0.211	21,511.00	10	0.215	-	-	-	21,511.00	10	0.215
1.3) CW-1181E DOME	A		5,413.79	87	0.471	5,743.00	18	0.103	5,858.00	18	0.105	5,975.00	18	0.108	-	-	-	5,975.00	18	0.108
1.4) DT-574 100FT	A		2,164.00	500	1.082	2,297.00	100	0.230	2,343.00	100	0.234	2,389.00	100	0.239	-	-	-	2,389.00	100	0.239
1.5) MX-12309 SSGN HFSA WINDOW	A		194,000.00	4	0.776	203,727.80	1	0.204	207,802.00	1	0.208	211,958.00	1	0.212	-	-	-	211,958.00	1	0.212
1.6) CABLES	A		-	-	3.527	-	-	0.782	-	-	0.799	-	-	0.814	-	-	-	-	-	0.814
1.7) DT-574 50FT	A		596.00	1,500	0.894	632.00	300	0.190	644.95	300	0.193	658.00	300	0.197	-	-	-	658.00	300	0.197
1.8) CW-1181C	A		5,410.00	100	0.541	5,743.00	20	0.115	5,858.00	20	0.117	5,975.00	20	0.120	-	-	-	5,975.00	20	0.120
1.9) MX-10624 Window	A		14,500.00	50	0.725	15,392.00	10	0.154	15,700.00	10	0.157	16,014.00	10	0.160	-	-	-	16,014.00	10	0.160
1.10) DT-5740 LSA OBE	A		17,700.00	100	1.770	18,777.00	20	0.376	19,152.00	20	0.383	19,535.00	20	0.391	-	-	-	19,535.00	20	0.391
1.11) DT-511 Hydrophone	A		30,600.00	75	2.295	32,470.00	15	0.487	33,119.00	15	0.497	33,781.00	15	0.507	-	-	-	33,781.00	15	0.507
1.12) DT-592 Hydrophone	A		43,033.33	90	3.873	45,650.00	18	0.822	46,563.00	18	0.838	47,494.00	18	0.855	-	-	-	47,494.00	18	0.855
1.13) TR-233 Transducer	A		10,820.00	100	1.082	11,487.00	20	0.230	11,717.00	20	0.234	11,951.00	20	0.239	-	-	-	11,951.00	20	0.239
1.14) TR-282 Transducer	A		29,600.00	35	1.036	31,432.00	7	0.220	32,061.00	7	0.224	32,702.00	7	0.229	-	-	-	32,702.00	7	0.229
1.15) TR-302 Transducer	A		24,527.78	72	1.766	25,763.00	18	0.464	26,279.00	18	0.473	26,804.00	18	0.482	-	-	-	26,804.00	18	0.482
1.16) TR-302 Window	A		1,080.00	50	0.054	1,148.69	10	0.011	1,172.00	10	0.012	1,195.00	10	0.012	-	-	-	1,195.00	10	0.012
1.17) TR-321 Transducer	A		17,688.89	45	0.796	18,769.00	9	0.169	19,145.00	9	0.172	19,527.00	9	0.176	-	-	-	19,527.00	9	0.176
1.18) TR-321 V CTD	A		19,840.00	100	1.984	21,042.00	20	0.421	21,463.00	20	0.429	21,892.00	20	0.438	-	-	-	21,892.00	20	0.438
1.19) TR-338 Transducer	A		24,986.67	75	1.874	26,498.00	15	0.397	27,028.00	15	0.405	27,568.00	15	0.414	-	-	-	27,568.00	15	0.414
1.20) TR-341 Transducer	A		19,110.00	100	1.911	20,271.00	20	0.405	20,676.00	20	0.414	21,089.00	20	0.422	-	-	-	21,089.00	20	0.422
1.21) WAA OBE	A		12,992.00	250	3.248	13,784.00	50	0.689	14,060.00	50	0.703	14,341.00	50	0.717	-	-	-	14,341.00	50	0.717
1.22) NCC CONNECTORS	A		1,078.74	254	0.274	1,148.69	50	0.057	1,172.00	50	0.059	1,195.00	50	0.060	-	-	-	1,195.00	50	0.060
1.23) DT-699 HFSA RECEIVE	A		76,866.67	30	2.306	81,557.00	6	0.489	83,188.00	6	0.499	84,851.00	6	0.509	-	-	-	84,851.00	6	0.509
1.24) TR-364 HFSP XMIT	A		168,400.00	5	0.842	178,648.00	1	0.179	182,221.00	1	0.182	185,865.00	1	0.186	-	-	-	185,865.00	1	0.186
1.25) TR-317	A		4,385.33	3,000	13.156	4,594.12	850	3.905	4,688.24	850	3.985	4,778.82	850	4.062	-	-	-	4,778.82	850	4.062
1.26) TR-281	A		24,333.33	30	0.730	25,756.00	6	0.155	26,271.00	6	0.158	26,796.00	6	0.161	-	-	-	26,796.00	6	0.161

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Aggregated Items Title:** Sonar Switches and Transducers

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1.27) DT-513 Hydrophone	A		4,551.02	392	1.784	4,828.33	75	0.362	4,925.00	75	0.369	5,023.00	75	0.377	-	-	-	5,023.00	75	0.377
1.28) DT-100 HFSA RECEIVE	A		81,538.46	13	1.060	86,151.00	3	0.258	87,874.00	3	0.264	89,631.00	3	0.269	-	-	-	89,631.00	3	0.269
Subtotal: 1) PU100 SONAR SWITCHES AND TRANSDUCERS			**-**	**-**	***53.456***	**-**	**-**	***12.770***	**-**	**-**	***13.027***	**-**	**-**	***13.288***	**-**	**-**	**-**	**-**	**-**	***13.288***
2) PU200 ENGINEERING CHANGES																				
2.1) ENGINEERING CHANGES	A		-	-	1.115	-	-	0.237	-	-	0.242	-	-	0.247	-	-	-	-	-	0.247
Subtotal: 2) PU200 ENGINEERING CHANGES			**-**	**-**	***1.115***	**-**	**-**	***0.237***	**-**	**-**	***0.242***	**-**	**-**	***0.247***	**-**	**-**	**-**	**-**	**-**	***0.247***
3) PU300 PROGRAM SUPPORT																				
3.1) PROGRAM SUPPORT	A		-	-	5.582	-	-	1.184	-	-	1.208	-	-	1.232	-	-	-	-	-	1.232
Subtotal: 3) PU300 PROGRAM SUPPORT			**-**	**-**	***5.582***	**-**	**-**	***1.184***	**-**	**-**	***1.208***	**-**	**-**	***1.232***	**-**	**-**	**-**	**-**	**-**	***1.232***
Total			**-**	**-**	**60.153**	**-**	**-**	**14.191**	**-**	**-**	**14.477**	**-**	**-**	**14.767**	**-**	**-**	**-**	**-**	**-**	**14.767**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

(7) PU100 SONAR SWITCHES AND TRANSDUCERS - Due to Fleet usage requirements to maintain submarines in an operational status, adjustments are made to quantities throughout the FYDP. Items not procured in a single year do not impact the production line.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 1 / SA101 LWWAA TECH REFRESH
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	10.150	12.313	0.000	12.313	12.559	12.810	13.067	13.328	2.164	76.391
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	10.150	12.313	0.000	12.313	12.559	12.810	13.067	13.328	2.164	76.391
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**10.150**	**12.313**	**0.000**	**12.313**	**12.559**	**12.810**	**13.067**	**13.328**	**2.164**	**76.391**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding supports procurement of Light Weight Wide Aperature Array (LWWAA) Unit 6512 receiver hardware for technology refresh for Software and Hardware updates to accommodate shifts in technology to counter obsolescence on Block I/II VIRGINIA Class submarines.

LWWAA is an acoustic sensor that brings detection, tracking, and ranging capabilities to the submarine platform. Technology refresh supports long term increase in reliability for the LWWAA Processing Suite on 10 VIRGINIA Class Block I/II platforms.

[LWWAA TECH REFRESH] Funding in FY 2024 provides for the procurement of two LWWAA Tech Refresh units.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 1 / SA101 LWWAA TECH REFRESH
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA101 LWWAA TECH REFRESH												
B Kits												
Recurring												
1.1.1) LWWAA TECH REFRESH - NonOrganic [8]	- / -	- / -	2 / 10.150	2 / 10.353	- / -	2 / 10.353	2 / 10.560	2 / 10.771	2 / 10.987	2 / 11.206	- / -	12 / 64.027
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / 10.150*	*- / 10.353*	*- / -*	*- / 10.353*	*- / 10.560*	*- / 10.771*	*- / 10.987*	*- / 11.206*	*- / 0.000*	*- / 64.027*
Subtotal: SA101 LWWAA TECH REFRESH	*- / -*	*- / -*	*2 / 10.150*	*2 / 10.353*	*- / -*	*2 / 10.353*	*2 / 10.560*	*2 / 10.771*	*2 / 10.987*	*2 / 11.206*	*- / -*	*12 / 64.027*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / 10.150*	*- / 10.353*	*- / -*	*- / 10.353*	*- / 10.560*	*- / 10.771*	*- / 10.987*	*- / 11.206*	*- / 0.000*	*- / 64.027*
Installation												
Modification Item 1 of 1: SA101 LWWAA TECH REFRESH	- / 0.000	- / 0.000	- / 0.000	- / 1.960	- / 0.000	- / 1.960	- / 1.999	- / 2.039	- / 2.080	- / 2.122	- / 2.164	- / 12.364
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / 1.960*	*- / -*	*- / 1.960*	*- / 1.999*	*- / 2.039*	*- / 2.080*	*- / 2.122*	*- / 2.164*	*- / 12.364*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**10.150**	**12.313**	**0.000**	**12.313**	**12.559**	**12.810**	**13.067**	**13.328**	**2.164**	**76.391**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 1 / SA101 LWWAA TECH REFRESH

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA101 LWWAA TECH REFRESH

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: Manassas, VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028
Delivery Dates		Jul 2024	Jul 2025	Jul 2026	Jul 2027	Jul 2028	Jul 2029

Installation Information

Method of Implementation: [none specified]:: Installation Name: LWWAA TECH REFRESH

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	2 / 1.960	0 / 0.000	2 / 1.960	- / -	- / -	- / -	- / -	0 / 0.000	2 / 1.960
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.999	- / -	- / -	- / -	0 / 0.000	2 / 1.999
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.039	- / -	- / -	0 / 0.000	2 / 2.039
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.080	- / -	0 / 0.000	2 / 2.080
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.122	0 / 0.000	2 / 2.122
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.164	2 / 2.164
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	2 / 1.960	0 / 0.000	2 / 1.960	2 / 1.999	2 / 2.039	2 / 2.080	2 / 2.122	2 / 2.164	12 / 12.364

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	2	-	-	-	2	-	-	-	2	-	-	-	2	2	12
Out	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	2	-	-	-	2	-	-	-	2	-	-	-	2	2	12

Footnotes:

(8) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 2 / SA101 SSBN LEGACY INTERFACE HARDWARE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	60.081	5.046	6.304	5.250	0.000	5.250	0.000	0.000	0.000	0.000	0.000	76.681
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	60.081	5.046	6.304	5.250	0.000	5.250	0.000	0.000	0.000	0.000	0.000	76.681
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**60.081**	**5.046**	**6.304**	**5.250**	**0.000**	**5.250**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**76.681**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding supports procurement of hardware to accommodate increased power requirements of SSBN modernization equipment.

SSBN Legacy Interface Hardware supports emergent Engineering Change Proposals (ECPs) and hardware changes necessary to address significantly expanded power and infrastructure driven by required capability improvements. These funds support the conversion of the SSBN from a legacy Sonar system to the A-RCI model requiring upgrades to the power and infrastructure of the platform.

[SA101 SSBN LEGACY INTERFACE HARDWARE] Funding in FY 2023 provided for the procurement of one legacy kit.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 2 / SA101 SSBN LEGACY INTERFACE HARDWARE
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSBN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA101 SSBN LEGACY INTERFACE HARDWARE												
B Kits												
Recurring												
1.1.1) SA101 SSBN LEGACY INTERFACE HARDWARE - NonOrganic [9]	6 / 35.542	- / -	1 / 6.304	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 41.846
Subtotal: Recurring	*- / 35.542*	*- / -*	*- / 6.304*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 41.846*
Subtotal: SA101 SSBN LEGACY INTERFACE HARDWARE	*6 / 35.542*	*- / -*	*1 / 6.304*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*7 / 41.846*
Subtotal: Procurement, All Modification Items	*- / 35.542*	*- / -*	*- / 6.304*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 41.846*
Installation												
Modification Item 1 of 1: SA101 SSBN LEGACY INTERFACE HARDWARE	- / 24.539	- / 5.046	- / 0.000	- / 5.250	- / 0.000	- / 5.250	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 34.835
Subtotal: Installation	*- / 24.539*	*- / 5.046*	*- / -*	*- / 5.250*	*- / -*	*- / 5.250*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 34.835*
Total												
Total Cost (Procurement + Support + Installation)	**60.081**	**5.046**	**6.304**	**5.250**	**0.000**	**5.250**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**76.681**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 2 / SA101 SSBN LEGACY INTERFACE HARDWARE

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA101 SSBN LEGACY INTERFACE HARDWARE

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: Manassas, VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	
Delivery Dates	Jul 2023	Jul 2024	Jul 2025	Jul 2026	Jul 2027	Jul 2028	

Installation Information

Method of Implementation: [none specified]:: Installation Name: SA101 SSBN LEGACY INTERFACE HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	5 / 24.539	1 / 5.046	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 29.585
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	1 / 5.250	0 / 0.000	1 / 5.250	- / -	- / -	- / -	- / -	0 / 0.000	1 / 5.250
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 24.539	1 / 5.046	- / -	1 / 5.250	0 / 0.000	1 / 5.250	- / -	- / -	- / -	- / -	0 / 0.000	7 / 34.835

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	5	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Out	5	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7

Footnotes:

(9) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 3 / SA106 LOW COST CONFORMAL ARRAY KITS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	47.024	14.325	25.239	24.387	0.000	24.387	22.801	23.257	23.722	24.196	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	47.024	14.325	25.239	24.387	0.000	24.387	22.801	23.257	23.722	24.196	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**47.024**	**14.325**	**25.239**	**24.387**	**0.000**	**24.387**	**22.801**	**23.257**	**23.722**	**24.196**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Procurement of Low Cost Conformal Array (LCCA) to provide enhanced situational awareness and collision avoidance capability.

[SA106 HULL SENSORS LOW COST CONFORMAL ARRAY KITS] Funding in FY 2024 provides for the installation of two arrays purchased in FY 2022 and the procurement of three additional arrays in FY 2024.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 3 / SA106 LOW COST CONFORMAL ARRAY KITS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA106 LOW COST CONFORMAL ARRAY KITS												
B Kits												
Recurring												
1.1.1) SA106 HULL SENSORS LOW COST CONFORMAL ARRAY KITS - NonOrganic (10)	9 / 34.285	2 / 10.419	4 / 21.255	3 / 16.260	- / -	3 / 16.260	3 / 16.584	3 / 16.916	3 / 17.254	3 / 17.599	Continuing	Continuing
Subtotal: Recurring	*- / 34.285*	*- / 10.419*	*- / 21.255*	*- / 16.260*	*- / -*	*- / 16.260*	*- / 16.584*	*- / 16.916*	*- / 17.254*	*- / 17.599*	*Continuing*	*Continuing*
Subtotal: SA106 LOW COST CONFORMAL ARRAY KITS	*9 / 34.285*	*2 / 10.419*	*4 / 21.255*	*3 / 16.260*	*- / -*	*3 / 16.260*	*3 / 16.584*	*3 / 16.916*	*3 / 17.254*	*3 / 17.599*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 34.285*	*- / 10.419*	*- / 21.255*	*- / 16.260*	*- / -*	*- / 16.260*	*- / 16.584*	*- / 16.916*	*- / 17.254*	*- / 17.599*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SA106 LOW COST CONFORMAL ARRAY KITS	- / 12.739	- / 3.906	- / 3.984	- / 8.127	- / 0.000	- / 8.127	- / 6.217	- / 6.341	- / 6.468	- / 6.597	- / 6.729	- / 61.108
Subtotal: Installation	*- / 12.739*	*- / 3.906*	*- / 3.984*	*- / 8.127*	*- / -*	*- / 8.127*	*- / 6.217*	*- / 6.341*	*- / 6.468*	*- / 6.597*	*- / 6.729*	*- / 61.108*
Total												
Total Cost (Procurement + Support + Installation)	**47.024**	**14.325**	**25.239**	**24.387**	**0.000**	**24.387**	**22.801**	**23.257**	**23.722**	**24.196**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 3 / SA106 LOW COST CONFORMAL ARRAY KITS

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA106 LOW COST CONFORMAL ARRAY KITS

Manufacturer Information

Manufacturer Name: LOCKHEED MARTIN | Manufacturer Location: SYRACUSE, NY

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028
Delivery Dates	Jul 2023	Jul 2024	Jul 2025	Jul 2026	Jul 2027	Jul 2028	Jul 2029

Installation Information

Method of Implementation: SHIPALT:: Installation Name: SA106 HULL SENSORS LOW COST CONFORMAL ARRAY KITS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	7 / 12.739	2 / 3.906	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 16.645
FY 2022	- / -	- / -	2 / 3.984	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 3.984
FY 2023	- / -	- / -	- / -	4 / 8.127	0 / 0.000	4 / 8.127	- / -	- / -	- / -	- / -	0 / 0.000	4 / 8.127
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	3 / 6.217	- / -	- / -	- / -	0 / 0.000	3 / 6.217
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 6.341	- / -	- / -	0 / 0.000	3 / 6.341
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 6.468	- / -	0 / 0.000	3 / 6.468
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 6.597	0 / 0.000	3 / 6.597
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 6.729	3 / 6.729
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
Total	7 / 12.739	2 / 3.906	2 / 3.984	4 / 8.127	0 / 0.000	4 / 8.127	3 / 6.217	3 / 6.341	3 / 6.468	3 / 6.597	3 / 6.729	30 / 61.108

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	7	-	-	2	-	-	-	2	-	-	-	4	-	-	-	3	-	-	-	3	-	-	-	3	-	-	-	-	3	3	30
Out	7	-	-	2	-	-	-	2	-	-	-	4	-	-	-	3	-	-	-	3	-	-	-	3	-	-	-	-	3	3	30

Footnotes:

(10) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 4 / SA106 HIGH FREQUENCY SAIL ARRAY
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	30.980	4.372	4.460	4.549	0.000	4.549	4.640	4.732	2.483	0.000	0.000	56.216
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	30.980	4.372	4.460	4.549	0.000	4.549	4.640	4.732	2.483	0.000	0.000	56.216
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**30.980**	**4.372**	**4.460**	**4.549**	**0.000**	**4.549**	**4.640**	**4.732**	**2.483**	**0.000**	**0.000**	**56.216**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The High Frequency Sail Array (HFSA) provides high frequency active and passive capability supporting Anti-Submarine Warfare (ASW) and Anti-Surface Warfare (ASUW) for SSNs, and contact avoidance for SSNs and SSBNs.

[SA106 HIGH FREQUENCY SAIL ARRAY] Funding in FY 2024 provides for the installation of one array purchased in FY 2023 and the procurement of one additional array in FY 2024.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 4 / SA106 HIGH FREQUENCY SAIL ARRAY
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSN, SSBN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA106 HIGH FREQUENCY SAIL ARRAY												
B Kits												
Recurring												
1.1.1) SA106 HIGH FREQUENCY SAIL ARRAY - NonOrganic (11)	8 / 15.971	1 / 2.123	1 / 2.166	1 / 2.209	- / -	1 / 2.209	1 / 2.253	1 / 2.298	- / -	- / -	- / -	13 / 27.020
Subtotal: Recurring	*- / 15.971*	*- / 2.123*	*- / 2.166*	*- / 2.209*	*- / -*	*- / 2.209*	*- / 2.253*	*- / 2.298*	*- / -*	*- / -*	*- / 0.000*	*- / 27.020*
Subtotal: SA106 HIGH FREQUENCY SAIL ARRAY	*8 / 15.971*	*1 / 2.123*	*1 / 2.166*	*1 / 2.209*	*- / -*	*1 / 2.209*	*1 / 2.253*	*1 / 2.298*	*- / -*	*- / -*	*- / -*	*13 / 27.020*
Subtotal: Procurement, All Modification Items	*- / 15.971*	*- / 2.123*	*- / 2.166*	*- / 2.209*	*- / -*	*- / 2.209*	*- / 2.253*	*- / 2.298*	*- / -*	*- / -*	*- / 0.000*	*- / 27.020*
Installation												
Modification Item 1 of 1: SA106 HIGH FREQUENCY SAIL ARRAY	- / 15.009	- / 2.249	- / 2.294	- / 2.340	- / 0.000	- / 2.340	- / 2.387	- / 2.434	- / 2.483	- / 0.000	- / 0.000	- / 29.196
Subtotal: Installation	*- / 15.009*	*- / 2.249*	*- / 2.294*	*- / 2.340*	*- / -*	*- / 2.340*	*- / 2.387*	*- / 2.434*	*- / 2.483*	*- / -*	*- / 0.000*	*- / 29.196*
Total												
Total Cost (Procurement + Support + Installation)	**30.980**	**4.372**	**4.460**	**4.549**	**0.000**	**4.549**	**4.640**	**4.732**	**2.483**	**0.000**	**0.000**	**56.216**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 4 / SA106 HIGH FREQUENCY SAIL ARRAY

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA106 HIGH FREQUENCY SAIL ARRAY

Manufacturer Information

Manufacturer Name: NUWC Neport | Manufacturer Location: Newport, RI

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027
Delivery Dates	May 2023	May 2024	May 2025	May 2026	May 2027	May 2028	May 2029

Installation Information

Method of Implementation: SHIPALT:: Installation Name: SA106 HIGH FREQUENCY SAIL ARRAY

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	7 / 15.009	1 / 2.249	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	8 / 17.258
FY 2022	- / -	- / -	1 / 2.294	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 2.294
FY 2023	- / -	- / -	- / -	1 / 2.340	0 / 0.000	1 / 2.340	- / -	- / -	- / -	- / -	0 / 0.000	1 / 2.340
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.387	- / -	- / -	- / -	0 / 0.000	1 / 2.387
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.434	- / -	- / -	0 / 0.000	1 / 2.434
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.483	- / -	0 / 0.000	1 / 2.483
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	7 / 15.009	1 / 2.249	1 / 2.294	1 / 2.340	0 / 0.000	1 / 2.340	1 / 2.387	1 / 2.434	1 / 2.483	- / -	0 / 0.000	13 / 29.196

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	7	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	13
Out	7	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	13

Footnotes:

(11) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 5 / SA106 OHIO CLASS LARGE VERTICAL ARRAY
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	66.821	10.330	30.588	20.453	0.000	20.453	31.824	32.460	33.110	33.772	23.969	283.327
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	66.821	10.330	30.588	20.453	0.000	20.453	31.824	32.460	33.110	33.772	23.969	283.327
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**66.821**	**10.330**	**30.588**	**20.453**	**0.000**	**20.453**	**31.824**	**32.460**	**33.110**	**33.772**	**23.969**	**283.327**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Large Vertical Array (LVA) provides improved detection and enhanced tactical situational awareness capability for tracking targets of interest, and supports acoustic superiority objectives for OHIO class submarines. SSBN systems will be approximately half the width of their SSN counterparts. This variance reflects the difference in mission, expected environment, and requirements.

[SA106 OHIO CLASS LARGE VERTICAL ARRAY] Funding in FY 2024 provides for the procurement of one array.
No procurement was funded in FY 2022 which corresponds to FY 2024 installation.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 5 / SA106 OHIO CLASS LARGE VERTICAL ARRAY
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSBN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA106 OHIO CLASS LARGE VERTICAL ARRAY												
B Kits												
Recurring												
1.1.1) SA106 OHIO CLASS LARGE VERTICAL ARRAY - NonOrganic (12)	3 / 56.694	- / -	1 / 20.052	1 / 20.453	- / -	1 / 20.453	1 / 20.862	1 / 21.279	1 / 21.705	1 / 22.139	- / -	9 / 183.184
Subtotal: Recurring	*- / 56.694*	*- / -*	*- / 20.052*	*- / 20.453*	*- / -*	*- / 20.453*	*- / 20.862*	*- / 21.279*	*- / 21.705*	*- / 22.139*	*- / 0.000*	*- / 183.184*
Subtotal: SA106 OHIO CLASS LARGE VERTICAL ARRAY	*3 / 56.694*	*- / -*	*1 / 20.052*	*1 / 20.453*	*- / -*	*1 / 20.453*	*1 / 20.862*	*1 / 21.279*	*1 / 21.705*	*1 / 22.139*	*- / -*	*9 / 183.184*
Subtotal: Procurement, All Modification Items	*- / 56.694*	*- / -*	*- / 20.052*	*- / 20.453*	*- / -*	*- / 20.453*	*- / 20.862*	*- / 21.279*	*- / 21.705*	*- / 22.139*	*- / 0.000*	*- / 183.184*
Installation												
Modification Item 1 of 1: SA106 OHIO CLASS LARGE VERTICAL ARRAY	- / 10.127	- / 10.330	- / 10.536	- / 0.000	- / 0.000	- / 0.000	- / 10.962	- / 11.181	- / 11.405	- / 11.633	- / 23.969	- / 100.143
Subtotal: Installation	*- / 10.127*	*- / 10.330*	*- / 10.536*	*- / -*	*- / -*	*- / -*	*- / 10.962*	*- / 11.181*	*- / 11.405*	*- / 11.633*	*- / 23.969*	*- / 100.143*
Total												
Total Cost (Procurement + Support + Installation)	**66.821**	**10.330**	**30.588**	**20.453**	**0.000**	**20.453**	**31.824**	**32.460**	**33.110**	**33.772**	**23.969**	**283.327**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 5 / SA106 OHIO CLASS LARGE VERTICAL ARRAY

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA106 OHIO CLASS LARGE VERTICAL ARRAY

Manufacturer Information

Manufacturer Name: Electric Boat | Manufacturer Location: Groton, CT

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 24

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028
Delivery Dates		Jan 2025	Jan 2026	Jan 2027	Jan 2028	Jan 2029	Jan 2030

Installation Information

Method of Implementation: TRID:: Installation Name: SA106 OHIO CLASS LARGE VERTICAL ARRAY

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	1 / 10.127	1 / 10.330	1 / 10.536	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 30.993
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	1 / 10.962	- / -	- / -	- / -	0 / 0.000	1 / 10.962
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 11.181	- / -	- / -	0 / 0.000	1 / 11.181
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 11.405	- / -	0 / 0.000	1 / 11.405
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 11.633	0 / 0.000	1 / 11.633
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 11.866	1 / 11.866
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 12.103	1 / 12.103
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	1 / 10.127	1 / 10.330	1 / 10.536	- / -	- / -	- / -	1 / 10.962	1 / 11.181	1 / 11.405	1 / 11.633	2 / 23.969	9 / 100.143

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	1	1	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	2	9
Out	1	1	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	2	9

Footnotes:

(12) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 6 / SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	87.678	65.077	66.379	67.683	0.000	67.683	69.036	70.417	71.825	73.262	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	87.678	65.077	66.379	67.683	0.000	67.683	69.036	70.417	71.825	73.262	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**87.678**	**65.077**	**66.379**	**67.683**	**0.000**	**67.683**	**69.036**	**70.417**	**71.825**	**73.262**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Procurement of the VIRGINIA Class Large Vertical Array (LVA) provides improved detection and enhanced tactical situational awareness capability for tracking targets of interest, and supports acoustic superiority objectives for the VIRGINIA class submarines. SSN systems will be approximately twice the width of their SSBN counterparts. This variance reflects the difference in mission, expected environment, and requirements.

[SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY] Funding in FY 2024 provides for the installation of one array procured in FY 2022 and the procurement of one array for FY 2024.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 6 / SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY												
B Kits												
Recurring												
1.1.1) SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY - NonOrganic (13)	2 / 87.678	1 / 45.159	1 / 46.062	1 / 46.960	- / -	1 / 46.960	1 / 47.899	1 / 48.857	1 / 49.834	1 / 50.831	Continuing	Continuing
Subtotal: Recurring	*- / 87.678*	*- / 45.159*	*- / 46.062*	*- / 46.960*	*- / -*	*- / 46.960*	*- / 47.899*	*- / 48.857*	*- / 49.834*	*- / 50.831*	*Continuing*	*Continuing*
Subtotal: SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY	*2 / 87.678*	*1 / 45.159*	*1 / 46.062*	*1 / 46.960*	*- / -*	*1 / 46.960*	*1 / 47.899*	*1 / 48.857*	*1 / 49.834*	*1 / 50.831*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 87.678*	*- / 45.159*	*- / 46.062*	*- / 46.960*	*- / -*	*- / 46.960*	*- / 47.899*	*- / 48.857*	*- / 49.834*	*- / 50.831*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY	- / 0.000	- / 19.918	- / 20.317	- / 20.723	- / 0.000	- / 20.723	- / 21.137	- / 21.560	- / 21.991	- / 22.431	- / 46.800	- / 194.877
Subtotal: Installation	*- / 0.000*	*- / 19.918*	*- / 20.317*	*- / 20.723*	*- / -*	*- / 20.723*	*- / 21.137*	*- / 21.560*	*- / 21.991*	*- / 22.431*	*- / 46.800*	*- / 194.877*
Total												
Total Cost (Procurement + Support + Installation)	**87.678**	**65.077**	**66.379**	**67.683**	**0.000**	**67.683**	**69.036**	**70.417**	**71.825**	**73.262**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 6 / SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY

Manufacturer Information

Manufacturer Name: Electric Boat | Manufacturer Location: Groton, CT

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 24

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2021	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	
Delivery Dates	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027	Nov 2028	

Installation Information

Method of Implementation: TBD:: Installation Name: SA106 VIRGINIA CLASS LARGE VERTICAL ARRAY

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	1 / 19.918	1 / 20.317	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 40.235
FY 2022	- / -	- / -	- / -	1 / 20.723	0 / 0.000	1 / 20.723	- / -	- / -	- / -	- / -	0 / 0.000	1 / 20.723
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	1 / 21.137	- / -	- / -	- / -	0 / 0.000	1 / 21.137
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 21.560	- / -	- / -	0 / 0.000	1 / 21.560
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 21.991	- / -	0 / 0.000	1 / 21.991
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 22.431	0 / 0.000	1 / 22.431
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 22.880	1 / 22.880
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 23.920	1 / 23.920
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
Total	- / -	1 / 19.918	1 / 20.317	1 / 20.723	0 / 0.000	1 / 20.723	1 / 21.137	1 / 21.560	1 / 21.991	1 / 22.431	2 / 46.800	9 / 194.877

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	2	9
Out	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	1	2	9

Footnotes:

(13) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 7 / SA303 688/688I TECHNOLOGY INSERTION KITS (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	191.247	8.630	64.108	26.767	0.000	26.767	2.592	37.365	48.900	30.442	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	191.247	8.630	64.108	26.767	0.000	26.767	2.592	37.365	48.900	30.442	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**191.247**	**8.630**	**64.108**	**26.767**	**0.000**	**26.767**	**2.592**	**37.365**	**48.900**	**30.442**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides technology insertion upgrade kits to previously installed A-RCI systems, providing the latest and most current capability and includes tech insertion to Legacy Replacement components on Los Angeles Class submarines.

[SA303 688i TECHNOLOGY INSERTION KITS (SWFTS)] Funding in FY 2024 provides for installation of seven (7) kits procured in FY 2023 and procurement of one additional kit in FY 2024.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 7 / SA303 688/688I TECHNOLOGY INSERTION KITS (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA303 688/688I TECHNOLOGY INSERTION KITS (SWFTS)												
B Kits												
Non-Recurring												
1.1.1) SA303 688i TECHNOLOGY INSERTION KITS (SWFTS) - NonOrganic (14)	23 / 138.101	1 / 8.630	7 / 61.617	1 / 8.978	- / -	1 / 8.978	- / -	4 / 37.365	4 / 38.112	2 / 19.438	Continuing	Continuing
Subtotal: Non-Recurring	*- / 138.101*	*- / 8.630*	*- / 61.617*	*- / 8.978*	*- / -*	*- / 8.978*	*- / -*	*- / 37.365*	*- / 38.112*	*- / 19.438*	*Continuing*	*Continuing*
Subtotal: SA303 688/688I TECHNOLOGY INSERTION KITS (SWFTS)	*23 / 138.101*	*1 / 8.630*	*7 / 61.617*	*1 / 8.978*	*- / -*	*1 / 8.978*	*- / -*	*4 / 37.365*	*4 / 38.112*	*2 / 19.438*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 138.101*	*- / 8.630*	*- / 61.617*	*- / 8.978*	*- / -*	*- / 8.978*	*- / -*	*- / 37.365*	*- / 38.112*	*- / 19.438*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SA303 688/688I TECHNOLOGY INSERTION KITS (SWFTS)	- / 53.146	- / 0.000	- / 2.491	- / 17.789	- / 0.000	- / 17.789	- / 2.592	- / 0.000	- / 10.788	- / 11.004	- / 5.502	- / 103.312
Subtotal: Installation	*- / 53.146*	*- / -*	*- / 2.491*	*- / 17.789*	*- / -*	*- / 17.789*	*- / 2.592*	*- / -*	*- / 10.788*	*- / 11.004*	*- / 5.502*	*- / 103.312*
Total												
Total Cost (Procurement + Support + Installation)	**191.247**	**8.630**	**64.108**	**26.767**	**0.000**	**26.767**	**2.592**	**37.365**	**48.900**	**30.442**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 7 / SA303 688/688I TECHNOLOGY INSERTION KITS (SWFTS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA303 688/688I TECHNOLOGY INSERTION KITS (SWFTS)

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024		Jan 2026	Jan 2027	Jan 2028
Delivery Dates	Jul 2023	Jul 2024	Jul 2025		Jul 2027	Jul 2028	Jul 2029

Installation Information

Method of Implementation: SHIPALT:: Installation Name: SA303 688i TECHNOLOGY INSERTION KITS (SWFTS)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	23 / 53.146	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	23 / 53.146
FY 2022	- / -	- / -	1 / 2.491	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 2.491
FY 2023	- / -	- / -	- / -	7 / 17.789	0 / 0.000	7 / 17.789	- / -	- / -	- / -	- / -	0 / 0.000	7 / 17.789
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.592	- / -	- / -	- / -	0 / 0.000	1 / 2.592
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 10.788	- / -	0 / 0.000	4 / 10.788
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 11.004	0 / 0.000	4 / 11.004
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 5.502	2 / 5.502
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
Total	23 / 53.146	- / -	1 / 2.491	7 / 17.789	0 / 0.000	7 / 17.789	1 / 2.592	- / -	4 / 10.788	4 / 11.004	2 / 5.502	42 / 103.312

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	23	-	-	-	-	-	-	-	1	-	3	2	2	-	-	-	1	-	-	-	-	-	-	-	4	-	-	-	4	2	42
Out	23	-	-	-	-	-	-	-	1	-	3	2	2	-	-	-	1	-	-	-	-	-	-	-	4	-	-	-	4	2	42

Footnotes:

(14) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2 or later. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 8 / SA303 SSGN TECHNOLOGY INSERTION KITS (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	42.335	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	42.335
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	42.335	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	42.335
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**42.335**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**42.335**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:
Provides technology insertion upgrade kits to previously installed A-RCI systems, providing the latest and most current capability and includes tech insertion to Legacy Replacement components on SSGN class submarines.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 8 / SA303 SSGN TECHNOLOGY INSERTION KITS (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSGN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA303 SSGN TECHNOLOGY INSERTION KITS (SWFTS)												
B Kits												
Non-Recurring												
1.1.1) SSGN TECHNOLOGY INSERTION KITS (SWFTS) - NonOrganic	4 / 32.853	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 32.853
Subtotal: Non-Recurring	- / 32.853	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.000	- / 32.853
Subtotal: SA303 SSGN TECHNOLOGY INSERTION KITS (SWFTS)	4 / 32.853	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 32.853
Subtotal: Procurement, All Modification Items	- / 32.853	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.000	- / 32.853
Installation												
Modification Item 1 of 1: SA303 SSGN TECHNOLOGY INSERTION KITS (SWFTS)	- / 9.482	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 9.482
Subtotal: Installation	- / 9.482	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.000	- / 9.482
Total												
Total Cost (Procurement + Support + Installation)	**42.335**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**42.335**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 8 / SA303 SSGN TECHNOLOGY INSERTION KITS (SWFTS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA303 SSGN TECHNOLOGY INSERTION KITS (SWFTS)

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: SHIPALT:: Installation Name: SSGN TECHNOLOGY INSERTION KITS (SWFTS)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	4 / 9.482	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	4 / 9.482
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	4 / 9.482	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	4 / 9.482

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Out	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 9 / SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	27.730	9.666	13.555	13.826	0.000	13.826	3.845	0.000	0.000	0.000	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	27.730	9.666	13.555	13.826	0.000	13.826	3.845	0.000	0.000	0.000	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**27.730**	**9.666**	**13.555**	**13.826**	**0.000**	**13.826**	**3.845**	**0.000**	**0.000**	**0.000**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides technology insertion upgrade kits to previously installed A-RCI systems, providing the latest and most current capability and includes tech insertion to Legacy Replacement components on Seawolf Class submarines.

[SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS)] FY 2024 funds the installation of one kit procured in FY 2023 and procures one additional kit in FY 2024.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 9 / SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS)												
B Kits												
Recurring												
1.1.1) SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS) - NonOrganic (15)	3 / 17.685	1 / 9.666	1 / 9.859	1 / 10.056	- / -	1 / 10.056	- / -	- / -	- / -	- / -	Continuing	Continuing
Subtotal: Recurring	*- / 17.685*	*- / 9.666*	*- / 9.859*	*- / 10.056*	*- / -*	*- / 10.056*	*- / -*	*- / -*	*- / -*	*- / -*	*Continuing*	*Continuing*
Subtotal: SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS)	*3 / 17.685*	*1 / 9.666*	*1 / 9.859*	*1 / 10.056*	*- / -*	*1 / 10.056*	*- / -*	*- / -*	*- / -*	*- / -*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 17.685*	*- / 9.666*	*- / 9.859*	*- / 10.056*	*- / -*	*- / 10.056*	*- / -*	*- / -*	*- / -*	*- / -*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS)	- / 10.045	- / 0.000	- / 3.696	- / 3.770	- / 0.000	- / 3.770	- / 3.845	- / 0.000	- / 0.000	- / 0.000	Continuing	Continuing
Subtotal: Installation	*- / 10.045*	*- / -*	*- / 3.696*	*- / 3.770*	*- / -*	*- / 3.770*	*- / 3.845*	*- / -*	*- / -*	*- / -*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**27.730**	**9.666**	**13.555**	**13.826**	**0.000**	**13.826**	**3.845**	**0.000**	**0.000**	**0.000**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 9 / SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS)

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Jul 2023	Jul 2024	Jul 2025				

Installation Information

Method of Implementation: SHIPALT:: Installation Name: SA303 SSN 21 TECHNICAL INSERTION KITS (SWFTS)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	3 / 10.045	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 10.045
FY 2022	- / -	- / -	1 / 3.696	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 3.696
FY 2023	- / -	- / -	- / -	1 / 3.770	0 / 0.000	1 / 3.770	- / -	- / -	- / -	- / -	0 / 3.770	1 / 7.540
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.845	- / -	- / -	- / -	0 / 0.000	1 / 3.845
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	3 / 10.045	- / -	1 / 3.696	1 / 3.770	0 / 0.000	1 / 3.770	1 / 3.845	- / -	- / -	- / -	Continuing	Continuing

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	3	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	Cont.	Cont.
Out	3	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	Cont.	Cont.

Footnotes:

(15) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 10 / SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	207.324	37.452	11.089	60.338	0.000	60.338	101.289	73.285	58.692	89.799	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	207.324	37.452	11.089	60.338	0.000	60.338	101.289	73.285	58.692	89.799	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**207.324**	**37.452**	**11.089**	**60.338**	**0.000**	**60.338**	**101.289**	**73.285**	**58.692**	**89.799**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides technology insertion upgrade kits to previously A-RCI installed systems on the VA Class, providing the latest and most current capability.

[SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS)] Funding in FY 2024 provides for the procurement of six kits.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 10 / SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS)												
B Kits												
Recurring												
1.1.1) SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS) - NonOrganic (16)	19 / 163.326	2 / 19.332	- / -	6 / 60.338	- / -	6 / 60.338	8 / 82.060	4 / 41.851	4 / 42.688	6 / 65.312	Continuing	Continuing
Subtotal: Recurring	*- / 163.326*	*- / 19.332*	*- / -*	*- / 60.338*	*- / -*	*- / 60.338*	*- / 82.060*	*- / 41.851*	*- / 42.688*	*- / 65.312*	*Continuing*	*Continuing*
Subtotal: SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS)	*19 / 163.326*	*2 / 19.332*	*- / -*	*6 / 60.338*	*- / -*	*6 / 60.338*	*8 / 82.060*	*4 / 41.851*	*4 / 42.688*	*6 / 65.312*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 163.326*	*- / 19.332*	*- / -*	*- / 60.338*	*- / -*	*- / 60.338*	*- / 82.060*	*- / 41.851*	*- / 42.688*	*- / 65.312*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS)	- / 43.998	- / 18.120	- / 11.089	- / 0.000	- / 0.000	- / 0.000	- / 19.229	- / 31.434	- / 16.004	- / 24.487	- / 33.303	- / 197.664
Subtotal: Installation	*- / 43.998*	*- / 18.120*	*- / 11.089*	*- / -*	*- / -*	*- / -*	*- / 19.229*	*- / 31.434*	*- / 16.004*	*- / 24.487*	*- / 33.303*	*- / 197.664*
Total												
Total Cost (Procurement + Support + Installation)	**207.324**	**37.452**	**11.089**	**60.338**	**0.000**	**60.338**	**101.289**	**73.285**	**58.692**	**89.799**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 10 / SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS)

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: VA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022		Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028
Delivery Dates	Jul 2023		Jul 2025	Jul 2026	Jul 2027	Jul 2028	Jul 2029

Installation Information

Method of Implementation: SHIPALT:: Installation Name: SA303 VIRGINIA CLASS TECHNICAL INSERTION KITS (SWFTS)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	13 / 43.998	5 / 18.120	1 / 3.696	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	19 / 65.814
FY 2022	- / -	- / -	2 / 7.393	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 7.393
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	4 / 19.229	2 / 7.896	- / -	- / -	0 / 0.000	6 / 27.125
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 23.538	2 / 8.002	- / -	0 / 0.000	8 / 31.540
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 8.002	2 / 8.162	0 / 0.000	4 / 16.164
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 16.325	2 / 8.328	4 / 24.653
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 24.975	6 / 24.975
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
Total	13 / 43.998	5 / 18.120	3 / 11.089	- / -	- / -	- / -	4 / 19.229	8 / 31.434	4 / 16.004	4 / 24.487	8 / 33.303	49 / 197.664

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	13	-	-	-	5	1	-	-	2	-	-	-	-	-	-	-	4	2	-	-	6	2	-	-	2	2	-	-	2	8	49
Out	13	-	-	-	5	1	-	-	2	-	-	-	-	-	-	-	4	2	-	-	6	2	-	-	2	2	-	-	2	8	49

Footnotes:

(16) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 11 / SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	120.920	4.523	0.000	22.871	0.000	22.871	21.953	28.595	34.269	18.203	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	120.920	4.523	0.000	22.871	0.000	22.871	21.953	28.595	34.269	18.203	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**120.920**	**4.523**	**0.000**	**22.871**	**0.000**	**22.871**	**21.953**	**28.595**	**34.269**	**18.203**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Provides sonar modernization to the SSBN (TRIDENT) Class Submarine Fleet.

[SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS)] Funding in FY 2024 provides procurement of three (3) additional kits in FY 2024.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 11 / SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SSBN	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS)												
B Kits												
Non-Recurring												
1.1.1) SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS) - NonOrganic [17]	14 / 65.401	- / -	- / -	3 / 18.165	- / -	3 / 18.165	2 / 12.352	3 / 18.899	3 / 19.277	2 / 13.109	Continuing	Continuing
Subtotal: Non-Recurring	*- / 65.401*	*- / -*	*- / -*	*- / 18.165*	*- / -*	*- / 18.165*	*- / 12.352*	*- / 18.899*	*- / 19.277*	*- / 13.109*	*Continuing*	*Continuing*
Subtotal: SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS)	*14 / 65.401*	*- / -*	*- / -*	*3 / 18.165*	*- / -*	*3 / 18.165*	*2 / 12.352*	*3 / 18.899*	*3 / 19.277*	*2 / 13.109*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 65.401*	*- / -*	*- / -*	*- / 18.165*	*- / -*	*- / 18.165*	*- / 12.352*	*- / 18.899*	*- / 19.277*	*- / 13.109*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS)	- / 55.519	- / 4.523	- / 0.000	- / 4.706	- / 0.000	- / 4.706	- / 9.601	- / 9.696	- / 14.992	- / 5.094	- / 25.880	- / 130.011
Subtotal: Installation	*- / 55.519*	*- / 4.523*	*- / -*	*- / 4.706*	*- / -*	*- / 4.706*	*- / 9.601*	*- / 9.696*	*- / 14.992*	*- / 5.094*	*- / 25.880*	*- / 130.011*
Total												
Total Cost (Procurement + Support + Installation)	**120.920**	**4.523**	**0.000**	**22.871**	**0.000**	**22.871**	**21.953**	**28.595**	**34.269**	**18.203**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2150 / SSN Acoustic Equipment	**Modification Number / Title:** 11 / SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS)

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: Manassas, VA

Administrative Leadtime *(in Months)*: 6 | Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Apr 2024	Apr 2025	Apr 2026	Apr 2027	
Delivery Dates			Apr 2025	Apr 2026	Apr 2027	Apr 2028	

Installation Information

Method of Implementation: SHIPALT:: Installation Name: SA303 SSBN TECHNICAL INSERTION CONVERSION (SWFTS)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	12 / 55.519	1 / 4.523	- / -	1 / 4.706	0 / 0.000	1 / 4.706	- / -	- / -	- / -	- / -	0 / 0.000	14 / 64.748
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 9.601	1 / 4.800	- / -	- / -	0 / 0.000	3 / 14.401
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.896	1 / 4.994	- / -	0 / 0.000	2 / 9.890
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 9.998	1 / 5.094	0 / 0.000	3 / 15.092
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 15.282	3 / 15.282
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 10.598	2 / 10.598
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
Total	12 / 55.519	1 / 4.523	- / -	1 / 4.706	0 / 0.000	1 / 4.706	2 / 9.601	2 / 9.696	3 / 14.992	1 / 5.094	5 / 25.880	27 / 130.011

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	12	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	2	1	-	-	1	1	-	-	2	1	-	-	-	5	27
Out	12	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	2	1	-	-	1	1	-	-	2	1	-	-	-	5	27

Footnotes:

(17) Supply chain delays have increased lead time from 12 months to as much as 18 months or longer. As a result, shipset deliveries starting in FY25 are now received in Q4 of a given fiscal year instead of what has in prior fiscal years been Q2. Once delivered, these shipsets are sent to platforms in the same quarter instead of what has been done in the past prior to the supply chain delays.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2176 / Undersea Warfare Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0603512N, 0604518N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	129.778	13.965	17.424	23.452	0.000	23.452	16.960	16.299	16.617	16.975	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	129.778	13.965	17.424	23.452	0.000	23.452	16.960	16.299	16.617	16.975	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**129.778**	**13.965**	**17.424**	**23.452**	**0.000**	**23.452**	**16.960**	**16.299**	**16.617**	**16.975**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This Budget Line Item (BLI) consists of three separate and distinct programs, the OPNAV N98 sponsored Aircraft Carrier Tactical Support Center (CV-TSC) program, the OPNAV N96 sponsored Sonar Dome Rubber Windows (SDRW) program, and the OPNAV N2N6 sponsored Undersea Warfare Decision Support System (USW-DSS) program.

FY 2023 TO FY 2024 INCREASE:
- FY 2023 ($17.424M) to FY 2024 ($23.452M) increase ($+6.028M) is driven by the following two (2) factors:

1) A new requirement commencing in FY 2024 for the CV-TSC backfit program to perform a technology refresh of obsolete Technical Insertion-12 (TI-12) Common Processing System (CPS) and Interface Processing System (IPS) equipment on three (3) CVNs and six (6) shore site training systems.

2) The requirement to procure two (2) additional SDRWs in FY 2024 (for a total of three) to increase the inventory of near-term emergency replacement systems to offset current casualty rates (due to corrosion, fatigue, and impact damage) and mitigate operational risk if casualty rates were to continue to be above historical averages. Keeping a ready inventory of replacement SDRW assets is necessary for the Anti-Submarine Warfare (ASW) mission, as the SDRW significantly improves the surface ship sonar performance by reducing flow-induced self-noise and by providing increased source level receiving and sensitivity resulting from reduced attenuation.

Program Descriptions:

AIRCRAFT CARRIER TACTICAL SUPPORT CENTER (CV-TSC) (Cost Code VM301):
The AN/SQQ-34 Aircraft Carrier Tactical Support Center (CV-TSC) program delivers Anti-Submarine Warfare (ASW) and Surface Warfare (SUW) combat capability to the Aircraft Carrier supporting Aircraft Carrier, Nuclear power (CVN) Tactical Action Office (TAO) and embarked Carrier Strike Group (CSG) Sea Combat Commander. The program provides validation and certification of Engineering Changes (ECs) fielded on CVNs and provides hardware/software changes/upgrades to previously fielded and in-production CV-TSC systems required to correct deficiencies identified through Fleet use, upgrade unreliable/ unsupportable components, replace obsolete components, and resolve Information Assurance (IA) issues. The program maintains interoperability with current and future interfaces to stay within the current performance envelope, supports mission data exchange, improves ASW/SUW track/sensor processing and analysis techniques, improves mission planning, improves data recording, reconstruction, and distribution, improves embedded simulation and training capabilities and implements cyber-security measures to effectively employ overall CVN Self Ship Defense System (SSDS) capabilities. CV-TSC integrates sensor data from organic Aircraft (MH-60R), organic platform sensors and tracks via Ship Self Defense System Product Line Architecture (PLA) and non-PLA, Link-16 track data, Global Command and Control

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2176 / Undersea Warfare Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0603512N, 0604518N
Line Item MDAP/MAIS Code: N/A		

System (GCCS) Over-the-Horizon track data, and Environmental and Threat Databases to assess the threat and assist the Tactical Action Officer and Carrier Strike Group to effectively employ overall CVN self-defense capabilities. CV-TSC generates real-time ASW/SUW information and recommendations, tactical planning and employment of ASW/SUW assets, ASW/SUW sensor data processing and analysis, and distribution of tactically significant data. Aircraft supported include: MH-60R/S Seahawk, P-8 Poseidon, MQ-4C Triton, and future ASW/SUW non-organic supporting platforms.

NOTE: The CV-TSC Technology Insert/Refresh & ECP Implementation Cost Code VM301/Item Number 1.1 FY 2023 ($0.355M) to FY 2024 ($4.263M) increase ($+3.908M) represents the additional funding required commencing in FY 2024 to perform a technology refresh of obsolete Technical Insertion-12 (TI-12) Common Processing System (CPS) and Interface Processing System (IPS) equipment on three (3) CVNs and six (6) shore site training systems. Specifically, TI-12 CPS IBM blade center technology was sold to China and is no longer supportable (obsolete), thereby requiring the integration of the next generation CPS. The TI-12 IPS equipment has also encountered end of life issues and must be requalified because of obsolete network components and accumulated shock deficiency corrective action requirements. This CV-TSC technology refresh effort provides the Fleet with updated equipment that will: ensure the continued operation of the CV-TSC (the primary ASW and SUW element of the Aircraft Carrier Integrated Combat System and the primary shipboard support system for multi-mission aircraft conducting ASW/SUW missions supporting the CSG), improve overall CV-TSC Operational Availability (Ao), and allow CV-TSC to be able to support the Integrated Broadcast System (IBS), required to enable enterprise Automated Identification System (AIS) track and future fused National Technical Mean (NTM) surface track updates outside the CVN surveillance area.

SONAR DOME RUBBER WINDOWS (SDRWs) (Cost Code VM401):
AN/SQS-53 Sonar Dome Rubber Windows (SDRWs) are installed on all CG47 and DDG51 class ships (Initial Capabilities Document (ICD) for ASW, AN/SQQ-89(V) Operational Requirements Document (ORD) (#667-76-05 dated August 2005). This program provides emergency replacement, wire-reinforced, pressurized rubber acoustic windows and attachment hardware, which experience failure due to corrosion, fatigue, and impact damage. Ships with a severely damaged SDRW need to be dry-docked, so continually monitoring status of SDRWs and maintaining a ready inventory of replacement assets is a priority in order to keep ships on mission. The SDRW significantly improves the surface ship sonar performance by reducing flow-induced self-noise and by providing increased source level receiving and sensitivity resulting from reduced attenuation. This program provides production engineering in support of technical evaluations, failure analysis, implementation of the in-water one-side backscatter X-ray program, Government Furnished Equipment (GFE) refurbishments of production systems and field service engineering; and completion of engineering design work and material tests. This program also provides drawings, configuration management information, incorporation of new design and fabrication technology, incorporation of lessons learned and required testing, and constructs sub-elements to confirm single-stage cure of the SDRW production process.

NOTE: The SDRW Procurement Cost Code VM401/Item Number 2.1 FY 2023 ($2.450M/Qty 1) to FY 2024 ($6.495M/Qty 3) increase ($+4.045M/Qty +2) reflects the requirement to procure two (2) additional SDRWs in FY 2024 (for a total of three) to increase the inventory of near-term emergency replacement systems to offset current casualty rates (due to corrosion, fatigue, and impact damage) and mitigate operational risk if casualty rates were to continue to be above historical averages. Keeping a ready inventory of replacement SDRW assets is necessary for the Anti-Submarine Warfare (ASW) mission, as the SDRW significantly improves the surface ship sonar performance by reducing flow-induced self-noise and by providing increased source level receiving and sensitivity resulting from reduced attenuation.

UNDERSEA WARFARE DECISION SUPPORT SYSTEM (USW-DSS) (Cost Code VM601):
USW-DSS is the Navy Program of Record ASW Command and Control (C2) Net-Centric system supporting the warfighter. USW-DSS provides an integrated, near-real time, net-centric ASW Common Tactical Picture (CTP) and Common Operational Picture (COP) for the Carrier Strike Groups (CSGs). USW-DSS is a C2 capability identified in the ASW Initial Capabilities Document (ICD), for the Sea Combat Commander (SCC) and Theater USW Commander (TUSWC). USW-DSS enables effective planning and execution of Undersea Warfare (USW) operations, optimizes placement of sensors for exploitation of the environment, manages available resources, balances operations versus risk, and provides a clear vulnerability assessment of the operational environment. USW-DSS shortens C2 decision processes for detection-to-engagement across multiple platforms, including those with low bandwidth communications or intermittent connectivity. Tactical data such as tracks, environmental, and sensor processing data is ingested into USW-DSS through platform specific interfaces such as the AN/SQQ-89(V) Surface Ship ASW Combat System, the Global Command and Control System - Maritime (GCCS-M), and Aircraft Carrier Tactical Support Center (CV-TSC). USW-DSS processes this and other tactical data and supports intelligent dissemination of the data to unit level and theater level platforms in support of an enhanced USW tactical picture. USW-DSS provides USW Commanders with an expanded, net-centric USW collaborative capability across CSG platforms (CVNs, CGs, DDGs) as well as supporting shore nodes to include: Theater Undersea Warfare Command Headquarters (TUSWCHQ), the Naval Oceanographic Processing Facility (NOPF), and Tactical Operations Center (TOC) and Mobile Tactical Operations Center (M-TOC). On afloat platforms, USW-DSS processing software is virtualized for portability and is hosted on the Integrated Shipboard Network System (ISNS) and Consolidated Afloat Networks and Enterprise Services (CANES) systems and implements a Service-Oriented Architecture (SOA) with display generation and operator interfaces provided via USW-DSS hardware. For support and ashore nodes, USW-DSS processing software is hosted on Commercial Off The Shelf (COTS) hardware. USW-DSS capability improvements are phased to deliver timely and cost-effective software improvements to the warfighter via the Build / Fleet Capability Release (FCR) process funded under the USW-DSS RDT&EN Program Element (PE) 0604518N Project 3094 development program, for transition and fielding via the USW-DSS OPN BLI 2176

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	P-1 Line Item Number / Title: 2176 / Undersea Warfare Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0603512N, 0604518N
Line Item MDAP/MAIS Code: N/A		

program. USW-DSS procurements are installed on CSG platforms and supporting shore nodes via permanent Ship Alterations (SHIPALTs). Workstation procurements are required to support ISNS and CANES configured ships as well as shore nodes.

See the following for a description of all P-40a cost items that comprise this budget:

[P40A / VM301 - AIRCRAFT CARRIER TACTICAL SUPPORT CENTER (CV-TSC)]: VM301 - AIRCRAFT CARRIER TACTICAL SUPPORT CENTER (CV-TSC)

[P40A / CV-TSC Technology Insert/Refresh & ECP Implementation]: Item Number 1.1 - Consists of Engineering Change Proposals (ECPs) and hardware/software changes/upgrades to previously fielded and in-production CV-TSC AN/SQQ-34 systems. Funding used to implement ECPs to correct deficiencies identified through Fleet use; upgrade unreliable components; replace obsolete components; and address Information Assurance (IA) issues.

NOTE: The FY 2023 ($0.355M) to FY 2024 ($4.263M) increase ($+3.908M) to CV-TSC Technology Insert/Refresh & ECP Implementation Cost Code VM301/Item Number 1.1 represents the additional funding required commencing in FY 2024 to perform a technology refresh of obsolete Technical Insertion-12 (TI-12) Common Processing System (CPS) and Interface Processing System (IPS) equipment on three (3) CVNs and six (6) shore site training systems. Specifically, TI-12 CPS IBM blade center technology was sold to China and is no longer supportable (obsolete), thereby requiring the integration of the next generation CPS. The TI-12 IPS equipment has also encountered end of life issues and must be requalified because of obsolete network components and accumulated shock deficiency corrective action requirements. This CV-TSC technology refresh effort provides the Fleet with updated equipment that will: ensure the continued operation of the CV-TSC (the primary ASW and SUW element of the Aircraft Carrier Integrated Combat System and the primary shipboard support system for multi-mission aircraft conducting ASW/SUW missions supporting the CSG), improve overall CV-TSC Operational Availability (Ao), and allow CV-TSC to be able to support the Integrated Broadcast System (IBS), required to enable enterprise Automated Identification System (AIS) track and future fused National Technical Mean (NTM) surface track updates outside the CVN surveillance area.

[P40A / CV-TSC Minotaur Multi-Sensor Fused Track Build Out]: Item Number 1.2 - This Non-Recurring Engineering (NRE) effort will productize and qualify a Minotaur Interface Processing System (IPS) backfit kit to be integrated within the CV-TSC and fielded on Aircraft Carriers and shore sites. Minotaur Multi-Sensor Fusion is required to provide increased battlespace awareness, and will significantly accelerate the find, fix, and track capabilities within the Maritime Intelligence Surveillance and Reconnaissance & Targeting (MIS&RT) function when CV-TSC is operating in a communications-denied environment.

[P40A / VM401 - SONAR DOME RUBBER WINDOWS (SDRWs)]: VM401 - SONAR DOME RUBBER WINDOWS (SDRWs)

[P40A / SDRW Procurement]: Item Number 2.1 - Procure SDRWs, shipping fixtures, and fairing angles for emergency replacement on all CG47 and DDG51 class hulls. This line provides emergency replacement, wire-reinforced, pressurized rubber acoustic windows and attachment hardware, which experience failure due to corrosion, fatigue, and impact damage. Ships with a severely damaged SDRW need to be dry-docked, so continually monitoring status of SDRWs and maintaining a ready inventory of replacement assets is a priority in order to keep ships on mission.

NOTE: The SDRW Procurement Cost Code VM401/Item Number 2.1 FY 2023 ($2.450M/Qty 1) to FY 2024 ($6.495M/Qty 3) increase ($+4.045M/Qty +2) reflects the requirement to procure two (2) additional SDRWs in FY 2024 (for a total of three) to increase the inventory of near-term emergency replacement systems to offset current casualty rates (due to corrosion, fatigue, and impact damage) and mitigate operational risk if casualty rates were to continue to be above historical averages. Keeping a ready inventory of replacement SDRW assets is necessary for the Anti-Submarine Warfare (ASW) mission, as the SDRW significantly improves the surface ship sonar performance by reducing flow-induced self-noise and by providing increased source level receiving and sensitivity resulting from reduced attenuation.

[P40A / SDRW Production Support]: Item Number 2.2 - Funding is provided for production engineering in support of technical evaluations, failure analysis, implementation of the in-water one-side backscatter X-ray program, Government Furnished Equipment (GFE) refurbishments, and field service engineering; and complete engineering design work and material tests. This program also provides drawings, configuration management information, new design and fabrication technology, incorporation of lessons learned and required testing, and construct sub-elements to confirm single-stage cure.

[P40A / VM601 - UNDERSEA WARFARE DECISION SUPPORT SYSTEM (USW-DSS)]: VM601 - UNDERSEA WARFARE DECISION SUPPORT SYSTEM (USW-DSS)

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2176 / Undersea Warfare Support Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0603512N, 0604518N
Line Item MDAP/MAIS Code: N/A		

[P40A / USW-DSS Shore Sites and Tactical Trainers]: Item Number 3.1 - Reflects the initial procurement of USW-DSS Build 3 systems required to support shore nodes and training sites to include theater, maritime operations centers, tactical operations centers, and training centers, hosted via general services secret and top secret networks.

[P40A / USW-DSS Tech Refresh]: Item Number 3.2 - Tech Refreshes are defined as hardware and software upgrades to existing USW-DSS systems and include upgrades to both USW-DSS Build 2 Revision 3 (B2R3) afloat systems and Build 3 ashore systems. Through USW-DSS Tech Refreshes, targeted architecture improvements developed under USW-DSS RDT&EN Program Element 0604518N Project 3094 via Build 3 Fleet Capability Release (FCR) will facilitate the migration of key components of USW-DSS onto existing installed systems for Fleet use. USW-DSS Tech Refreshes will include the latest cybersecurity patches, mitigate/resolve obsolescence issues, and improve software scalability, while installing the latest integrated, near-real time, netcentric ASW Common Tactical Picture (CTP) and Common Operational Picture (COP) on an electronic Master Tactical Plot (eMTP). Each year, USW-DSS is required to perform Tech Refreshes for afloat B2R3 systems to stay compatible with the Consolidated Afloat Network and Enterprise Services (CANES) hosting environment when CANES undergoes system upgrades to prevent loss of functionality. Each year, USW-DSS Build 3 ashore systems at TUSWCHQ sites are updated to provide additional capability, bug fixes, and cybersecurity upgrades. For FY 2024 and beyond, all USW-DSS tech refreshes (for both afloat and ashore sites) will be to the Build 3 software baseline. This line includes the tech refresh of USW-DSS afloat systems that were previously fielded with the B2R3 baseline to the Build 3 baseline, as well as additional Build 3 upgrades for ashore systems.

[P40A / USW-DSS Engineering Changes (ECs)]: Item Number 3.3 - Consists of Engineering Change Proposals (ECPs) and hardware/software changes/upgrades. Funding will be used to support Reliability, Maintainability, and Availability (RM&A) modifications, correct deficiencies identified through Fleet use, and upgrade of unreliable components.

[P40A / USW-DSS System Technical Support]: Item Number 3.4 - Funding is for USW-DSS program Software Support Activity (SSA) efforts in performing the following functions: generation/assessment of Software Problem Reports (SPRs)/Software Trouble Reports (STRs); responding to Fleet software change requests; Configuration Management (CM); software Quality Assurance (QA); software installation automation; and software recovery support.

[P40A / USW-DSS Production Support]: Item Number 3.5 - Consists of on-site engineering support; Consolidated Afloat Network and Enterprise Services (CANES) Integrated Product Team (IPT) Support; Information Assurance (IA) certification support; production quality assurance; system sustainability support; Integrated Logistics Support (ILS) product updates/support; status reporting and technical briefings; program office support; and all other production support efforts directly related to delivery of USW-DSS to both the Integrated Shipboard Network System (ISNS) and CANES systems, and ultimately to the Fleet.

NOTE: The FY 2023 ($0.881M) to FY 2024 ($1.075M) increase ($+0.194M) reflects the requirement commencing in FY 2024 to provide additional USW-DSS production software licenses as necessary to support increasingly more complex software suites.

[P40A / USW-DSS CANES Software Shipsets]: Item Number 3.6 - Consists of initial loads of the latest USW-DSS Build 3 software suite on new Consolidated Afloat Network and Enterprise Services (CANES) equipped ships.

[P40A / USW-DSS Theater ASW (TASW) Build Out]: Item Number 3.7 - Reflects the additional requirement, commencing in FY 2024, to update previously fielded USW-DSS Build 3 equipped afloat systems to remain interoperable with the latest Consolidated Afloat Network and Enterprise Services (CANES) and AN/SQQ-89A(V)15 Surface Anti-Submarine Warfare (ASW) Combat System production baselines. The USW-DSS Build 3 system is more complex and incorporates additional tactical data links than the legacy Build 2 Revision 3 (B2R3) baseline. Build 3 data is shared at the general services Secret and Top Secret level, creating additional complexity. This expanded list of tactical data allows for better communication and expanded data fusion for ship-to-ship, ship-to-shore, shore-to-shore, and shore-to-aircraft information sharing. These added tactical data links require additional effort to establish and validate during system delivery, and this TASW Build Out effort encompasses this both for ship upgrades and for new ship installations to Build 3.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 2: Ship Sonars	**P-1 Line Item Number / Title:** 2176 / Undersea Warfare Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0603512N, 0604518N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Undersea Warfare Support Equipment	P-5a			- / 129.778	- / 13.965	- / 17.424	- / 23.452	- / -	- / 23.452
P-40	**Total Gross/Weapon System Cost**				**- / 129.778**	**- / 13.965**	**- / 17.424**	**- / 23.452**	**- / 0.000**	**- / 23.452**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY 2023 TO FY 2024 INCREASE:
- FY 2023 ($17.424M) to FY 2024 ($23.452M) increase ($+6.028M) is driven by the following two (2) factors:

1) A new requirement commencing in FY 2024 for the CV-TSC backfit program to perform a technology refresh of obsolete Technical Insertion-12 (TI-12) Common Processing System (CPS) and Interface Processing System (IPS) equipment on three (3) CVNs and six (6) shore site training systems.

2) The requirement to procure two (2) additional SDRWs in FY 2024 (for a total of three) to increase the inventory of near-term emergency replacement systems to offset current casualty rates (due to corrosion, fatigue, and impact damage) and mitigate operational risk if casualty rates were to continue to be above historical averages. Keeping a ready inventory of replacement SDRW assets is necessary for the Anti-Submarine Warfare (ASW) mission, as the SDRW significantly improves the surface ship sonar performance by reducing flow-induced self-noise and by providing increased source level receiving and sensitivity resulting from reduced attenuation.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2176 / Undersea Warfare Support Equipment	**Aggregated Items Title:** Undersea Warfare Support Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) VM301 - AIRCRAFT CARRIER TACTICAL SUPPORT CENTER (CV-TSC)																				
1.1) CV-TSC Technology Insert/ Refresh & ECP Implementation (1)	A		-	-	11.996	-	-	0.348	-	-	0.355	-	-	4.263	-	-	-	-	-	4.263
1.2) CV-TSC Minotaur Multi-Sensor Fused Track Build Out	A		-	-	-	-	-	2.295	-	-	1.981	-	-	-	-	-	-	-	-	-
Subtotal: 1) VM301 - AIRCRAFT CARRIER TACTICAL SUPPORT CENTER (CV-TSC)			**-**	**-**	***11.996***	**-**	**-**	***2.643***	**-**	**-**	***2.336***	**-**	**-**	***4.263***	**-**	**-**	**-**	**-**	**-**	***4.263***
2) VM401 - SONAR DOME RUBBER WINDOWS (SDRWs)																				
2.1) SDRW Procurement(†)	A		2,688K	16	43.003	2,402K	1	2.402	2,450K	1	2.450	2,165K	3	6.495	-	-	-	2,165K	3	6.495
2.2) SDRW Production Support			-	-	12.425	-	-	0.252	-	-	0.422	-	-	0.430	-	-	-	-	-	0.430
Subtotal: 2) VM401 - SONAR DOME RUBBER WINDOWS (SDRWs)			**-**	**-**	***55.428***	**-**	**-**	***2.654***	**-**	**-**	***2.872***	**-**	**-**	***6.925***	**-**	**-**	**-**	**-**	**-**	***6.925***
3) VM601 - UNDERSEA WARFARE DECISION SUPPORT SYSTEM (USW-DSS)																				
3.1) USW-DSS Shore Sites and Tactical Trainers(†)	A		970,714.29	7	6.795	670,588.00	4	2.682	684,000.00	9	6.156	697,680.00	5	3.488	-	-	-	697,680.00	5	3.488
3.2) USW-DSS Tech Refresh(†)	A		194,297.87	47	9.132	131,580.00	16	2.105	134,212.00	14	1.879	136,896.00	24	3.286	-	-	-	136,896.00	24	3.286
3.3) USW-DSS Engineering Changes (ECs)			-	-	10.270	-	-	1.132	-	-	1.179	-	-	1.203	-	-	-	-	-	1.203
3.4) USW-DSS System Technical Support			-	-	14.125	-	-	1.400	-	-	1.428	-	-	1.457	-	-	-	-	-	1.457
3.5) USW-DSS Production Support (2)			-	-	13.913	-	-	0.864	-	-	0.881	-	-	1.075	-	-	-	-	-	1.075
3.6) USW-DSS CANES Software Shipsets(†)	A		88,804.88	82	7.282	97,000.00	5	0.485	98,940.00	7	0.693	100,919.00	3	0.303	-	-	-	100,919.00	3	0.303
3.7) USW-DSS Theater ASW (TASW) Build Out (3)(†)	A		-	-	0.837	-	-	-	-	-	-	103,718.00	14	1.452	-	-	-	103,718.00	14	1.452
Subtotal: 3) VM601 - UNDERSEA WARFARE DECISION SUPPORT SYSTEM (USW-DSS)			**-**	**-**	***62.354***	**-**	**-**	***8.668***	**-**	**-**	***12.216***	**-**	**-**	***12.264***	**-**	**-**	**-**	**-**	**-**	***12.264***
Total			**-**	**-**	**129.778**	**-**	**-**	**13.965**	**-**	**-**	**17.424**	**-**	**-**	**23.452**	**-**	**-**	**-**	**-**	**-**	**23.452**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2176 / Undersea Warfare Support Equipment	**Aggregated Items Title:** Undersea Warfare Support Equipment

Footnotes:

(1) Item Number 1.1 - CV-TSC Technology Insert/Refresh & ECP Implementation: FY 2023 ($0.355M) to FY 2024 ($4.263M) increase ($+3.908M) represents the additional funding required commencing in FY 2024 to perform a technology refresh of obsolete Technical Insertion-12 (TI-12) Common Processing System (CPS) and Interface Processing System (IPS) equipment on three (3) CVNs and six (6) shore site training systems. Specifically, TI-12 CPS IBM blade center technology was sold to China and is no longer supportable (obsolete), thereby requiring the integration of the next generation CPS. The TI-12 IPS equipment has also encountered end of life issues and must be requalified because of obsolete network components and accumulated shock deficiency corrective action requirements. This CV-TSC technology refresh effort provides the Fleet with updated equipment that will: ensure the continued operation of the CV-TSC (the primary ASW and SUW element of the Aircraft Carrier Integrated Combat System and the primary shipboard support system for multi-mission aircraft conducting ASW/SUW missions supporting the CSG), improve overall CV-TSC Operational Availability (Ao), and allow CV-TSC to be able to support the Integrated Broadcast System (IBS), required to enable enterprise Automated Identification System (AIS) track and future fused National Technical Mean (NTM) surface track updates outside the CVN surveillance area.

(2) Item Number 3.5 - USW-DSS Production Support: The FY 2023 ($0.881M) to FY 2024 ($1.075M) increase ($+0.194M) reflects the requirement commencing in FY 2024 to provide additional USW-DSS production software licenses as necessary to support increasingly more complex software suites.

(3) Item Number 3.7 - USW-DSS Theater ASW (TASW) Build Out: Reflects the additional requirement, commencing in FY 2024, to update previously fielded USW-DSS Build 3 equipped afloat systems to remain interoperable with the latest Consolidated Afloat Network and Enterprise Services (CANES) and AN/SQQ-89A(V)15 Surface Anti-Submarine Warfare (ASW) Combat System production baselines. The USW-DSS Build 3 system is more complex and incorporates additional tactical data links than the legacy Build 2 Revision 3 (B2R3) baseline. Build 3 data is shared at the general services Secret and Top Secret level, creating additional complexity. This expanded list of tactical data allows for better communication and expanded data fusion for ship-to-ship, ship-to-shore, shore-to-shore, and shore-to-aircraft information sharing. These added tactical data links require additional effort to establish and validate during system delivery, and this TASW Build Out effort encompasses this both for ship upgrades and for new ship installations to Build 3.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	P-1 Line Item Number / Title: 2176 / Undersea Warfare Support Equipment	Aggregated Items: Undersea Warfare Support Equipment

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) VM401 - SONAR DOME RUBBER WINDOWS (SDRWs)												
2.1) SDRW Procurement		2019	Collins Aerospace Systems (formerly Goodrich) / Jacksonville, FL	SS / FP	NAVSEA	Jun 2019	Jun 2021	1	2,264K	Y		
2.1) SDRW Procurement		2020	Collins Aerospace Systems (formerly Goodrich) / Jacksonville, FL	SS / FP	NAVSEA	Mar 2020	Mar 2022	1	2,309K	Y		
2.1) SDRW Procurement		2021	Collins Aerospace Systems (formerly Goodrich) / Jacksonville, FL	SS / FP	NAVSEA	May 2021	May 2023	1	2,355K	Y		
2.1) SDRW Procurement		2022	Collins Aerospace Systems (formerly Goodrich) / Jacksonville, FL	SS / FP	NAVSEA	Jun 2022	Jun 2024	1	2,402K	Y		
2.1) SDRW Procurement		2023	Collins Aerospace Systems (formerly Goodrich) / Jacksonville, FL	SS / FP	NAVSEA	Apr 2023	Apr 2025	1	2,450K	Y		
2.1) SDRW Procurement		2024	Collins Aerospace Systems (formerly Goodrich) / Jacksonville, FL	SS / FP	NAVSEA	Mar 2024	Mar 2026	3	2,165K	Y		
3) VM601 - UNDERSEA WARFARE DECISION SUPPORT SYSTEM (USW-DSS)												
3.1) USW-DSS Shore Sites and Tactical Trainers		2022	Progeny Systems, Corporation / Manassas, VA	C / CPFF	NAVSEA	Nov 2021	Apr 2022	4	670,588.00	Y		
3.1) USW-DSS Shore Sites and Tactical Trainers		2023	Progeny Systems, Corporation / Manassas, VA	C / CPFF	NAVSEA	Nov 2022	Apr 2023	9	684,000.00	Y		
3.1) USW-DSS Shore Sites and Tactical Trainers		2024	Progeny Systems, Corporation / Manassas, VA	C / CPFF	NAVSEA	Nov 2023	Apr 2024	5	697,680.00	Y		
3.2) USW-DSS Tech Refresh		2020	Progeny Systems, Corporation / Manassas, VA	C / CPFF	NAVSEA	Nov 2019	Apr 2020	15	126,000.00	Y		
3.2) USW-DSS Tech Refresh		2021	Progeny Systems, Corporation / Manassas, VA	C / CPFF	NAVSEA	Feb 2021	Jul 2021	15	129,000.00	Y		
3.2) USW-DSS Tech Refresh		2022	Progeny Systems, Corporation / Manassas, VA	C / CPFF	NAVSEA	Nov 2021	Apr 2022	16	131,580.00	Y		
3.2) USW-DSS Tech Refresh		2023	Progeny Systems, Corporation / Manassas, VA	C / CPFF	NAVSEA	Nov 2022	Apr 2023	14	134,212.00	Y		
3.2) USW-DSS Tech Refresh		2024	Progeny Systems, Corporation / Manassas, VA	C / CPFF	NAVSEA	Nov 2023	Apr 2024	24	136,896.00	Y		
3.6) USW-DSS CANES Software Shipsets		2020	NUWC/Keyport / Keyport, WA	WR	NAVSEA	Nov 2019	Feb 2020	9	93,000.00	Y		
3.6) USW-DSS CANES Software Shipsets		2021	NUWC/Keyport / Keyport, WA	WR	NAVSEA	Nov 2020	Feb 2021	4	95,000.00	Y		
3.6) USW-DSS CANES Software Shipsets		2022	NUWC/Keyport / Keyport, WA	WR	NAVSEA	Oct 2021	Jan 2022	5	97,000.00	Y		
3.6) USW-DSS CANES Software Shipsets		2023	NUWC/Keyport / Keyport, WA	WR	NAVSEA	Oct 2022	Jan 2023	7	98,940.00	Y		
3.6) USW-DSS CANES Software Shipsets		2024	NUWC/Keyport / Keyport, WA	WR	NAVSEA	Nov 2023	Feb 2024	3	100,919.00	Y		

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 2	**P-1 Line Item Number / Title:** 2176 / Undersea Warfare Support Equipment	**Aggregated Items:** Undersea Warfare Support Equipment

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty *(Each)*	Unit Cost *($)*	Specs Avail Now?	Date Revision Available	RFP Issue Date
3.7) USW-DSS Theater ASW (TASW) Build Out (3)		2024	NUWC/Keyport / Keyport, WA	WR	NAVSEA	Nov 2023	Apr 2024	14	103,718.00	Y		

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	211.952	24.578	31.708	46.726	0.000	46.726	46.283	38.944	37.451	34.548	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	211.952	24.578	31.708	46.726	0.000	46.726	46.283	38.944	37.451	34.548	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**211.952**	**24.578**	**31.708**	**46.726**	**0.000**	**46.726**	**46.283**	**38.944**	**37.451**	**34.548**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.636	0.672	1.096	-	1.096	0.774	0.763	0.648	0.446	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Submarine Acoustic Warfare System (SAWS) program provides submarines with expendable defensive countermeasures and the systems necessary to externally launch against torpedo and acoustic sensor threats. This program provides ongoing production of countermeasure devices needed to sustain fleet inventories, improvements to enhance the readiness and effectiveness of countermeasure devices and associated External Countermeasure Launcher (ECL) systems on all U.S. submarines. Acoustic Device Countermeasures (ADC) are expendable devices produced in two primary versions. The Internal Countermeasure Launcher (ICL) launches the 3" ADC's and ECL Systems launch the 6" devices.

WM014 - Acoustic Device Countermeasure 6" procures MK3 (torpedo) and MK4 (SONAR) countermeasures for ship protection. The effort has been broken out to clearly identify the unit costs of the devices and the system engineering, which covers the associated support costs at the TDA and ISEA.

WM015 - ADC 3" procures MK2 countermeasures for submarine protection. This effort has been broken out to clearly identify the unit costs of the devices as well as the system engineering services. Beginning in FY 2023, funding will be used to transition a SBIR for 3" SONAR Countermeasure. This effort will focus on eliminating the need for a 6" diameter SONAR countermeasure, which will free up payload space in the external countermeasure launcher to support future payload integration (e.g., CRAW).

WM018 - The Acoustic Augmentation Support Program (AASP) provides acoustic augmentation systems in appropriate configurations for all submarine classes (except SEAWOLF). The equipment is installed as temporary equipment Temporary Alteration (TEMPALT) until SHIPALTs can be permanently installed to reduce sustainment costs and provide a long term solution. A combination of new procurement systems (10) and refurbished systems (8) are required to complete VIRGINIA Blocks I-III (18) installations. A revision to extend the SHIPALT to VIRGINIA Blocks IV completed in FY19 and installs will start in FY24. Development of a revision to extend the SHIPALT to VIRGINIA Block V started in FY21 and will be completed in FY23. Installations are projected to start in FY26. Reliability and refurbishment upgrades provide current in-service AASP systems with new components and software updates to maintain reliability. AASP new procurements are required a year prior installation and refurbished systems the same year as installation. AASP and Acoustics Rapid COTS Insertion (ARCI) integration efforts started in FY21 in support of TI-20 Submarine Warfare Federated Tactical System (SWFTS) upgrades. Funding was added in FY23 to accelerate AASP ARCI TI-20 VIRGINIA SHIPALT installations.

WM019 - The Countermeasure Set, Acoustic (CSA) program procures and supports the inboard electronic system necessary for preparing and launching 6" ADCs from all 688i and newer U.S. submarines. This inboard system consists of the Torpedo Defense Controller (TDC), Launch Control Panels (LCPs), and associated cabling, in a class-by-class configuration. The CSA program provides obsolescence support for legacy systems and modernization to divest legacy systems improving force readiness. Five efforts are supported: (1) The "CSA SWFTS Integration" effort is maintaining the integration of the CSA system with the SWFTS System of Systems (SoS). Implementation of a phased approach allowed incremental implementation of capabilities. Required funding addresses recurring upgrades within the SWFTS Technology

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Insertion (TI)/Advanced Processor Build (APB) cycles to maintain compatibility with networked tactical systems and continue to reduce cybersecurity risks. (2) The ongoing "CSA MK4 Technology Insertion" effort replaces the CSA MK2 MOD2 with a SubTDS-capable, SWFTS-integrated CSA MK4 system on VIRGINIA Class Block I and II submarines (10 hulls). (3) The "CSA SEAWOLF SWFTS Integration" effort replaces the CSA MK2 MOD5 system on SEAWOLF Class submarines (3 hulls) with a SubTDS-capable, SWFTS-integrated CSA system. The non-recurring engineering effort (to develop the SHIPALT drawings that address mounting and cable changes and the software development effort in support of the MK 5 system going on the SEAWOLF) begins in FY21 with fielding beginning in FY23 as part of the SWFTS TI-22 baseline. (4) The "CSA SWFTS Virtualization" effort supports the development and integration of the CSA system with the AN/BYG-1 Combat Control System on VIRGINIA and COLUMBIA new construction hulls. (5) The fifth effort is the ongoing support for engineering issues across all CSA systems as they arise.

WM025 - Compact Rapid Attack Weapon (CRAW) is a very light weight 6 and 3/4 inch diameter torpedo that is integrated with the submarine combat system (BYG-1) and external countermeasure launcher (ECL). The CRAW delivers a multi-mission capable weapon for hard-kill countermeasure and anti-submarine torpedo. In order to integrate the CRAW onto a submarine, an integration kit is required to modify existing ECL components, combat system hardware, and internal submarine wiring.

[P40A / WM014 6 INCH]: WM014 6 INCH - The 6" Countermeasures program procures, reworks, and refreshes ADC MK3 (torpedo countermeasure) devices, ADC MK4 (SONAR countermeasure) devices, and associated launch tubes in order to maintain submarine fleet countermeasure device inventory levels in accordance with the Naval Munition Requirements Process (NMRP). The 6" Countermeasure program tracks and implements device improvements through configuration control and an Engineering Change Proposal (ECP) process.

[P40A / WM015 3 INCH]: WM015 3 INCH - The 3" Countermeasures program procures ADC MK2 MOD 7 countermeasure devices in order to maintain submarine fleet inventory levels in accordance with the NMRP. The 3" Countermeasures program tracks and implements device improvements through configuration control and the ECP process.

[P40A / WM022 GAS GENERATOR MK77]: WM022 Gas Generator MK 77 - The MK77 Gas Generator (GG) program provides the energetic device used as the impulse mechanism for launching 6 inch Acoustic Device Countermeasures (ADC MK3 and ADC MK4) on VIRGINIA, OHIO, LOS ANGELES Improved and SEAWOLF classes. MK77 GG Mod 0 rework is the complete disassembly and refurbishment of a GG that has been deployed and then reassembled into A Condition status with replacement of the inert hardware. MK77 GG Mod 1 is the new procurement unit design to replace the obsolete propellant formulation of the MOD 0 while retaining the same fit and function.

[P40A / WM830 PRODUCTION ENGINEERING]: WM830 - Production Engineering - The Production Engineering line provides production engineering services for SAWS Technical Design Agent (TDA) and In-Service Engineering Agent (ISEA) across all SAWS systems, including AASP. Also provides specification preparation and validation, government prepared production acceptance procedures, production planning, integrated logistics support, planning coordination of government furnished information and government furnished equipment, and contract administration including contract deliverable monitoring and prime contractor monitoring of cost/ schedule performance.

[P40A / PRODUCTION ENGINEERING]: Production Engineering adjustment commensurate with anticipated work to support the ordnance assessment required to extend the service life.

[P40A / WM900 CONSULTING SERVICES]: WM900 Consulting Services - The Consulting Services line procures contractor support services for all SAWS programs including program, financial, acquisition, contract administration and engineering management support.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	Submarine Acoustic Warfare System	P-5a, P-21			- / 120.880	- / 13.930	- / 14.522	- / 20.220	- / -	- / 20.220
P-3a	1 / AASP WM018 (SHIPALT)				- / 22.410	- / 5.420	- / 8.217	- / 9.701	- / 0.000	- / 9.701
P-3a	2 / CSA WM019 (SHIPALT, OCMOD, EC)				- / 68.662	- / 5.228	- / 7.178	- / 8.386	- / 0.000	- / 8.386
P-3a	3 / CRAW WM025 (Integration Kit)				- / 0.000	- / 0.000	- / 1.791	- / 8.419	- / 0.000	- / 8.419
P-40	**Total Gross/Weapon System Cost**				**- / 211.952**	**- / 24.578**	**- / 31.708**	**- / 46.726**	**- / 0.000**	**- / 46.726**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	Submarine Acoustic Warfare System	P-5a, P-21			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / AASP WM018 (SHIPALT)				- / 11.210	- / 7.269	- / 7.097	- / 7.174	- / 7.731	- / 86.229
P-3a	2 / CSA WM019 (SHIPALT, OCMOD, EC)				- / 5.066	- / 6.379	- / 4.690	- / 5.507	Continuing	Continuing
P-3a	3 / CRAW WM025 (Integration Kit)				- / 9.896	- / 5.985	- / 6.100	- / 6.222	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 46.283**	**- / 38.944**	**- / 37.451**	**- / 34.548**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY 2024 funding supports procurement of 4 Augmentation Support Program (AASP) system procurements, 1 AASP system refurbishment, and 4 AASP system installations; procurement, installation and technology insertions for the Countermeasure Set, Acoustic (CSA) systems on all submarines during their availabilities, and procurement of launch tube assemblies, installation kits, and Revolver MP kits in support of Compact Rapid Attack Weapon (CRAW).

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	P-1 Line Item Number / Title: 2210 / Submarine Acoustic Warfare System	Aggregated Items Title: Submarine Acoustic Warfare System

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) WM014 6 INCH																				
1.1) 6" Countermeasure Launch Tube (1)	A		-	-	9.181	-	-	0.459	-	-	-	7,104.76	105	0.746	-	-	-	7,104.76	105	0.746
1.2) ADC MK3 (TORPEDO) NEW (2)(†)	A		36,909.09	803	29.638	42,075.00	120	5.049	54,731.96	97	5.309	55,828.57	70	3.908	-	-	-	55,828.57	70	3.908
1.3) ADC MK3 NON RECURRING	A		-	-	7.787	-	-	-	-	-	-	-	-	5.000	-	-	-	-	-	5.000
1.4) MK 3 ADC SLEP(†)	A		50,817.07	82	4.167	10,675.00	80	0.854	-	-	-	-	-	-	-	-	-	-	-	-
1.5) ADC MK4 (SONAR) NEW(†)	A		72,967.74	62	4.524	-	-	-	70,000.00	25	1.750	71,400.00	25	1.785	-	-	-	71,400.00	25	1.785
1.6) MK 4 ADC SLEP	A		15,275.86	29	0.443	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.7) Systems Engineering (3)	A		-	-	-	-	-	1.947	-	-	1.180	-	-	0.695	-	-	-	-	-	0.695
Subtotal: 1) WM014 6 INCH			**-**	**-**	***55.740***	**-**	**-**	***8.309***	**-**	**-**	***8.239***	**-**	**-**	***12.134***	**-**	**-**	**-**	**-**	**-**	***12.134***
2) WM015 3 INCH																				
2.1) ADC MK2 (4)(†)	A		6,190.91	2,881	17.836	8,492.25	258	2.191	8,197.01	401	3.287	9,458.46	325	3.074	-	-	-	9,458.46	325	3.074
2.3) Systems Engineering (5)	A		-	-	-	-	-	0.785	-	-	0.133	-	-	0.780	-	-	-	-	-	0.780
2.4) ADC MK2 NON RECURRING (6)	A		-	-	-	-	-	-	-	-	0.700	-	-	0.700	-	-	-	-	-	0.700
2.5) ADC MK5 NON RECURRING (7)	A		-	-	-	-	-	-	-	-	0.150	-	-	0.200	-	-	-	-	-	0.200
Subtotal: 2) WM015 3 INCH			**-**	**-**	***17.836***	**-**	**-**	***2.976***	**-**	**-**	***4.270***	**-**	**-**	***4.754***	**-**	**-**	**-**	**-**	**-**	***4.754***
3) WM022 GAS GENERATOR MK77																				
3.1) GAS GENERATOR MK77 MOD 1 NEW PRODUCTION (8)(†)	A		12,377.73	1,554	19.235	26,563.46	50	1.328	33,784.62	25	0.845	24,907.69	65	1.619	-	-	-	24,907.69	65	1.619
3.2) GAS GENERATOR MK77 MOD 0 REWORK (9)	A		9,495.58	791	7.511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3) GAS GENERATOR MK77 REWORK (10)(†)	A		-	-	-	-	-	-	-	-	-	15,433.33	30	0.463	-	-	-	15,433.33	30	0.463
3.4) SYSTEMS ENGINEERING (11)	A		-	-	1.261	-	-	0.403	-	-	0.484	-	-	0.484	-	-	-	-	-	0.484
Subtotal: 3) WM022 GAS GENERATOR MK77			**-**	**-**	***28.007***	**-**	**-**	***1.731***	**-**	**-**	***1.329***	**-**	**-**	***2.566***	**-**	**-**	**-**	**-**	**-**	***2.566***

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Aggregated Items Title:** Submarine Acoustic Warfare System

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
4) WM830 PRODUCTION ENGINEERING																				
4.1) PRODUCTION ENGINEERING	A		-	-	14.612	-	-	0.411	-	-	0.148	-	-	0.223	-	-	-	-	-	0.223
Subtotal: 4) WM830 PRODUCTION ENGINEERING			**-**	**-**	***14.612***	**-**	**-**	***0.411***	**-**	**-**	***0.148***	**-**	**-**	***0.223***	**-**	**-**	**-**	**-**	**-**	***0.223***
5) WM900 CONSULTING SERVICES																				
5.1) CONSULTING SERVICES	A		-	-	4.685	-	-	0.503	-	-	0.536	-	-	0.543	-	-	-	-	-	0.543
Subtotal: 5) WM900 CONSULTING SERVICES			**-**	**-**	***4.685***	**-**	**-**	***0.503***	**-**	**-**	***0.536***	**-**	**-**	***0.543***	**-**	**-**	**-**	**-**	**-**	***0.543***
Total			**-**	**-**	**120.880**	**-**	**-**	**13.930**	**-**	**-**	**14.522**	**-**	**-**	**20.220**	**-**	**-**	**-**	**-**	**-**	**20.220**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) Cost of Launch Tubes include rework and new Launch Tubes.

(2) MK3 increased from 115 to 120, MK 3 SLEP qtys to 80, and no MK 4 qtys in FY 2022. Quantity increases for new and SLEP MK3 units are to mitigate the MK3 inventory shortages. Realignment was required to address MK 3 and MK4 inventory shortages. This impacts unit costs and also includes Government support (ISEA, TDA), Launch Tubes (salvage), containers (CNU 488), Silver, anodes, and contract service fees.

(3) Systems engineering cost previously included in ADC MK2, MK3, and MK4 unit price cost starting in FY24. The FY23 Systems engineering is to conduct the contract proposal evaluation for the FY24 MK3/4 contract award.

(4) ADC unit prices were adjusted per actual contractor pricing starting in FY24 and beyond.

(5) Systems engineering cost previously included in ADC MK2, MK3, and MK4 unit price cost.

(6) NRE in support of ADC MK2 to include reduction of form factor to 3 inch SONAR Countermeasure starting in FY24.

(7) NRE in support of ADC MK5 Full Rate Production Contract Acquisition Planning starting in FY23 to support contract award in FY27.

(8) Cost of MK77 MOD 1 GG new production, reflects the unit cost for MK77 MOD 1 GGs procured as wholly new units. Unit cost increased from prior years due to updated inventory, lot sizes, and MK77 Mod 1 SLEP.

(9) Cost of MK77 Gas Generators (GGs) MOD 0 rework reflects the unit cost for reworked units, not wholly new units.

(10) MK77 MOD 1 units will start to be available for rework in FY24. A combination of MK77 MOD 0 and MK77 MOD 1 will be reworked after FY24.

(11) Systems engineering cost previously included in the MK77 MOD 0 rework and MK77 MOD 1 new production unit costs.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	P-1 Line Item Number / Title: 2210 / Submarine Acoustic Warfare System	Aggregated Items: Submarine Acoustic Warfare System

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) WM014 6 INCH												
1.2) ADC MK3 (TORPEDO) NEW (2)(†)		2021	ULTRA / BRAINTREE, MA	C / FFP	NUWC/KEYPORT	Jun 2021	Jun 2022	94	70,212.77	Y		
1.2) ADC MK3 (TORPEDO) NEW (2)(†)		2022	ULTRA / BRAINTREE, MA	C / FFP	NUWC/KEYPORT	Oct 2021	Oct 2022	120	42,075.00	Y		
1.2) ADC MK3 (TORPEDO) NEW (2)(†)		2023	ULTRA / BRAINTREE, MA	C / FFP	NUWC/KEYPORT	Oct 2022	Oct 2023	97	54,731.96	Y		
1.2) ADC MK3 (TORPEDO) NEW (2)		2024	ULTRA / BRAINTREE, MA	C / TBD	WASH NAVY YARD	Oct 2023	Oct 2024	70	55,828.57	Y		
1.4) MK 3 ADC SLEP(†)		2021	ULTRA / BRAINTREE, MA	C / FFP	NUWC/KEYPORT	Oct 2020	Nov 2021	41	15,829.27	Y		
1.4) MK 3 ADC SLEP(†)		2022	FRC -SW / San Diego, CA	C / FFP	NUWC/KEYPORT	Oct 2021	Nov 2022	80	10,675.00	N		
1.5) ADC MK4 (SONAR) NEW(†)		2020	ULTRA / BRAINTREE, MA	C / FFP	NUWC/KEYPORT	Jun 2020	Aug 2021	25	66,000.00	Y		
1.5) ADC MK4 (SONAR) NEW(†)		2021	ULTRA_ / BRAINTREE, MA	C / FFP	NUWC/KEYPORT	Jun 2021	Apr 2023	37	77,675.68	Y		
1.5) ADC MK4 (SONAR) NEW(†)		2023	ULTRA / BRAINTREE, MA	C / FFP	NUWC/KEYPORT	Jun 2023	May 2024	25	70,000.00	Y		
2) WM015 3 INCH												
2.1) ADC MK2 (4)(†)		2022	ULTRA / BRAINTREE, MA	C / IDIQ	NUWC/KEYPORT	Jul 2022	Apr 2023	258	8,492.25	Y		
2.1) ADC MK2 (4)(†)		2023	ULTRA / BRAINTREE, MA	C / IDIQ	NUWC/KEYPORT	May 2023	Feb 2025	401	8,197.01	Y		
2.1) ADC MK2 (4)(†)		2024	ULTRA / BRAINTREE, MA	C / IDIQ	NUWC/KEYPORT	May 2024	Feb 2026	325	9,458.46	Y		
3) WM022 GAS GENERATOR MK77												
3.1) GAS GENERATOR MK77 MOD 1 NEW PRODUCTION (8)		2022	NSWC/INDIAN HEAD / NSWC INDIAN HEAD	WR	NSWC INDIAN HEAD	Oct 2021	Jul 2022	50	26,563.46	Y		
3.1) GAS GENERATOR MK77 MOD 1 NEW PRODUCTION (8)		2023	NSWC/INDIAN HEAD / NSWC INDIAN HEAD	WR	NSWC INDIAN HEAD	Oct 2022	Jul 2023	25	33,784.62	Y		
3.3) GAS GENERATOR MK77 REWORK (10)		2024	NSWC/INDIAN HEAD / NSWC INDIAN HEAD	WR	NSWC INDIAN HEAD	Oct 2023	Jul 2024	30	15,433.33	N	May 2024	

(†) indicates the presence of a P-21

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Aggregated Items:** Submarine Acoustic Warfare System

Items (Units in Each)							Fiscal Year 2020												Fiscal Year 2021												BALANCE
							Calendar Year 2020												Calendar Year 2021												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1) WM014 6 INCH																															
1.2) ADC MK3 (TORPEDO) NEW [2]																															
Prior Years Deliveries: 709																															
	1	2021	NAVY	94	0	94																					A -	-	-	-	94
	1	2022	NAVY	120	0	120																									120
	1	2023	NAVY	97	0	97																									97
1.4) MK 3 ADC SLEP																															
Prior Years Deliveries: 41																															
	3	2021	NAVY	41	0	41													A -	-	-	-	-	-	-	-	-	-	-	-	41
	2	2022	NAVY	80	0	80																									80
1.5) ADC MK4 (SONAR) NEW																															
	4	2020	NAVY	25	0	25									A -	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	19
	5	2021	NAVY	37	0	37																					A -	-	-	-	37
	4	2023	NAVY	25	0	25																									25
2) WM015 3 INCH																															
2.1) ADC MK2 [4]																															
Prior Years Deliveries: 2881																															
	6	2022	NAVY	258	0	258																									258
	6	2023	NAVY	401	0	401																									401
	6	2024	NAVY	325	0	325																									325
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy | **Date:** March 2023

Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3

P-1 Line Item Number / Title: 2210 / Submarine Acoustic Warfare System

Aggregated Items: Submarine Acoustic Warfare System

Items (Units in Each)							Fiscal Year 2022												Fiscal Year 2023												BALANCE
							Calendar Year 2022												Calendar Year 2023												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1) WM014 6 INCH																															
1.2) ADC MK3 (TORPEDO) NEW [2]																															
Prior Years Deliveries: 709																															
	1	2021	NAVY	94	0	94	-	-	-	-	-	-	-	-	8	8	8	8	8	8	8	8	8	8	7	7					0
	1	2022	NAVY	120	0	120	A -	-	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10	10	10	10	10	10	10	10	0
	1	2023	NAVY	97	0	97													A -	-	-	-	-	-	-	-	-	-	-	-	97
1.4) MK 3 ADC SLEP																															
Prior Years Deliveries: 41																															
	3	2021	NAVY	41	0	41	-	7	-	-	-	-	-	-	-	-	-	20	14												0
	2	2022	NAVY	80	0	80	A -	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10	10	10	10				0
1.5) ADC MK4 (SONAR) NEW																															
	4	2020	NAVY	25	6	19	3	3	3	3	3	4																			0
	5	2021	NAVY	37	0	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	17					0
	4	2023	NAVY	25	0	25																					A -	-	-	-	25
2) WM015 3 INCH																															
2.1) ADC MK2 [4]																															
Prior Years Deliveries: 2881																															
	6	2022	NAVY	258	0	258										A -	-	-	-	-	-	-	-	-	48	42	42	42	42	42	0
	6	2023	NAVY	401	0	401																				A -	-	-	-	-	401
	6	2024	NAVY	325	0	325																									325
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Aggregated Items:** Submarine Acoustic Warfare System

Items (Units in Each)							Fiscal Year 2024												Fiscal Year 2025												BALANCE
							Calendar Year 2024												Calendar Year 2025												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1) WM014 6 INCH																															
1.2) ADC MK3 (TORPEDO) NEW [2]																															
Prior Years Deliveries: 709																															
	1	2021	NAVY	94	94	0																									0
	1	2022	NAVY	120	120	0																									0
	1	2023	NAVY	97	0	97	9	8	8	8	8	8	8	8	8	8	8	8													0
1.4) MK 3 ADC SLEP																															
Prior Years Deliveries: 41																															
	3	2021	NAVY	41	41	0																									0
	2	2022	NAVY	80	80	0																									0
1.5) ADC MK4 (SONAR) NEW																															
	4	2020	NAVY	25	25	0																									0
	5	2021	NAVY	37	37	0																									0
	4	2023	NAVY	25	0	25	-	-	-	-	-	-	-	3	3	3	3	3	3	3	3	1									0
2) WM015 3 INCH																															
2.1) ADC MK2 [4]																															
Prior Years Deliveries: 2881																															
	6	2022	NAVY	258	258	0																									0
	6	2023	NAVY	401	0	401	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	33	33	33	33	33	33	33	137
	6	2024	NAVY	325	0	325								A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	325
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	P-1 Line Item Number / Title: 2210 / Submarine Acoustic Warfare System	Aggregated Items: Submarine Acoustic Warfare System

Items (Units in Each)							Fiscal Year 2026												Fiscal Year 2027												BALANCE
										Calendar Year 2026												Calendar Year 2027									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2025	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1) WM014 6 INCH																															
1.2) ADC MK3 (TORPEDO) NEW [2]																															
Prior Years Deliveries: 709																															
	1	2021	NAVY	94	94	0																									0
	1	2022	NAVY	120	120	0																									0
	1	2023	NAVY	97	97	0																									0
1.4) MK 3 ADC SLEP																															
Prior Years Deliveries: 41																															
	3	2021	NAVY	41	41	0																									0
	2	2022	NAVY	80	80	0																									0
1.5) ADC MK4 (SONAR) NEW																															
	4	2020	NAVY	25	25	0																									0
	5	2021	NAVY	37	37	0																									0
	4	2023	NAVY	25	25	0																									0
2) WM015 3 INCH																															
2.1) ADC MK2 [4]																															
Prior Years Deliveries: 2881																															
	6	2022	NAVY	258	258	0																									0
	6	2023	NAVY	401	264	137	33	33	33	38																					0
	6	2024	NAVY	325	0	325	-	-	-	-	55	54	54	54	54	54															0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Aggregated Items:** Submarine Acoustic Warfare System

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2024	1-8-5 For 2024	MAX For 2024	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	ULTRA - BRAINTREE, MA	192	288	576	0	0	0	0	7	2	12	14
2	FRC -SW - San Diego, CA			TBD	0	0	0	0	0	0	13	13
3	ULTRA - BRAINTREE, MA			TBD	0	0	13	13	0	0	13	13
4	ULTRA - BRAINTREE, MA	192	288	576	8	2	14	16	8	2	11	13
5	ULTRA_ - BRAINTREE, MA	192	288	576	8	2	14	16	8	2	22	24
6	ULTRA - BRAINTREE, MA	840	1,440	2,880	0	1	0	1	0	1	12	13

"A" in the Delivery Schedule indicates the Contract Award Date.
Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 1 / AASP WM018
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	22.410	5.420	8.217	9.701	0.000	9.701	11.210	7.269	7.097	7.174	7.731	86.229
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	22.410	5.420	8.217	9.701	0.000	9.701	11.210	7.269	7.097	7.174	7.731	86.229
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**22.410**	**5.420**	**8.217**	**9.701**	**0.000**	**9.701**	**11.210**	**7.269**	**7.097**	**7.174**	**7.731**	**86.229**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Acoustic Augmentation Support Program (AASP) provides acoustic augmentation systems in appropriate configurations for all submarine classes (except SEAWOLF) installed as temporary equipment Temporary Alteration (TEMPALT) until SHIPALTs can be permanently installed to reduce sustain cost and provide a long term solution. A permanent SHIPALT for VIRGINIA Class Block IV was completed in FY19 and installations will start in FY24, gradually phasing out the TEMPALTs on VIRGINIA Class. Development of a revision to extend the SHIPALT to VIRGINIA Block V started in FY21 and will be completed in FY23. Installations are projected to start in FY26. Reliability and refurbishment upgrades provide current in-service AASP systems with new components and software updates to maintain reliability. AASP new procurements are required a year prior installation and refurbished systems the same year as installation. AASP and Acoustics Rapid COTS Insertion (ARCI) integration efforts start in FY21 in support of TI20.

[WM018 AASP Support] Includes production support for BLK I-IV SHIPALTS and the AASP reliability and refurbishment upgrade.

[WM018 AASP (Acoustic Augmentation Support Program)] AASP includes costs of procuring new systems including HLF-1, for SHIPALTs 4678KP and 5039KP.

[WM018 AASP Reliability and Refurbishment Upgrade] Reliability and refurbishment upgrade to sustain in-service AASP systems.

[WM018 AASP (Acoustic Augmentation Support Program)] Non-recurring costs to produce AASP SHIPALT alteration packages.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 1 / AASP WM018
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/BQT-1	**Modification Type:** SHIPALT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AASP WM018												
B Kits												
Recurring												
1.1.1) WM018 AASP Support - Organic (12)	- / 1.963	- / 0.472	- / 0.482	- / 0.613	- / -	- / 0.613	- / 0.628	- / 0.637	- / 0.649	- / 0.663	- / 2.070	- / 8.177
1.1.2) WM018 AASP (Acoustic Augmentation Support Program) - NonOrganic (13)	7 / 6.971	3 / 2.570	3 / 2.966	4 / 4.034	- / -	4 / 4.034	4 / 4.135	2 / 2.100	2 / 2.142	3 / 3.277	- / -	28 / 28.195
1.1.3) WM018 AASP Reliability and Refurbishment Upgrade - NonOrganic	2 / 0.202	1 / 0.114	1 / 0.117	1 / 0.121	- / -	1 / 0.121	1 / 0.124	- / -	1 / 0.126	- / -	1 / 0.131	8 / 0.935
Subtotal: Recurring	*- / 9.136*	*- / 3.156*	*- / 3.565*	*- / 4.768*	*- / -*	*- / 4.768*	*- / 4.887*	*- / 2.737*	*- / 2.917*	*- / 3.940*	*- / 2.201*	*- / 37.307*
Non-Recurring												
1.2.1) WM018 AASP (Acoustic Augmentation Support Program) - Organic	- / 4.782	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.782
Subtotal: Non-Recurring	*- / 4.782*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 4.782*
Subtotal: AASP WM018	*9 / 13.918*	*4 / 3.156*	*4 / 3.565*	*5 / 4.768*	*- / -*	*5 / 4.768*	*5 / 4.887*	*2 / 2.737*	*3 / 2.917*	*3 / 3.940*	*1 / 2.201*	*36 / 42.089*
Subtotal: Procurement, All Modification Items	*- / 13.918*	*- / 3.156*	*- / 3.565*	*- / 4.768*	*- / -*	*- / 4.768*	*- / 4.887*	*- / 2.737*	*- / 2.917*	*- / 3.940*	*- / 2.201*	*- / 42.089*
Installation												
Modification Item 1 of 1: AASP WM018	- / 8.492	- / 2.264	- / 4.652	- / 4.933	- / 0.000	- / 4.933	- / 6.323	- / 4.532	- / 4.180	- / 3.234	- / 5.530	- / 44.140
Subtotal: Installation	*- / 8.492*	*- / 2.264*	*- / 4.652*	*- / 4.933*	*- / -*	*- / 4.933*	*- / 6.323*	*- / 4.532*	*- / 4.180*	*- / 3.234*	*- / 5.530*	*- / 44.140*
Total												
Total Cost (Procurement + Support + Installation)	**22.410**	**5.420**	**8.217**	**9.701**	**0.000**	**9.701**	**11.210**	**7.269**	**7.097**	**7.174**	**7.731**	**86.229**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 1 / AASP WM018
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: AASP WM018

Manufacturer Information

Manufacturer Name: Sparton DeLeon Springs, LLC	Manufacturer Location: DeLeon Springs, FL
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 10

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Feb 2023	Feb 2024	Feb 2025	Feb 2026	Feb 2027	Feb 2028
Delivery Dates		Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027	Nov 2028

Manufacturer Name: NUWC Newport	Manufacturer Location: Newport, RI
Administrative Leadtime *(in Months)*: 1	Production Leadtime *(in Months)*: 2

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Oct 2021	Oct 2022	Oct 2023	Oct 2024	Oct 2025	Oct 2026	Oct 2027
Delivery Dates	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028

Installation Information

Method of Implementation: AIT:: Installation Name: WM018 AASP (Acoustic Augmentation Support Program)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	6 / 6.151	1 / 1.132	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 7.283
FY 2022	- / -	- / -	3 / 3.489	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 3.489
FY 2023	- / -	- / -	- / -	3 / 3.700	0 / 0.000	3 / 3.700	- / -	- / -	- / -	- / -	0 / 0.000	3 / 3.700
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	4 / 5.058	- / -	- / -	- / -	0 / 0.000	4 / 5.058
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 4.532	- / -	- / -	0 / 0.000	4 / 4.532
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.826	- / -	0 / 0.000	2 / 2.826
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 3.234	0 / 0.000	2 / 3.234
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 4.000	3 / 4.000
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	6 / 6.151	1 / 1.132	3 / 3.489	3 / 3.700	0 / 0.000	3 / 3.700	4 / 5.058	4 / 4.532	2 / 2.826	2 / 3.234	3 / 4.000	28 / 34.122

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	6	-	1	-	-	3	-	-	-	2	1	-	-	4	-	-	-	1	-	2	1	2	-	-	-	2	-	-	-	3	28
Out	6	-	-	-	1	-	-	-	3	-	-	-	3	-	-	-	4	-	-	-	4	-	-	-	2	-	-	-	2	3	28

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 1 / AASP WM018
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: AASP WM018

Installation Information

Method of Implementation: AIT:: Installation Name: WM018 AASP Reliability and Refurbishment Upgrade

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	2 / 2.341	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 2.341
FY 2022	- / -	1 / 1.132	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 1.132
FY 2023	- / -	- / -	1 / 1.163	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 1.163
FY 2024	- / -	- / -	- / -	1 / 1.233	0 / 0.000	1 / 1.233	- / -	- / -	- / -	- / -	0 / 0.000	1 / 1.233
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.265	- / -	- / -	- / -	0 / 0.000	1 / 1.265
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.354	- / -	0 / 0.000	1 / 1.354
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.530	1 / 1.530
Total	2 / 2.341	1 / 1.132	1 / 1.163	1 / 1.233	0 / 0.000	1 / 1.233	1 / 1.265	- / -	1 / 1.354	- / -	1 / 1.530	8 / 10.018

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	2	-	-	1	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	8
Out	2	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	8

Footnotes:

(12) Includes production support for SHIPALT 4678KP, included Technical Direction Agent, Software Support Agent and Information Assurance efforts for Virginia Blocks I-V. Cost increase to support the TI/APB Integration efforts and cyber security.

(13) FY 2022 new system procurement costs lower than usual due to delays in new Very Low Frequency (VLF) transducer component competitive contract award. FY 2023 system installations supported with spares.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	68.662	5.228	7.178	8.386	0.000	8.386	5.066	6.379	4.690	5.507	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	68.662	5.228	7.178	8.386	0.000	8.386	5.066	6.379	4.690	5.507	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**68.662**	**5.228**	**7.178**	**8.386**	**0.000**	**8.386**	**5.066**	**6.379**	**4.690**	**5.507**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Countermeasure Set, Acoustic (CSA) program procures and supports the inboard electronic system necessary for preparing and launching 6" Acoustic Devices, Countermeasure (ADCs) from all 688i and newer U.S. submarines. This inboard system consists of the Torpedo Defense Controller (TDC), Launch Control Panels (LCPs), and associated cabling, in a class-by-class configuration. The CSA program provides obsolescence support for legacy systems, and modernization to divest legacy systems improving force readiness. Five efforts are supported: (1) The "CSA SWFTS Integration" effort is maintaining the integration of the CSA system with the Submarine Warfare Federated Tactical System (SWFTS) System of Systems (SoS). Implementation of a phased approach allowed incremental implementation of capabilities. Required funding addresses recurring upgrades within the SWFTS Technology Insertion (TI)/Advanced Processor Build (APB) cycles to maintain compatibility with networked tactical systems and continue to reduce cybersecurity risks. (2) The ongoing "CSA MK4 Technology Insertion" effort replaces the CSA MK2 MOD2 with a SubTDS-capable, SWFTS-integrated CSA MK4 system on VIRGINIA Class Block I and II submarines (10 hulls). (3) The "CSA SEAWOLF SWFTS Integration" effort replaces the CSA MK2 MOD5 system on SEAWOLF Class submarines (3 hulls) with a SubTDS-capable, SWFTS-integrated CSA system. The non-recurring engineering effort begins in FY21 with fielding beginning in FY23 as part of the SWFTS TI-22 baseline. (4) The "CSA SWFTS Virtualization" effort supports the development and integration of the CSA system with the AN/BYG-1 Combat Control System on VIRGINIA and COLUMBIA new construction hulls. (5) The fifth effort is the ongoing support for engineering issues across all CSA systems as they arise.

NOTE: Beginning in FY20, the WM019 budget was restructured to align the CSA development and procurement efforts with the SWFTS TI/APB model. The changes reallocated funding entirely within the WM019 subhead to support current and future SWFTS development efforts. This restructuring will provides clarity to the recurring development and procurement costs associated with CSA systems and upgrades within the SWFTS TI/APB model.

[WM019 CSA MK3 Engineering Changes (LAN, SWFTS, TDA)] Technology insertion effort that supports and designs engineering changes for VA Blk III and following ships, including the Countermeasures Set Acoustic (CSA) system, Torpedo Defense Controller (TDC), and Launch Control Panels (LCPs). This effort supports changes to correct obsolescence issues, supports SWFTS modernization goals and engineering changes necessary to accommodate modified devices and new devices.

[WM019 ECPs CSA MK2 MOD 2 Conversion to MK 4] WM019 - ECPs CSA MK2 MOD2 Conversion to CSA MK4 - Organic Technology insertion effort that converts CSA MK2 MOD2 to CSA MK4 to accommodate introduction of ADC MK5 to Virginia Class Block 1 and 2 Ships (10 hulls) is ongoing.

[WM019 CSA MK2 MOD 0 OBSOLESCENCE]

[WM019 CSAMK2 MOD2 CONVERSION to CSA MK4] [WM019 ECPs CSA MK2 MOD 2 Conversion to MK 4] WM019 - ECPs CSA MK2 MOD2 Conversion to CSA MK4 - Organic Technology insertion effort that converts CSA MK2 MOD2 to CSA MK4 to accommodate modernization of Virginia Class Block 1 and 2 Ships (10 hulls) is ongoing.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

[WM019 CSA MK3 Kits and Systems] Procures engineering change kits and systems in support of SAWS including Countermeasures Set Acoustic (CSA) system, Torpedo Defense Controller (TDC), Launch Control Panels (LCPs), CSA support system assets to correct obsolescence issues, including engineering changes necessary to accommodate modified devices and new devices, such as the ADC MK5.

[WM019 CSA Engineering Changes - Organic] [WM019 CSA Engineering Changes - Organic] Technology insertion effort that supports and designs engineering changes for the Countermeasure Set, Acoustic (CSA) systems fielded on all 688i and newer U.S. submarines. This supports changes to correct obsolescence issues, modernization to divest legacy systems improving force readiness, and engineering changes necessary to accommodate modified devices and new devices.

[WM019 CSA Technology Insertion (TI-20) Upgrade Kits NonOrganic] Procures CSA Technology Insertion to upgrade fielded SWFTS-integrated CSA systems from TI-14 and TI-16 to TI-20 on VIRGINIA Class submarines.

[WM019 CSA Technology Insertion (TI-22) Upgrade Kits NonOrganic] Procures CSA Technology Insertion to upgrade legacy CSA MK2 MOD 5 systems to TI-22 on SEAWOLF Class submarines.

[WM019 CSA Technology Insertion (TI-24) Upgrade Kits NonOrganic] Procures CSA Technology Insertion to upgrade fielded SWFTS-integrated CSA systems from TI-16 and TI-20 to TI-24 on VIRGINIA Class submarines. The significant change from prior budgets is the removal of CSA MK 5 from the planned TI-24 installations. The Common Weapon Launcher (CWL) is planned to be fielded with ADC launch capability starting with TI-24 on VACL Blocks III, IV, and V. CSA MK 4 installations of TI-24 remain.

[WM019 CSA Technology Insertion (TI-26) Upgrade Kits NonOrganic] Procures CSA Technology Insertion to upgrade fielded SWFTS-integrated CSA systems from TI-16 and TI-24 to TI-26 on VIRGINIA Class submarines. The significant change from prior budgets is the removal of CSA MK 5 from the planned TI-26 installations. The Common Weapon Launcher (CWL) is planned to be fielded with ADC launch capability starting with TI-24 on VACL Blocks III, IV, and V. CSA MK 4 installations of TI-26 remain.

[WM019 CSA SWFTS VIRTUALIZATION - Organic] Nonrecurring costs for the upgrade, verification, validation and integration of CSA functionality with the AN/BYG-1 Combat Control System and the Payload Control System (PCS) on SWFTS. CSA Virtualization effort supports advanced integration of the CSA system with the AN/BYG-1 Combat Control System on VIRGINIA and COLUMBIA new construction hulls.

[WM019 CSA SEA WOLF SWFTS Integration - Organic] Nonrecurring costs for the upgrade, validation, verification, and SHIPALT with the goal of modernizing SEAWOLF class with CSA equipment currently being fielded on VIRGINIA Class new construction platforms. The CSA modernization plan is aligned with SEAWOLF class modernization plans of other submarine tactical systems fielded in the TI-22 SWFTS baseline. The timing and phasing of funds is critical to the completion of this effort in time to install within the scheduled modernization availability starting in FY2023. In FY2021, the majority of the requested funding is planned to go directly to private industry to support the platform engineering efforts to design arrangement, placement and cabling of the modern CSA Equipment. FY2022 efforts will be split between private industry and government to finalize engineering efforts, perform equipment integration, and perform submarine environmental qualification testing. The remaining fiscal years are expected to finalize all necessary equipment integration, resolve deficiencies found during testing and attain all necessary certifications for each of the three SEAWOLF class submarines.

[WM019 CSA MK2 MOD 2 Conversion to CSA MK4] Technology Insertion effort that procures engineering change kits and systems including Countermeasures Set Acoustic (CSA) system, Torpedo Defense Controller (TDC), Launch Control Panels (LCPs), and CSA support system assets to correct obsolescence, including engineering changes necessary to accommodate modified devices and new devices.

[WM019 CSA ISEA] WM019 - CSA ISEA Supports engineering issues across all systems and platforms as they arise, using ISEA support.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Countermeasure Set Acoustic	**Modification Type:** SHIPALT, OCMOD, EC	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CSA WM019												
B Kits												
Recurring												
1.1.1) WM019 CSA MK3 Engineering Changes (LAN, SWFTS, TDA) - Organic	- / 13.348	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
1.1.2) WM019 ECPs CSA MK2 MOD 2 Conversion to MK 4 - Organic	- / 8.320	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
1.1.3) WM019 CSA MK2 MOD 0 OBSOLESCENCE - Organic	42 / 6.004	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	42 / 6.004
1.1.4) WM019 CSAMK2 MOD2 CONVERSION to CSA MK4 - NonOrganic	9 / 4.226	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 4.226
1.1.5) WM019 CSA MK3 Kits and Systems - NonOrganic (14)	9 / 1.865	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 1.865
1.1.6) WM019 CSA Engineering Changes - Organic - Organic (15)	- / 4.463	- / 2.176	- / 2.628	- / 2.617	- / -	- / 2.617	- / 2.540	- / 2.616	- / 2.616	- / 2.668	Continuing	Continuing
1.1.7) WM019 CSA Technology Insertion (TI-20) Upgrade Kits NonOrganic - NonOrganic	11 / 3.981	1 / 0.350	1 / 0.350	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 4.681
1.1.8) WM019 CSA Technology Insertion (TI-22) Upgrade Kits NonOrganic - NonOrganic (16)	1 / 0.510	1 / 0.500	1 / 0.500	1 / 0.528	- / -	1 / 0.528	- / -	- / -	- / -	- / -	- / -	4 / 2.038
1.1.9) WM019 CSA Technology Insertion (TI-24) Upgrade Kits NonOrganic - NonOrganic	- / -	- / -	1 / 0.590	4 / 2.408	- / -	4 / 2.408	- / -	1 / 0.626	- / -	- / -	- / -	6 / 3.624
1.1.10) WM019 CSA Technology Insertion (TI-26) Upgrade Kits NonOrganic - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.640	2 / 1.305	22 / 14.476	25 / 16.421
Subtotal: Recurring	*- / 42.717*	*- / 3.026*	*- / 4.068*	*- / 5.553*	*- / -*	*- / 5.553*	*- / 2.540*	*- / 3.242*	*- / 3.256*	*- / 3.973*	*Continuing*	*Continuing*
Non-Recurring												
1.2.1) WM019 CSA SWFTS VIRTUALIZATION - Organic - Organic	- / 1.250	- / 0.500	- / 0.500	- / 0.545	- / -	- / 0.545	- / 0.510	- / -	- / -	- / -	- / -	- / 3.305
1.2.2) WM019 CSA SEA WOLF SWFTS Integration - Organic - Organic (17)	- / 1.125	- / -	- / 0.520	- / 0.533	- / -	- / 0.533	- / 0.533	- / 0.375	- / 0.375	- / -	- / 0.375	- / 3.836
1.2.3) WM019 CSA MK2 MOD 2 Conversion to CSA MK4 - Organic	- / 8.998	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.998
Subtotal: Non-Recurring	*- / 11.373*	*- / 0.500*	*- / 1.020*	*- / 1.078*	*- / -*	*- / 1.078*	*- / 1.043*	*- / 0.375*	*- / 0.375*	*- / -*	*- / 0.375*	*- / 16.139*
Subtotal: CSA WM019	*72 / 54.090*	*2 / 3.526*	*3 / 5.088*	*5 / 6.631*	*- / -*	*5 / 6.631*	*- / 3.583*	*1 / 3.617*	*1 / 3.631*	*2 / 3.973*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 54.090*	*- / 3.526*	*- / 5.088*	*- / 6.631*	*- / -*	*- / 6.631*	*- / 3.583*	*- / 3.617*	*- / 3.631*	*- / 3.973*	*Continuing*	*Continuing*

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Countermeasure Set Acoustic	**Modification Type:** SHIPALT, OCMOD, EC	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Support *(All Modification Items)*												
2.1) WM019 CSA ISEA [18]	- / 11.323	- / 0.898	- / 1.148	- / 1.069	- / -	- / 1.069	- / 1.038	- / 1.059	- / 1.059	- / 1.080	Continuing	Continuing
Subtotal: Support	*- / 11.323*	*- / 0.898*	*- / 1.148*	*- / 1.069*	*- / -*	*- / 1.069*	*- / 1.038*	*- / 1.059*	*- / 1.059*	*- / 1.080*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: CSA WM019	- / 3.249	- / 0.804	- / 0.942	- / 0.686	- / 0.000	- / 0.686	- / 0.445	- / 1.703	- / 0.000	- / 0.454	- / 6.488	- / 14.771
Subtotal: Installation	*- / 3.249*	*- / 0.804*	*- / 0.942*	*- / 0.686*	*- / -*	*- / 0.686*	*- / 0.445*	*- / 1.703*	*- / -*	*- / 0.454*	*- / 6.488*	*- / 14.771*
Total												
Total Cost (Procurement + Support + Installation)	**68.662**	**5.228**	**7.178**	**8.386**	**0.000**	**8.386**	**5.066**	**6.379**	**4.690**	**5.507**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CSA WM019

Manufacturer Information

Manufacturer Name: CSA MK 2 to MK4 RAYTHEON				Manufacturer Location: Keyport, WA			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 18			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates							
Delivery Dates							
Manufacturer Name: CSA MK3 Technology Insertion (TI-20) Raytheon				Manufacturer Location: Poulsbo, WA			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 18			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Apr 2022	Apr 2023					
Delivery Dates	Oct 2023	Oct 2024					
Manufacturer Name: CSA MK5 Technology Insertion (TI-22) Raytheon / DRS				Manufacturer Location: Poulsbo, WA / Johnstown, PA			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 18			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates		Apr 2023	Apr 2024				
Delivery Dates		Oct 2024	Oct 2025				
Manufacturer Name: CSA MK4/5 Technology Insertion (TI-24) DRS				Manufacturer Location: Johnstown, PA			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 18			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates		Apr 2023	Apr 2024	Apr 2025	Apr 2026		
Delivery Dates		Oct 2024	Oct 2025	Oct 2026	Oct 2027		
Manufacturer Name: CSA MK4/5 Technology Insertion (TI-26) DRS				Manufacturer Location: Johnstown, PA			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 18			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates					Apr 2026		
Delivery Dates					Oct 2027		

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CSA WM019

Installation Information

Method of Implementation: AIT:: Installation Name: WM019 CSAMK2 MOD2 CONVERSION to CSA MK4

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	9 / 2.468	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 2.468
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	9 / 2.468	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 2.468

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Out	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9

Method of Implementation: AIT:: Installation Name: WM019 CSA MK3 Kits and Systems

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	4 / 0.445	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.575	9 / 1.020
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CSA WM019

Installation Information

Method of Implementation: AIT:: Installation Name: WM019 CSA MK3 Kits and Systems

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	4 / 0.445	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.575	9 / 1.020

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9
Out	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	9

Method of Implementation: AIT:: Installation Name: WM019 CSA Technology Insertion (TI-20) Upgrade Kits NonOrganic

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	2 / 0.336	5 / 0.804	4 / 0.672	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	11 / 1.812
FY 2022	- / -	- / -	- / -	1 / 0.168	0 / 0.000	1 / 0.168	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.168
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.175	- / -	- / -	- / -	0 / 0.000	1 / 0.175
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	2 / 0.336	5 / 0.804	4 / 0.672	1 / 0.168	0 / 0.000	1 / 0.168	1 / 0.175	- / -	- / -	- / -	0 / 0.000	13 / 2.155

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	3	-	2	-	-	1	3	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
Out	2	-	3	-	2	-	-	1	3	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	13

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CSA WM019

Installation Information

Method of Implementation: AIT:: Installation Name: WM019 CSA Technology Insertion (TI-22) Upgrade Kits NonOrganic

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	1 / 0.270	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.270
FY 2022	- / -	- / -	- / -	1 / 0.168	0 / 0.000	1 / 0.168	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.168
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.270	- / -	- / -	- / -	0 / 0.000	1 / 0.270
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.275	- / -	- / -	0 / 0.000	1 / 0.275
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	1 / 0.270	1 / 0.168	0 / 0.000	1 / 0.168	1 / 0.270	1 / 0.275	- / -	- / -	0 / 0.000	4 / 0.983

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	4
Out	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	4

Method of Implementation: AIT:: Installation Name: WM019 CSA Technology Insertion (TI-24) Upgrade Kits NonOrganic

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	1 / 0.350	0 / 0.000	1 / 0.350	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.350
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.428	- / -	- / -	0 / 0.000	4 / 1.428
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.743	1 / 0.743
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CSA WM019

Installation Information

Method of Implementation: AIT:: Installation Name: WM019 CSA Technology Insertion (TI-24) Upgrade Kits NonOrganic

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	- / -	- / -	- / -	1 / 0.350	0 / 0.000	1 / 0.350	- / -	4 / 1.428	- / -	- / -	1 / 0.743	6 / 2.521

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-	1	6
Out	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	1	6

Method of Implementation: [none specified]:: Installation Name: WM019 CSA Technology Insertion (TI-26) Upgrade Kits NonOrganic

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.454	0 / 0.000	1 / 0.454
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.900	2 / 0.900
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	22 / 4.270	22 / 4.270
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.454	24 / 5.170	25 / 5.624

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	24	25
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	24	25

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 2 / CSA WM019
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CSA WM019

Installation Information

Method of Implementation (Organic): WM019 CSA MK3 Engineering Changes (LAN, SWFTS, TDA)	**Installation Quantity:** 0
Method of Implementation (Organic): WM019 ECPs CSA MK2 MOD 2 Conversion to MK 4 - Not Installed	**Installation Quantity:** 0
Method of Implementation (Organic): WM019 CSA MK2 MOD 0 OBSOLESCENCE - Not Installed	**Installation Quantity:** 42
Method of Implementation (Organic): WM019 CSA Engineering Changes - Organic	**Installation Quantity:** 0

Footnotes:

(14) Due to changes in the SWFTS baseline to be installed on VIRGINIA Block II hulls, only four (4) of the CSA MK3 upgrade kits procured will be installed. The remaining kits are being used or will be transferred to labs for testing and continued supportability of the CSA MK3 system.

(15) Due to installation schedule shift, procurement of three TI-20 kits (1.1.7) was modified to one TI-20 kit (1.1.7) and one TI-22 shipset (1.1.8).

(16) Delays in SEAWOLF SHIPALT design and software development reduced expected funding to the planning yard and software support agent to zero for FY22 (1.2.2). Installations were updated to reflect the current install schedule on Submarine Modernization Alteration and Requirements Tool (SMART).

(17) CSA SEAWOLF SWFTS Integration (1.2.1) reflects organic CSA non-recurring engineering efforts less CSA Engineering Changes (1.1.6) and WM019 CSA SWFTS VIRTUALIZATION (1.2.1). This effort was reallocated from a combination of other organic CSA budget lines (1.1.1, 1.1.2, 1.1.6, 1.2.1) to stay within the CSA WM019 budget control. The intent of this reallocation of funds is to allow for better accountability of the effort. This effort is intended to be a non-recurring engineering effort to begin two years before the start of the first SEAWOLF class modernization availability. The timing and phasing of funds is critical to being able to modernize the SEAWOLF class starting in FY2023. In FY2021, the majority of the requested funding is planned to go directly to private industry to support the platform engineering efforts to design arrangement, placement and cabling of the modern CSA Equipment. It is critical to have sufficient funding the first year to ensure private industry can create the necessary designs artifacts which are used the following year as a basis for all remaining engineering, integration, and testing. FY2022 efforts will be split between private industry and government to finalize engineering efforts, perform equipment integration, and perform submarine environmental qualification testing. The remaining fiscal years are expected to finalize all necessary equipment integration, resolve deficiencies found during testing and attain all necessary certifications for each of the three SEAWOLF class submarines.

(18) Installations were updated to reflect the current install schedule on Submarine Modernization Alteration and Requirements Tool (SMART).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 3 / CRAW WM025
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	1.791	8.419	0.000	8.419	9.896	5.985	6.100	6.222	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	1.791	8.419	0.000	8.419	9.896	5.985	6.100	6.222	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**1.791**	**8.419**	**0.000**	**8.419**	**9.896**	**5.985**	**6.100**	**6.222**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Compact Rapid Attack Weapon (CRAW) is a very light-weight torpedo that utilizes a multi-mission warhead to provide Submarine Torpedo Defense and Anti-Submarine Warfare (ASW) capabilities for close-in encounters and Anti-Torpedo Torpedo (ATT) capabilities for submarine torpedo defense. The CRAW device is designed with a modular configuration that is comprised of nose section, a reconfigurable payload section, a command and control section, a power plant section that includes the SCEPS engine for thermal power or the ability to replace with an electric drive, and a tail section.

In order to field CRAW's residual ASW and ATT capabilities, the CRAW program will require procurement of SHIPALT installation kits and support/shipping equipment to enable fielding. CRAW devices will be procured separately via WPN.

In FY23, Revolver MP will begin production engineering in preparation for procurement of production baseline units in FY24.

[CRAW Launch Tube Assembly] The Launch Tube Assembly (LTA) enables integration of the CRAW device with the VA Class External Countermeasure Launchers (ECLs). Procurement of 11 LTAs will be procured in FY24.

[CRAW Installation Kits] Procurement and installation of combat systems SHIPALT installation kits will consist of upgrades to the submarine combat system as a part of the Submarine Federated and Warfare Tactical Systems (SWFTS) modernization cycle in order to integrate with the submarine's ECL. This will be accomplished by procuring TI-24 SHIPALT installation kits to meet currently scheduled platform availabilities and consist of backfit upgrade packages for the CWL (interface with BYG-1 to enable launching from the ECL). Lead times for production of the installation kits are estimated to be approximately 10 months. Thus, making it a requirement to procure the kits a year prior to installation beginning in FY24.

[Revolver MP] Revolver Multi-Payload (Revolver MP) is a program that transitions the ONR Multi-Vehicle Torpedo Tube Defense System (MVTTDS) in order to facilitate launching of multiple small diameter payloads from the VIRGINIA Class Torpedo Tubes. CRAW will be the first payload integrated for use with the Revolver MP production baseline. While CRAW will be the initial payload integrated with Revolver MP, additional payloads will continue to be integrated.

In FY24, Revolver MP begin procurement of production equipment.

[Shipping Containers] Three shipping container variants will support the CRAW program and consist of the CRAW device container, the Warhead container, and the Launch Tube Assembly container. These containers will be certified to ship between PSU/ARL, Indian Head, NUWC Keyport as the IMA and the shipyard/dockside for installation or storage for staging as inventories increase. In FY24 and FY25, the 30 shipping containers procured will account for 10 sets of each configuration.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 3 / CRAW WM025
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** Integration Kit	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CRAW WM025												
B Kits												
Recurring												
1.1.1) CRAW Launch Tube Assembly - NonOrganic	- / -	- / -	3 / 1.300	11 / 2.748	- / -	11 / 2.748	7 / 1.849	6 / 1.600	2 / 0.697	4 / 1.022	Continuing	Continuing
1.1.2) CRAW Installation Kits - NonOrganic	- / -	- / -	- / -	1 / 0.600	- / -	1 / 0.600	3 / 1.800	2 / 1.200	4 / 2.400	3 / 1.800	Continuing	Continuing
1.1.3) Revolver MP - NonOrganic	- / -	- / -	- / 0.491	2 / 4.000	- / -	2 / 4.000	2 / 3.400	- / -	- / -	- / -	- / -	4 / 7.891
1.1.4) Shipping Containers - Organic	- / -	- / -	- / -	30 / 0.300	- / -	30 / 0.300	30 / 0.300	30 / 0.300	60 / 0.600	60 / 0.600	- / -	210 / 2.100
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / 1.791*	*- / 7.648*	*- / -*	*- / 7.648*	*- / 7.349*	*- / 3.100*	*- / 3.697*	*- / 3.422*	*Continuing*	*Continuing*
Subtotal: CRAW WM025	*- / -*	*- / -*	*3 / 1.791*	*44 / 7.648*	*- / -*	*44 / 7.648*	*42 / 7.349*	*38 / 3.100*	*66 / 3.697*	*67 / 3.422*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / 1.791*	*- / 7.648*	*- / -*	*- / 7.648*	*- / 7.349*	*- / 3.100*	*- / 3.697*	*- / 3.422*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: CRAW WM025	- / 0.000	- / 0.000	- / 0.000	- / 0.771	- / 0.000	- / 0.771	- / 2.547	- / 2.885	- / 2.403	- / 2.800	- / 3.500	- / 14.906
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / 0.771*	*- / -*	*- / 0.771*	*- / 2.547*	*- / 2.885*	*- / 2.403*	*- / 2.800*	*- / 3.500*	*- / 14.906*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**1.791**	**8.419**	**0.000**	**8.419**	**9.896**	**5.985**	**6.100**	**6.222**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 3 / CRAW WM025
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CRAW WM025

Manufacturer Information

Manufacturer Name: NUWC Keyport	Manufacturer Location: Keyport, WA
Administrative Leadtime *(in Months)*: 7	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		May 2023	May 2024	May 2025	May 2026	May 2027	May 2028
Delivery Dates		May 2024	May 2025	May 2026	May 2027	May 2028	May 2029

Installation Information

Method of Implementation: [none specified]:: Installation Name: CRAW Launch Tube Assembly

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	3 / 0.771	0 / 0.000	3 / 0.771	- / -	- / -	- / -	- / -	0 / 0.000	3 / 0.771
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	11 / 1.547	- / -	- / -	- / -	0 / 0.000	11 / 1.547
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 0.703	- / -	- / -	0 / 0.000	7 / 0.703
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.821	- / -	0 / 1.500	6 / 2.321
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.800	0 / 0.000	2 / 0.800
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.000	4 / 1.000
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	3 / 0.771	0 / 0.000	3 / 0.771	11 / 1.547	7 / 0.703	6 / 0.821	2 / 0.800	4 / 2.500	33 / 7.142

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	11	-	-	-	7	-	-	-	6	-	-	-	2	-	4	33
Out	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	11	-	-	-	7	-	-	-	6	-	-	-	2	4	33

Method of Implementation: [none specified]:: Installation Name: CRAW Installation Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 3 / CRAW WM025
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CRAW WM025

Installation Information

Method of Implementation: [none specified]:: Installation Name: CRAW Installation Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.400	- / -	- / -	- / -	0 / 0.000	1 / 0.400
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.582	- / -	- / -	0 / 0.000	3 / 1.582
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.582	- / -	0 / 0.000	3 / 1.582
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.000	0 / 0.000	4 / 2.000
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.000	3 / 1.000
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.400	3 / 1.582	3 / 1.582	4 / 2.000	3 / 1.000	14 / 6.564

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	3	-	3	-	-	4	-	-	-	3	14
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	6	-	-	-	4	3	14

Method of Implementation: [none specified]:: Installation Name: Revolver MP

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.600	- / -	- / -	- / -	0 / 0.000	2 / 0.600
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.600	- / -	- / -	0 / 0.000	2 / 0.600
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.600	2 / 0.600	- / -	- / -	0 / 0.000	4 / 1.200

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2210 / Submarine Acoustic Warfare System	**Modification Number / Title:** 3 / CRAW WM025
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CRAW WM025

Installation Information

Method of Implementation: [none specified]:: Installation Name: Revolver MP

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	4
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	4

Method of Implementation (Organic): Shipping Containers - Not Installed	Installation Quantity: 210

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2213 / Surface Ship Torpedo Def (SSTD)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	208.448	11.010	14.325	14.560	0.000	14.560	2.713	2.841	2.868	2.937	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	208.448	11.010	14.325	14.560	0.000	14.560	2.713	2.841	2.868	2.937	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**208.448**	**11.010**	**14.325**	**14.560**	**0.000**	**14.560**	**2.713**	**2.841**	**2.868**	**2.937**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.242	0.529	0.265	-	0.265	0.269	0.279	0.279	0.290	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Surface Ship Torpedo Defense (SSTD) provides a layered torpedo defense capability to protect surface ships. The AN/SLQ-25 (NIXIE) is the Navy's primary SSTD system, providing towed persistent torpedo countermeasure capability, currently protecting over 180 surface ships. FY23 funding enabled the completion of the -25E design, delivered the Design Qualification Units (DQU), and began system integration testing. FY24 funding will finish hardware and software integration, complete system testing, and incorporate any design changes identified during testing.

WL106 AN/SLQ-25 ENGINEERING CHANGES (ECs): The AN/SLQ-25 NIXIE is the Navy's program of record for Surface Ship Torpedo Defense (SSTD), providing towed persistent torpedo countermeasure capability to protect over 180 surface ships. WL106, AN/SLQ-25 ENGINEERING CHANGES (EC), consists of three major efforts. (1) Engineering Changes for AN/SLQ-25C and earlier variants. These ECs are recurring efforts that include investigation and resolution of AN/SLQ-25A/C Trouble Reports (TRs), including those resulting from service-identified issues resulting in operational downtime. (2) Continuation of the system technical insertion that will result in the new configuration baseline, known as the AN/SLQ-25E. This funding supports updating 25E technical insertion software and allows for system integration effort. (3) AN/ SLQ-25C obsolescence. Funding for AN/SLQ-25 Engineering Changes provides for hardware and software configuration changes to current production baselines to resolve emergent hardware obsolescence issues and software updates. These recurring efforts include investigation and resolution of AN/SLQ-25 Trouble Reports (TRs), including those resulting from service-identified issues resulting in operational downtime. These efforts are critical to the extension of the military service life of the system. Funding to support obsolescence supports piece part repair and rebuild at the lowest repair assembly.

WL830 PRODUCTION ENGINEERING (IN-HOUSE): Funding provides specification preparation and validation, production planning, contract deliverable monitoring, prime contractor monitoring for cost, schedule, and performance and Integrated Logistics Support (ILS) planning, review and evaluation of obsolescence issues, and coordination of government furnished information (GFI) and government furnished equipment (GFE).

WL840 QUALITY ASSURANCE: Funding provides for quality assurance efforts including conducting quality assurance reviews of the contractor and subcontractors, documentation indicating contractor conformity to product performance requirements, and review of objective quality evidence.

WL860 ACCEPTANCE TEST & ENGINEERING: Funding provides for production acceptance of contractor hardware. Acceptance testing includes government acceptance testing and Environmental Qualification Testing (EQT) in support of the AN/SLQ-25E development with operationally trained subject matter experts and software support engineers.

WL900 CONSULTING SERVICES: Funding provides for contractor support to the program office for production monitoring, installation planning and coordination support.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2213 / Surface Ship Torpedo Def (SSTD)	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

WL905 PRODUCTION ENGINEERING CONTRACTOR: Funding provides for production engineering tasks performed by the hardware contractor.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2213 / Surface Ship Torpedo Def (SSTD)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-40a	Surface Ship Torpedo Def (SSTD)				- / 156.934	- / -	- / -	- / -	- / -	- / -
P-3a	1 / WL106 ENGINEERING CHANGES (TBD)				- / 51.514	- / 11.010	- / 14.325	- / 14.560	- / 0.000	- / 14.560
P-40	**Total Gross/Weapon System Cost**				**- / 208.448**	**- / 11.010**	**- / 14.325**	**- / 14.560**	**- / 0.000**	**- / 14.560**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-40a	Surface Ship Torpedo Def (SSTD)				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / WL106 ENGINEERING CHANGES (TBD)				- / 2.713	- / 2.841	- / 2.868	- / 2.937	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 2.713**	**- / 2.841**	**- / 2.868**	**- / 2.937**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY24 funding supports AN/SLQ-25E requirements for all classes of surface ships.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2213 / Surface Ship Torpedo Def (SSTD)	**Aggregated Items Title:** Surface Ship Torpedo Def (SSTD)

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) WL101 AN/SLQ-25A UPGRADE KITS																				
1.1) 25A Modification Kits	A		528,387.85	214	113.075	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) WL101 AN/SLQ-25A UPGRADE KITS			**-**	**-**	***113.075***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2) WL103 AN/SLQ-25X (TWS COMPATIBLE SYSTEM) HARDWARE																				
2.1) WL103 AN/ SLQ-25X (TWS COMPATIBLE SYSTEM) HARDWARE	A		3,788K	1	3.788	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) WL103 AN/SLQ-25X (TWS COMPATIBLE SYSTEM) HARDWARE			**-**	**-**	***3.788***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
3) WL104 AN-SLQ-25D EC-2 ()																				
3.1) AN-SLQ-25C EC-2 ()	A		13,447K	1	13.447	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) WL104 AN-SLQ-25D EC-2 ()			**-**	**-**	***13.447***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
4) WL105 AN-SLQ-25C CVN BATTLE SPARE																				
4.1) HARDWARE	A		-	-	1.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) WL105 AN-SLQ-25C CVN BATTLE SPARE			**-**	**-**	***1.500***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
5) WL106 ENGINEERING CHANGE																				
5.1) EC-1 UPDATE SLQ-25	A		-	-	2.100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.2) TECH INSERTION EC SLQ-25	A		-	-	0.936	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) WL106 ENGINEERING CHANGE			**-**	**-**	***3.036***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
6) WL830 PRODUCTION ENGINEERING																				
6.1) PRODUCTION ENGINEERING IN-HOUSE	A		-	-	13.281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) WL830 PRODUCTION ENGINEERING			**-**	**-**	***13.281***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
7) WL840 QUALITY ASSURANCE																				
7.1) QUALITY ASSURANCE (IN-HOUSE)	A		-	-	1.264	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.2) Torpedo Warning System (TWS) Quality Assurance	A		-	-	0.212	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2213 / Surface Ship Torpedo Def (SSTD)	**Aggregated Items Title:** Surface Ship Torpedo Def (SSTD)

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Subtotal: 7) WL840 QUALITY ASSURANCE			-	-	***1.476***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8) WL860 ACCEPTANCE TEST AND ENGINEERING																				
8.1) ACCEPTANCE TESTING & ENGINEERING	A		-	-	1.824	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.2) TWS Acceptance Testing & Engineering	A		-	-	0.496	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 8) WL860 ACCEPTANCE TEST AND ENGINEERING			-	-	***2.320***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9) WL900 SERVICES																				
9.1) CONSULTING SERVICES	A		-	-	2.869	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 9) WL900 SERVICES			-	-	***2.869***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10) WL905 PRODUCTION ENGINEERING CONTRACTOR																				
10.1) PRODUCTION ENGINEERING CONTRACTOR	A		-	-	2.142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 10) WL905 PRODUCTION ENGINEERING CONTRACTOR			-	-	***2.142***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	**156.934**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2213 / Surface Ship Torpedo Def (SSTD)	**Modification Number / Title:** 1 / WL106 ENGINEERING CHANGES
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	51.514	11.010	14.325	14.560	0.000	14.560	2.713	2.841	2.868	2.937	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	51.514	11.010	14.325	14.560	0.000	14.560	2.713	2.841	2.868	2.937	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**51.514**	**11.010**	**14.325**	**14.560**	**0.000**	**14.560**	**2.713**	**2.841**	**2.868**	**2.937**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

WL106 AN/SLQ-25 ENGINEERING CHANGES (ECs): The AN/SLQ-25 NIXIE is the Navy's program of record for Surface Ship Torpedo Defense (SSTD), providing towed persistent torpedo countermeasure capability to protect over 180 surface ships. WL106, AN/SLQ-25 ENGINEERING CHANGES (EC), consists of three major efforts. (1) Engineering Changes for AN/SLQ-25C and earlier variants. These ECs are recurring efforts that include investigation and resolution of AN/SLQ-25A/C Trouble Reports (TRs), including those resulting from service-identified issues resulting in operational downtime. (2) Continuation of the system technical insertion that will result in the new configuration baseline, known as the AN/SLQ-25E. This funding supports updating 25E technical insertion software and allows for system integration effort. (3) AN/ SLQ-25C obsolescence. Funding for AN/SLQ-25 Engineering Changes provides for hardware and software configuration changes to current production baselines to resolve emergent hardware obsolescence issues and software updates. These recurring efforts include investigation and resolution of AN/SLQ-25 Trouble Reports (TRs), including those resulting from service-identified issues resulting in operational downtime. These efforts are critical to the extension of the military service life of the system. Funding to support obsolescence supports piece part repair and rebuild at the lowest repair assembly.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2213 / Surface Ship Torpedo Def (SSTD)	**Modification Number / Title:** 1 / WL106 ENGINEERING CHANGES
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: WL106 ENGINEERING CHANGES												
B Kits												
Recurring												
1.1.1) WL106 Engineering Changes SLQ-25 - Organic (1)	- / -	- / -	- / 6.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.000
1.1.2) WL106 ECPs - Organic - Organic	- / 1.776	- / 0.580	- / 0.891	- / 0.899	- / -	- / 0.899	- / -	- / -	- / -	- / -	Continuing	Continuing
1.1.3) WL106 TECH INSERTION EC SLQ-25 - Organic (2)	- / 2.512	- / 0.514	- / 0.520	- / 2.523	- / -	- / 2.523	- / 0.553	- / 0.278	- / 0.278	- / 0.299	- / -	- / 7.477
1.1.4) WL106 EC-1 UPDATE SLQ-25 - Organic - Organic (3)	- / 3.038	- / 0.537	- / 0.543	- / 0.246	- / -	- / 0.246	- / 0.045	- / 0.048	- / 0.058	- / 0.058	- / -	- / 4.573
Subtotal: Recurring	*- / 7.326*	*- / 1.631*	*- / 7.954*	*- / 3.668*	*- / -*	*- / 3.668*	*- / 0.598*	*- / 0.326*	*- / 0.336*	*- / 0.357*	*Continuing*	*Continuing*
Non-Recurring												
1.2.1) WL106 AN/SLQ-25 Tech Insertion - Non - Organic (4)	- / 22.820	- / -	- / 3.101	- / 1.997	- / -	- / 1.997	- / 0.242	- / 0.262	- / 0.241	- / 0.241	- / -	- / 28.904
1.2.2) WL106 AN/SLQ-25 Tech Insertion - Organic (5)	- / 7.178	- / 0.604	- / 0.900	- / 1.500	- / -	- / 1.500	- / 0.304	- / 0.373	- / 0.400	- / 0.431	- / -	- / 11.690
Subtotal: Non-Recurring	*- / 29.998*	*- / 0.604*	*- / 4.001*	*- / 3.497*	*- / -*	*- / 3.497*	*- / 0.546*	*- / 0.635*	*- / 0.641*	*- / 0.672*	*- / 0.000*	*- / 40.594*
Subtotal: WL106 ENGINEERING CHANGES	*- / 37.324*	*- / 2.235*	*- / 11.955*	*- / 7.165*	*- / -*	*- / 7.165*	*- / 1.144*	*- / 0.961*	*- / 0.977*	*- / 1.029*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 37.324*	*- / 2.235*	*- / 11.955*	*- / 7.165*	*- / -*	*- / 7.165*	*- / 1.144*	*- / 0.961*	*- / 0.977*	*- / 1.029*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) WL830 AN/SLQ-25 Production Engineering In House (6)	- / 2.497	- / -	- / 1.100	- / 1.283	- / -	- / 1.283	- / -	- / -	- / -	- / -	Continuing	Continuing
2.2) WL840 AN/SLQ-25 Quality Assurance (7)	- / 1.449	- / 0.096	- / 0.490	- / 0.731	- / -	- / 0.731	- / -	- / -	- / -	- / -	Continuing	Continuing
2.3) WL860 AN/SLQ-25 Acceptance Test and Engineering (8)	- / 2.436	- / 0.583	- / 0.300	- / 0.815	- / -	- / 0.815	- / -	- / -	- / -	- / -	Continuing	Continuing
2.4) WL900 AN/SLQ-25 Consulting Services (9)	- / 3.105	- / 0.745	- / 0.272	- / 0.975	- / -	- / 0.975	- / 0.300	- / 0.600	- / 0.600	- / 0.600	Continuing	Continuing
2.5) WL905 AN/SLQ-25 Production Engineering Contractor (10)	- / 4.703	- / 7.351	- / 0.208	- / 3.591	- / -	- / 3.591	- / 1.269	- / 1.280	- / 1.291	- / 1.308	Continuing	Continuing
Subtotal: Support	*- / 14.190*	*- / 8.775*	*- / 2.370*	*- / 7.395*	*- / -*	*- / 7.395*	*- / 1.569*	*- / 1.880*	*- / 1.891*	*- / 1.908*	*Continuing*	*Continuing*
Installation												
Subtotal: Installation	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*
Total												
Total Cost (Procurement + Support + Installation)	**51.514**	**11.010**	**14.325**	**14.560**	**0.000**	**14.560**	**2.713**	**2.841**	**2.868**	**2.937**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2213 / Surface Ship Torpedo Def (SSTD)	**Modification Number / Title:** 1 / WL106 ENGINEERING CHANGES
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: WL106 ENGINEERING CHANGES

Manufacturer Information

Manufacturer Name: ULTRA Ocean Systems	Manufacturer Location: Braintree, Ma
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 20

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027
Delivery Dates	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027	Dec 2028

Footnotes:

(1) Funding decreased from FY23 to FY24 by $6.0M to Support OEM Program Management and Engineering Technical Services (WL905), Support Software Integration into Production Representative Article, Completing Environmental Qualification Testing, and at sea testing needed to complete technical insertion system from 1.1.3.

(2) Funding increased by $2.003M due to software integration into production representative Article, Completing Environmental Qualification Testing, and at sea testing needed to complete technical insertion system.

(3) Funding decreased from FY23 to FY24 by $0.297 due to reduction in ECP processing and EC-1 support to Fleet assets.

(4) Funding decreased from FY23 to FY24 by $1.104M to support OEM Program Management and Engineering Technical Services costs.

(5) Funding increased from FY23 to FY24 by $0.600 due to required government engineering oversight of the AN/SLQ-25E first article delivery.

(6) Funding increased from FY23 to FY24 by $0.183 due to government production oversight of AN/SLQ-25E OEM scheduled production and delivery.

(7) Funding increased from FY23 to FY24 by $0.241 due to government production oversight of AN/SLQ-25E OEM scheduled production and delivery.

(8) Funding increased from FY23 to FY24 by $0.515 due to government production oversight of AN/SLQ-25E OEM scheduled production and delivery.

(9) Funding increased from FY23 to FY24 by $0.703 due to government production oversight of AN/SLQ-25E OEM scheduled production and delivery.

(10) Funding increased from FY23 to FY24 by $3.292M to fund OEM Program Management and Engineering Technical Services through Warfare Center KPT Contract Office.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2225 / Fixed Surveillance System

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	2,880.709	363.651	266.228	420.069	0.000	420.069	473.540	436.159	517.998	561.716	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	2,880.709	363.651	266.228	420.069	0.000	420.069	473.540	436.159	517.998	561.716	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**2,880.709**	**363.651**	**266.228**	**420.069**	**0.000**	**420.069**	**473.540**	**436.159**	**517.998**	**561.716**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The details of this budget justification are classified, per Executive Order 13526, Sec 1.4 (a) and are submitted annually to Congress in the classified budget justification book.

[P40A / Classified (2225)]: The details of this budget justification are classified, per Executive Order 13526, Sec 1.4 (a) and are submitted annually to Congress in the classified budget justification book.

[P40A / Classified (222506)]: The details of this budget justification are classified, per Executive Order 13526, Sec 1.4 (a) and are submitted annually to Congress in the classified budget justification book.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2225 / Fixed Surveillance System

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Fixed Surveillance System				- / 2,880.709	- / 363.651	- / 266.228	- / 420.069	- / -	- / 420.069
P-40	**Total Gross/Weapon System Cost**				**- / 2,880.709**	**- / 363.651**	**- / 266.228**	**- / 420.069**	**- / 0.000**	**- / 420.069**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The details of this budget justification are classified, per Executive Order 13526, Sec 1.4 (a) and are submitted annually to Congress in the classified budget justification book.

OOC:
The details of this budget justification are classified, per Executive Order 13526, Sec 1.4 (a) and are submitted annually to Congress in the classified budget justification book.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2225 / Fixed Surveillance System	**Aggregated Items Title:** Fixed Surveillance System

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) Classified																				
1.1) Classified (2225)	A		-	-	2,766.918	-	-	356.734	-	-	258.794	-	-	412.481	-	-	-	-	-	412.481
1.2) Classified (222506)	A		-	-	113.791	-	-	6.917	-	-	7.434	-	-	7.588	-	-	-	-	-	7.588
Subtotal: 1) Classified			**-**	**-**	***2,880.709***	**-**	**-**	***363.651***	**-**	**-**	***266.228***	**-**	**-**	***420.069***	**-**	**-**	**-**	**-**	**-**	***420.069***
Total			**-**	**-**	**2,880.709**	**-**	**-**	**363.651**	**-**	**-**	**266.228**	**-**	**-**	**420.069**	**-**	**-**	**-**	**-**	**-**	**420.069**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2237 / SURTASS

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0204311N
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	298.765	67.500	25.030	33.910	0.000	33.910	25.204	28.804	29.148	29.371	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	298.765	67.500	25.030	33.910	0.000	33.910	25.204	28.804	29.148	29.371	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**298.765**	**67.500**	**25.030**	**33.910**	**0.000**	**33.910**	**25.204**	**28.804**	**29.148**	**29.371**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	4.476	3.128	3.346	-	3.346	5.673	3.662	3.330	0.415	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

PROGRAM COVERAGE: Surveillance Towed Array Sensor System (SURTASS) is the mobile, tactical, and strategic arm of the Navy's undersea surveillance capability that provides deep ocean and littoral acoustic detection and cueing for tactical weapon platforms against diesel and nuclear submarines as well as surface vessels in any given Area of Operations worldwide. Dedicated Anti-Submarine Warfare (ASW) T-AGOS ships tow long acoustic arrays that collect acoustic data and relay that data to shore facilities via satellites for processing and fusion of the resulting contact data with other sensors. Currently, there are five Small Waterplane Area Twin Hull (SWATH) T-AGOS ships operating in the Pacific area. Ship configurations are:

T-AGOS 22 USNS LOYAL (1), a SWATH-P platform which supports passive operations using the TB-29A Twinline (TL-29A) array, providing improved detection and classification capability. This ship class uses the Integrated Common Processor (ICP) signal processing and display system common with the SSN Acoustic Rapid Commercial Off the Shelf (COTS) Insertion (ARCI) Sonar Processing System;

Three (3) T-AGOS SWATH-P platforms, T-AGOS 19 USNS VICTORIOUS, T-AGOS 20 USNS ABLE, and T-AGOS 21 USNS EFFECTIVE, supporting passive/active operations, configured with the ICP processing and display system, the TL-29A array, and the Compact Low Frequency Active (CLFA) transmit capability;

One (1) Low Frequency Active (LFA) equipped ship, T-AGOS 23 USNS IMPECCABLE, a SWATH-A platform configured with the ICP processing and display system, the TL-29A array, and the Low Frequency Active (LFA) transmit capability. The active capability provides greatly improved detection against diesel submarines as well as the quiet nuclear submarine threat.

In addition to the five platforms described above, two (2) shore sites are configured with the ICP processing and display suites to receive the T-AGOS acoustic data via Super High Frequency (SHF) satellite communication links. One of the two shore sites is equipped with three (3) SURTASS Team Trainers (STTs) to support Home Port Training Periods.

A cost sharing agreement with Japan also provides two (2) shore sites and three (3) Japanese SWATH ships with similar capability to the T-AGOS SWATH-P ships for the Western Pacific region. A hardware ICP technology refresh is planned for two (2) shore sites and three (3) Japanese Auxiliary Ocean Surveillance (J-AOS) ships.

The Expeditionary Surveillance Towed Array Sensor System (SURTASS-E) provides a SURTASS passive capability packaged in ISO-Vans (ISO-International Organization for Standardization) for mobilization on Vessels of Opportunity (VOOs). It was developed as a Rapid Prototyping, Experimentation, and Demonstration (RPED) project, tasked to re-package, test, and demonstrate an expeditionary variant of the passive component of the SURTASS acoustic surveillance system that can be used as a surrogate for some of the SURTASS capabilities provided by traditional T-AGOS class vessels.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 3: ASW Electronic Equipment	**P-1 Line Item Number / Title:** 2237 / SURTASS

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0204311N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-3a	1 / VG006 - Integrated Common Processor (N/A)				- / 78.752	- / 14.818	- / 18.664	- / 15.735	- / 0.000	- / 15.735
P-3a	2 / VG006 - TL-29A U.S. Twinline Arrays (N/A)				- / 66.849	- / 1.935	- / 2.100	- / 2.000	- / 0.000	- / 2.000
P-3a	3 / VG006 - SURTASS Team Trainer (N/A)				- / 20.061	- / 4.700	- / 1.950	- / 4.600	- / 0.000	- / 4.600
P-3a	4 / VG006 - SURTASS-E (TBD)				- / 56.449	- / 44.034	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	5 / VG007 - Field Changes/Modifications (N/A)				- / 33.300	- / 2.013	- / 2.316	- / 2.468	- / 0.000	- / 2.468
P-3a	6 / VG006 J-AOS (N/A)				- / 43.354	- / 0.000	- / 0.000	- / 9.107	- / 0.000	- / 9.107
P-40	**Total Gross/Weapon System Cost**				**- / 298.765**	**- / 67.500**	**- / 25.030**	**- / 33.910**	**- / 0.000**	**- / 33.910**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-3a	1 / VG006 - Integrated Common Processor (N/A)				- / 17.960	- / 18.649	- / 21.742	- / 18.900	- / 8.600	- / 213.820
P-3a	2 / VG006 - TL-29A U.S. Twinline Arrays (N/A)				- / 2.285	- / 2.292	- / 2.338	- / 2.385	- / 0.000	- / 82.184
P-3a	3 / VG006 - SURTASS Team Trainer (N/A)				- / 2.000	- / 4.900	- / 2.040	- / 4.998	Continuing	Continuing
P-3a	4 / VG006 - SURTASS-E (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 100.483
P-3a	5 / VG007 - Field Changes/Modifications (N/A)				- / 2.765	- / 2.769	- / 3.028	- / 3.088	- / 0.000	- / 51.747
P-3a	6 / VG006 J-AOS (N/A)				- / 0.194	- / 0.194	- / 0.000	- / 0.000	- / 0.000	- / 52.849
P-40	**Total Gross/Weapon System Cost**				**- / 25.204**	**- / 28.804**	**- / 29.148**	**- / 29.371**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY24 funding amount of $33.910M consists of $15.735M in funding for Integrated Common Processor (ICP) units, $2.000M for TL-29A towed array refurbishments, $4.600M for Surveillance Towed Array Sensor System (SURTASS) Team Trainer (STT) procurements, $2.468M for field changes and modifications for multi-year transition to an upgraded command and control (C2) system, and $9.107M for cost sharing associated with Japanese Auxiliary Ocean Surveillance (J-AOS) ships and shore sites ICP hardware technology refresh. Details provided in individual exhibit P-3As.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 1 / VG006 - Integrated Common Processor
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	78.752	14.818	18.664	15.735	0.000	15.735	17.960	18.649	21.742	18.900	8.600	213.820
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	78.752	14.818	18.664	15.735	0.000	15.735	17.960	18.649	21.742	18.900	8.600	213.820
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**78.752**	**14.818**	**18.664**	**15.735**	**0.000**	**15.735**	**17.960**	**18.649**	**21.742**	**18.900**	**8.600**	**213.820**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Integrated Common Processor (ICP) system hardware and software configuration varies from ship to ship depending upon the type of arrays installed on each platform (passive only, passive and Low Frequency Active (LFA), or passive and Compact Low Frequency Active (CLFA)). Additionally, tech refresh efforts and individual unit procurements and their related costs can be more significant in some years based on a wide range of factors including: the number of end of life components that require refresh; whether the build is addressing passive only functionality, LFA or CLFA functionality, or a combination of the three; the extent of cyber security and program protection improvements required; the scope of testing required for a particular ICP system undergoing refresh; and the need to update Configuration Control Models (CCMs) or Engineering Measurements Program (EMP) systems for each major hardware refresh. Accordingly, the ICP procurement and installation costs will vary from year to year depending upon the magnitude of the changes required.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 1 / VG006 - Integrated Common Processor
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Integrated Common Processor	**Modification Type:** N/A	**Related RDT&E PEs:** 0204311N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: VG006 - Integrated Common Processor												
B Kits												
Recurring												
1.1.1) Integrated Common Processor - NonOrganic (1)	55 / 57.966	10 / 12.218	10 / 15.164	10 / 12.165	- / -	10 / 12.165	10 / 14.310	10 / 14.949	10 / 17.842	10 / 14.800	- / 4.300	125 / 163.714
Subtotal: Recurring	*- / 57.966*	*- / 12.218*	*- / 15.164*	*- / 12.165*	*- / -*	*- / 12.165*	*- / 14.310*	*- / 14.949*	*- / 17.842*	*- / 14.800*	*- / 4.300*	*- / 163.714*
Subtotal: VG006 - Integrated Common Processor	*55 / 57.966*	*10 / 12.218*	*10 / 15.164*	*10 / 12.165*	*- / -*	*10 / 12.165*	*10 / 14.310*	*10 / 14.949*	*10 / 17.842*	*10 / 14.800*	*- / 4.300*	*125 / 163.714*
Subtotal: Procurement, All Modification Items	*- / 57.966*	*- / 12.218*	*- / 15.164*	*- / 12.165*	*- / -*	*- / 12.165*	*- / 14.310*	*- / 14.949*	*- / 17.842*	*- / 14.800*	*- / 4.300*	*- / 163.714*
Installation												
Modification Item 1 of 1: VG006 - Integrated Common Processor	- / 20.786	- / 2.600	- / 3.500	- / 3.570	- / 0.000	- / 3.570	- / 3.650	- / 3.700	- / 3.900	- / 4.100	- / 4.300	- / 50.106
Subtotal: Installation	*- / 20.786*	*- / 2.600*	*- / 3.500*	*- / 3.570*	*- / -*	*- / 3.570*	*- / 3.650*	*- / 3.700*	*- / 3.900*	*- / 4.100*	*- / 4.300*	*- / 50.106*
Total												
Total Cost (Procurement + Support + Installation)	**78.752**	**14.818**	**18.664**	**15.735**	**0.000**	**15.735**	**17.960**	**18.649**	**21.742**	**18.900**	**8.600**	**213.820**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 1 / VG006 - Integrated Common Processor

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: VG006 - Integrated Common Processor

Manufacturer Information

Manufacturer Name: Lockheed Martin — Manufacturer Location: VA

Administrative Leadtime *(in Months)*: 2 — Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028	Jan 2029

Manufacturer Name: Various — Manufacturer Location: Various

Administrative Leadtime *(in Months)*: 2 — Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028	Jan 2029

Installation Information

Method of Implementation: AIT (Alteration Installation Team):: Installation Name: Integrated Common Processor

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	49 / 20.786	6 / 2.600	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	55 / 23.386
FY 2022	- / -	- / -	10 / 3.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 3.500
FY 2023	- / -	- / -	- / -	10 / 3.570	0 / 0.000	10 / 3.570	- / -	- / -	- / -	- / -	0 / 0.000	10 / 3.570
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	10 / 3.650	- / -	- / -	- / -	0 / 0.000	10 / 3.650
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 3.700	- / -	- / -	0 / 0.000	10 / 3.700
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 3.900	- / -	0 / 0.000	10 / 3.900
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 4.100	0 / 0.000	10 / 4.100
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 4.300	10 / 4.300
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	49 / 20.786	6 / 2.600	10 / 3.500	10 / 3.570	0 / 0.000	10 / 3.570	10 / 3.650	10 / 3.700	10 / 3.900	10 / 4.100	10 / 4.300	125 / 50.106

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 1 / VG006 - Integrated Common Processor

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: VG006 - Integrated Common Processor

Installation Information

Method of Implementation: AIT (Alteration Installation Team):: Installation Name: Integrated Common Processor

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	49	-	1	3	2	-	4	3	3	-	4	3	3	-	4	3	3	-	4	3	3	-	4	3	3	-	4	3	3	10	125
Out	47	2	1	3	2	-	4	3	3	-	4	3	3	-	4	3	3	-	4	3	3	-	4	3	3	-	4	3	3	10	125

Footnotes:

(1) The Integrated Common Processor (ICP) system hardware and software configuration varies from ship to ship depending upon the type of arrays installed on each platform (passive only, passive and Low Frequency Active (LFA), or passive and Compact Low Frequency Active (CLFA)). Additionally, tech refresh efforts and individual unit procurements and their related costs can be more significant in some years based on a wide range of factors including: the number of end of life components that require refresh; whether the build is addressing passive only functionality, LFA or CLFA functionality, or a combination of the three; the extent of cyber security and program protection improvements required; the scope of testing required for a particular ICP system undergoing refresh; and the need to update Configuration Control Models (CCMs) or Engineering Measurements Program (EMP) systems for each major hardware refresh. Accordingly, the ICP procurement and installation costs will vary from year to year depending upon the magnitude of the changes required.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 2 / VG006 - TL-29A U.S. Twinline Arrays
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	66.849	1.935	2.100	2.000	0.000	2.000	2.285	2.292	2.338	2.385	0.000	82.184
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	66.849	1.935	2.100	2.000	0.000	2.000	2.285	2.292	2.338	2.385	0.000	82.184
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**66.849**	**1.935**	**2.100**	**2.000**	**0.000**	**2.000**	**2.285**	**2.292**	**2.338**	**2.385**	**0.000**	**82.184**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The TL-29A Twinline is a shallow water variant of the common array produced by Naval Sea Systems Command (NAVSEA). The array consists of two (2) shorter array lengths and array support equipment, and is designed for increased surveillance capability in high clutter environments and littoral areas. Funding is provided to refurbish existing TL-29A array legs and associated support equipment. Support equipment includes ancillary test sets, array headline and roll control systems, tow cables, and array leader cables.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 2 / VG006 - TL-29A U.S. Twinline Arrays
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: TL-29A Twinline Arrays	**Modification Type:** N/A	**Related RDT&E PEs:** 0204311N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: VG006 - TL-29A U.S. Twinline Arrays												
B Kits												
Recurring												
1.1.1) U.S. Twinline Arrays - NonOrganic (2)	15 / 65.949	1 / 1.935	1 / 2.100	1 / 2.000	- / -	1 / 2.000	1 / 2.285	1 / 2.292	1 / 2.338	1 / 2.385	- / -	22 / 81.284
Subtotal: Recurring	*- / 65.949*	*- / 1.935*	*- / 2.100*	*- / 2.000*	*- / -*	*- / 2.000*	*- / 2.285*	*- / 2.292*	*- / 2.338*	*- / 2.385*	*- / 0.000*	*- / 81.284*
Subtotal: VG006 - TL-29A U.S. Twinline Arrays	*15 / 65.949*	*1 / 1.935*	*1 / 2.100*	*1 / 2.000*	*- / -*	*1 / 2.000*	*1 / 2.285*	*1 / 2.292*	*1 / 2.338*	*1 / 2.385*	*- / -*	*22 / 81.284*
Subtotal: Procurement, All Modification Items	*- / 65.949*	*- / 1.935*	*- / 2.100*	*- / 2.000*	*- / -*	*- / 2.000*	*- / 2.285*	*- / 2.292*	*- / 2.338*	*- / 2.385*	*- / 0.000*	*- / 81.284*
Installation												
Modification Item 1 of 1: VG006 - TL-29A U.S. Twinline Arrays	- / 0.900	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.900
Subtotal: Installation	*- / 0.900*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 0.900*
Total												
Total Cost (Procurement + Support + Installation)	**66.849**	**1.935**	**2.100**	**2.000**	**0.000**	**2.000**	**2.285**	**2.292**	**2.338**	**2.385**	**0.000**	**82.184**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 2 / VG006 - TL-29A U.S. Twinline Arrays
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: VG006 - TL-29A U.S. Twinline Arrays

Manufacturer Information

Manufacturer Name: LOCKHEED MARTIN	Manufacturer Location: SYRACUSE, NY
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 19

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027
Delivery Dates	Jul 2023	Jul 2024	Jul 2025	Jul 2026	Jul 2027	Jul 2028	Jul 2029

Installation Information

Method of Implementation: AIT (Alteration Installation Team):: Installation Name: U.S. Twinline Arrays

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	14 / 0.900	1 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	15 / 0.900
FY 2022	- / -	- / -	1 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / -
FY 2023	- / -	- / -	- / -	1 / 0.000	0 / 0.000	1 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	1 / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.000	- / -	- / -	- / -	0 / 0.000	1 / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.000	- / -	- / -	0 / 0.000	1 / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.000	- / -	0 / 0.000	1 / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.000	0 / 0.000	1 / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.000	1 / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	14 / 0.900	1 / 0.000	1 / 0.000	1 / 0.000	0 / 0.000	1 / 0.000	1 / 0.000	1 / 0.000	1 / 0.000	1 / 0.000	1 / 0.000	22 / 0.900

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	14	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	1	22
Out	14	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	1	22

Footnotes:

(2) The TL-29A Twinline is a shallow water variant of the common array produced by Naval Sea Systems Command (NAVSEA). The array consists of two shorter array lengths and array support equipment, and is designed for increased surveillance capability in high clutter environments and littoral areas. Support equipment procurement is for ancillary test sets, array headline and roll control systems, tow cable, and leader cables. Funds refurbishment of one (1) array leg per year and associated support equipment. Installation Remarks: Installation funding is not required. Upon completion of each refurbishment, the

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 2 / VG006 - TL-29A U.S. Twinline Arrays
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

arrays go into the depot spares pool for installation when needed by Operations and Maintenance, Navy (O&MN)-funded Field Support Technicians onboard T-AGOS vessels as older arrays are removed for rebalancing or shipped back to the Original Equipment Manufacturer (OEM) for refurbishment.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 3 / VG006 - SURTASS Team Trainer
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	20.061	4.700	1.950	4.600	0.000	4.600	2.000	4.900	2.040	4.998	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	20.061	4.700	1.950	4.600	0.000	4.600	2.000	4.900	2.040	4.998	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**20.061**	**4.700**	**1.950**	**4.600**	**0.000**	**4.600**	**2.000**	**4.900**	**2.040**	**4.998**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Surveillance Towed Array Sensor System (SURTASS) Team Trainer (STT) provides SURTASS crews with three high fidelity synthetic and live playback training capabilities to support Home Port Training Periods (HPTP) and Pre-Deployment Certification Periods (PDCP). Each STT will receive a hardware tech refresh on a six-year cycle and receive a major software update installation on a two-year cycle, so that 3 STTs hardware tech refreshes and 9 major software installations would be performed over a given six-year period. Tech refresh and software updates for the STTs will continue on this cycle.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 3 / VG006 - SURTASS Team Trainer
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: SURTASS Team Trainer	**Modification Type:** N/A	**Related RDT&E PEs:** 0204311N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: VG006 - SURTASS Team Trainer												
B Kits												
Recurring												
1.1.1) SURTASS Team Trainer - NonOrganic	4 / 15.035	1 / 4.700	- / -	1 / 4.600	- / -	1 / 4.600	- / -	1 / 4.900	- / -	1 / 4.998	Continuing	Continuing
Subtotal: Recurring	*- / 15.035*	*- / 4.700*	*- / -*	*- / 4.600*	*- / -*	*- / 4.600*	*- / -*	*- / 4.900*	*- / -*	*- / 4.998*	*Continuing*	*Continuing*
Subtotal: VG006 - SURTASS Team Trainer	*4 / 15.035*	*1 / 4.700*	*- / -*	*1 / 4.600*	*- / -*	*1 / 4.600*	*- / -*	*1 / 4.900*	*- / -*	*1 / 4.998*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 15.035*	*- / 4.700*	*- / -*	*- / 4.600*	*- / -*	*- / 4.600*	*- / -*	*- / 4.900*	*- / -*	*- / 4.998*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: VG006 - SURTASS Team Trainer	- / 5.026	- / 0.000	- / 1.950	- / 0.000	- / 0.000	- / 0.000	- / 2.000	- / 0.000	- / 2.040	- / 0.000	- / 1.950	- / 12.966
Subtotal: Installation	*- / 5.026*	*- / -*	*- / 1.950*	*- / -*	*- / -*	*- / -*	*- / 2.000*	*- / -*	*- / 2.040*	*- / -*	*- / 1.950*	*- / 12.966*
Total												
Total Cost (Procurement + Support + Installation)	**20.061**	**4.700**	**1.950**	**4.600**	**0.000**	**4.600**	**2.000**	**4.900**	**2.040**	**4.998**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 3 / VG006 - SURTASS Team Trainer
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: VG006 - SURTASS Team Trainer

Manufacturer Information

Manufacturer Name: NSWC CD	Manufacturer Location: BETHESDA, MD
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 14

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022		Jan 2024		Jan 2026		Jan 2028
Delivery Dates	Feb 2023		Feb 2025		Feb 2027		Feb 2029

Manufacturer Name: Lockheed Martin	Manufacturer Location: VA
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 14

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022		Jan 2024		Jan 2026		Jan 2028
Delivery Dates	Feb 2023		Feb 2025		Feb 2027		Feb 2029

Installation Information

Method of Implementation: AIT (Alteration Installation Team):: Installation Name: SURTASS Team Trainer

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	4 / 5.026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	4 / 5.026
FY 2022	- / -	- / -	1 / 1.950	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 1.950
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.000	- / -	- / -	- / -	0 / 0.000	1 / 2.000
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.040	- / -	0 / 0.000	1 / 2.040
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.950	1 / 1.950
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	4 / 5.026	- / -	1 / 1.950	- / -	- / -	- / -	1 / 2.000	- / -	1 / 2.040	- / -	1 / 1.950	8 / 12.966

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	4	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	8
Out	4	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	1	8

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 4 / VG006 - SURTASS-E
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	56.449	44.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	100.483
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	56.449	44.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	100.483
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**56.449**	**44.034**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**100.483**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Expeditionary Surveillance Towed Array Sensor System (SURTASS-E) provides a SURTASS passive capability packaged in ISO-Vans (ISO-International Organization for Standardization) for mobilization on Vessels of Opportunity (VOOs). It was developed as a Rapid Prototyping, Experimentation, and Demonstration (RPED) project, tasked to re-package, test, and demonstrate an expeditionary variant of the passive component of the SURTASS acoustic surveillance system that can be used as a surrogate for some of the SURTASS capabilities provided by traditional T-AGOS class vessels. Funding was added to FY21 and FY22 for procurement of one (1) production SURTASS-E system per year, with deliveries nominally planned 22-24 months after each procurement. Equipment to be delivered is initially provided as ready assets, and installed as needed.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 4 / VG006 - SURTASS-E
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0204311N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: VG006 - SURTASS-E												
B Kits												
Recurring												
1.1.1) SURTASS-E Arrays - NonOrganic (3)	2 / 56.449	1 / 44.034	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 100.483
Subtotal: Recurring	*- / 56.449*	*- / 44.034*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 100.483*
Subtotal: VG006 - SURTASS-E	*2 / 56.449*	*1 / 44.034*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*3 / 100.483*
Subtotal: Procurement, All Modification Items	*- / 56.449*	*- / 44.034*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 100.483*
Installation												
Modification Item 1 of 1: VG006 - SURTASS-E	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*
Total												
Total Cost (Procurement + Support + Installation)	**56.449**	**44.034**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**100.483**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 4 / VG006 - SURTASS-E
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: VG006 - SURTASS-E

Manufacturer Information

Manufacturer Name: LOCKHEED MARTIN	Manufacturer Location: SYRCACUSE, NY
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 19

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Feb 2022						
Delivery Dates	Jan 2024						

Installation Information

Method of Implementation: AIT (Alteration Installation Team):: Installation Name: SURTASS-E Arrays

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	1 / 0.000	- / -	1 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / -
FY 2022	- / -	- / -	- / -	1 / 0.000	0 / 0.000	1 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	1 / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	1 / 0.000	- / -	1 / 0.000	1 / 0.000	0 / 0.000	1 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	3 / -

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Out	1	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3

Footnotes:

(3) The Expeditionary Surveillance Towed Array Sensor System (SURTASS-E) does not require traditional installation methods. SURTASS-E provides a SURTASS passive capability packaged in ISO-Vans (ISO-International Organization for Standardization) for mobilization on various Vessels of Opportunity (VOOs). It is a containerized/modular system and installation is completed as part of the ISO-Van integration and test, prior to shipment to the mobilization site.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 5 / VG007 - Field Changes/Modifications
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	33.300	2.013	2.316	2.468	0.000	2.468	2.765	2.769	3.028	3.088	0.000	51.747
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	33.300	2.013	2.316	2.468	0.000	2.468	2.765	2.769	3.028	3.088	0.000	51.747
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**33.300**	**2.013**	**2.316**	**2.468**	**0.000**	**2.468**	**2.765**	**2.769**	**3.028**	**3.088**	**0.000**	**51.747**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Field Changes/Modifications for correction of deficiencies identified by Fleet use, array support, communications equipment and replacement of aging/unsupportable equipment. Funding facilitates transition to an upgraded command and control system, including installation of the Consolidated Afloat Network Enterprise System (CANES). Other aging End-of-life systems, including Global Command and Control System-Maritime (GCCS-M), Ultra High Frequency (UHF) Line-of-sight Satellite (LOS/SAT), and ship's gyros will need to be replaced in order to ensure continuity of operations should the primary acoustic path to shore become inoperable.

Navy Command, Control, Communications, Computers and Intelligence (C4I) system configurations being procured vary, resulting in the variability in individual unit costs across the fiscal years.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 5 / VG007 - Field Changes/Modifications
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Field Changes/ Modifications	**Modification Type:** N/A	**Related RDT&E PEs:** 0204311N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: VG007 - Field Changes/ Modifications												
B Kits												
Recurring												
1.1.1) Field Changes/Modifications - NonOrganic	93 / 27.506	5 / 1.513	5 / 1.803	5 / 1.943	- / -	5 / 1.943	5 / 2.227	5 / 2.217	5 / 2.462	5 / 2.511	- / -	128 / 42.182
Subtotal: Recurring	*- / 27.506*	*- / 1.513*	*- / 1.803*	*- / 1.943*	*- / -*	*- / 1.943*	*- / 2.227*	*- / 2.217*	*- / 2.462*	*- / 2.511*	*- / 0.000*	*- / 42.182*
Subtotal: VG007 - Field Changes/Modifications	*93 / 27.506*	*5 / 1.513*	*5 / 1.803*	*5 / 1.943*	*- / -*	*5 / 1.943*	*5 / 2.227*	*5 / 2.217*	*5 / 2.462*	*5 / 2.511*	*- / -*	*128 / 42.182*
Subtotal: Procurement, All Modification Items	*- / 27.506*	*- / 1.513*	*- / 1.803*	*- / 1.943*	*- / -*	*- / 1.943*	*- / 2.227*	*- / 2.217*	*- / 2.462*	*- / 2.511*	*- / 0.000*	*- / 42.182*
Installation												
Modification Item 1 of 1: VG007 - Field Changes/ Modifications	- / 5.794	- / 0.500	- / 0.513	- / 0.525	- / 0.000	- / 0.525	- / 0.538	- / 0.552	- / 0.566	- / 0.577	- / 0.000	- / 9.565
Subtotal: Installation	*- / 5.794*	*- / 0.500*	*- / 0.513*	*- / 0.525*	*- / -*	*- / 0.525*	*- / 0.538*	*- / 0.552*	*- / 0.566*	*- / 0.577*	*- / 0.000*	*- / 9.565*
Total												
Total Cost (Procurement + Support + Installation)	**33.300**	**2.013**	**2.316**	**2.468**	**0.000**	**2.468**	**2.765**	**2.769**	**3.028**	**3.088**	**0.000**	**51.747**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 5 / VG007 - Field Changes/Modifications
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: VG007 - Field Changes/Modifications

Manufacturer Information

Manufacturer Name: NIWC PAC				Manufacturer Location: San Diego, CA			
Administrative Leadtime *(in Months)*: 2				Production Leadtime *(in Months)*: 10			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Nov 2021	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027
Delivery Dates	Sep 2022	Sep 2023	Sep 2024	Sep 2025	Sep 2026	Sep 2027	Sep 2028
Manufacturer Name: NIWC LANT				Manufacturer Location: Charleston, SC			
Administrative Leadtime *(in Months)*: 2				Production Leadtime *(in Months)*: 10			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Nov 2021	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027
Delivery Dates	Sep 2022	Sep 2023	Sep 2024	Sep 2025	Sep 2026	Sep 2027	Sep 2028
Manufacturer Name: Lockheed Martin				Manufacturer Location: VA			
Administrative Leadtime *(in Months)*: 2				Production Leadtime *(in Months)*: 10			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Nov 2021	Nov 2022	Nov 2023	Nov 2024	Nov 2025	Nov 2026	Nov 2027
Delivery Dates	Sep 2022	Sep 2023	Sep 2024	Sep 2025	Sep 2026	Sep 2027	Sep 2028

Installation Information

Method of Implementation: AIT (Alteration Installation Team):: Installation Name: Field Changes/Modifications

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	93 / 5.794	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	93 / 5.794
FY 2022	- / -	5 / 0.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	5 / 0.500
FY 2023	- / -	- / -	5 / 0.513	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	5 / 0.513
FY 2024	- / -	- / -	- / -	5 / 0.525	0 / 0.000	5 / 0.525	- / -	- / -	- / -	- / -	0 / 0.000	5 / 0.525
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.538	- / -	- / -	- / -	0 / 0.000	5 / 0.538
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.552	- / -	- / -	0 / 0.000	5 / 0.552
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.566	- / -	0 / 0.000	5 / 0.566
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.577	0 / 0.000	5 / 0.577
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	93 / 5.794	5 / 0.500	5 / 0.513	5 / 0.525	0 / 0.000	5 / 0.525	5 / 0.538	5 / 0.552	5 / 0.566	5 / 0.577	0 / 0.000	128 / 9.565

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 5 / VG007 - Field Changes/Modifications
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: VG007 - Field Changes/Modifications

Installation Information

Method of Implementation: AIT (Alteration Installation Team):: Installation Name: Field Changes/Modifications

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	93	-	-	-	5	-	-	-	5	-	-	-	5	-	-	-	5	-	-	-	5	-	-	-	5	-	-	-	5	-	128
Out	93	-	-	-	5	-	-	-	5	-	-	-	5	-	-	-	5	-	-	-	5	-	-	-	5	-	-	-	5	-	128

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 6 / VG006 J-AOS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	43.354	0.000	0.000	9.107	0.000	9.107	0.194	0.194	0.000	0.000	0.000	52.849
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	43.354	0.000	0.000	9.107	0.000	9.107	0.194	0.194	0.000	0.000	0.000	52.849
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**43.354**	**0.000**	**0.000**	**9.107**	**0.000**	**9.107**	**0.194**	**0.194**	**0.000**	**0.000**	**0.000**	**52.849**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

P-3A breaks out specific U.S. requirements of cost sharing for Japanese Auxiliary Oceanographic Surveillance (J-AOS) ships and shore sites. FY24 funding supports the U.S. cost share for the technology refresh of Integrated Common Processor (ICP) hardware and software aboard three (3) J-AOS ships and at two (2) shore sites. This technology refresh ensures compatibility with the latest ICP hardware.

Prior year funding supported U.S. cost share for the procurement of upgraded TL-29A towed arrays and support equipment for the three (3) J-AOS ships.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	P-1 Line Item Number / Title: 2237 / SURTASS	Modification Number / Title: 6 / VG006 J-AOS
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	
Models of Systems Affected: J-AOS	Modification Type: N/A	Related RDT&E PEs: 0204311N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: VG006 J-AOS												
B Kits												
Non-Recurring												
1.1.1) J-AOS TL-29A Towed Arrays - Organic	3 / 43.354	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 43.354
1.1.2) J-AOS ICP Hardware Tech Refresh - NonOrganic	- / -	- / -	- / -	5 / 9.107	- / -	5 / 9.107	- / -	- / -	- / -	- / -	- / -	5 / 9.107
Subtotal: Non-Recurring	*- / 43.354*	*- / -*	*- / -*	*- / 9.107*	*- / -*	*- / 9.107*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 52.461*
Subtotal: VG006 J-AOS	*3 / 43.354*	*- / -*	*- / -*	*5 / 9.107*	*- / -*	*5 / 9.107*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*8 / 52.461*
Subtotal: Procurement, All Modification Items	*- / 43.354*	*- / -*	*- / -*	*- / 9.107*	*- / -*	*- / 9.107*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 52.461*
Installation												
Modification Item 1 of 1: VG006 J-AOS	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.194	- / 0.194	- / 0.000	- / 0.000	- / 0.000	- / 0.388
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.194*	*- / 0.194*	*- / -*	*- / -*	*- / 0.000*	*- / 0.388*
Total												
Total Cost (Procurement + Support + Installation)	**43.354**	**0.000**	**0.000**	**9.107**	**0.000**	**9.107**	**0.194**	**0.194**	**0.000**	**0.000**	**0.000**	**52.849**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 6 / VG006 J-AOS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: VG006 J-AOS

Manufacturer Information

Manufacturer Name: Lockheed Martin	Manufacturer Location: VA
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Jan 2024				
Delivery Dates			Jan 2025				

Manufacturer Name: Various	Manufacturer Location: Various
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Jan 2024				
Delivery Dates			Jan 2025				

Installation Information

Method of Implementation: [none specified]:: Installation Name: J-AOS ICP Hardware Tech Refresh

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.194	2 / 0.194	- / -	- / -	0 / 0.000	5 / 0.388
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.194	2 / 0.194	- / -	- / -	0 / 0.000	5 / 0.388

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	2	-	-	-	-	-	-	-	-	-	-	5
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	2	-	-	-	-	-	-	-	-	-	-	5

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 3	**P-1 Line Item Number / Title:** 2237 / SURTASS	**Modification Number / Title:** 6 / VG006 J-AOS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Modification Item 1 of 1: VG006 J-AOS		
Installation Information		
Method of Implementation (Organic): J-AOS TL-29A Towed Arrays	**Installation Quantity:** 3	

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 4: Electronic Warfare Equipment	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0204228N	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	2,106.037	313.817	292.417	329.513	0.000	329.513	278.251	513.853	594.041	606.214	3,871.034	8,905.177
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	2,106.037	313.817	292.417	329.513	0.000	329.513	278.251	513.853	594.041	606.214	3,871.034	8,905.177
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**2,106.037**	**313.817**	**292.417**	**329.513**	**0.000**	**329.513**	**278.251**	**513.853**	**594.041**	**606.214**	**3,871.034**	**8,905.177**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	8.887	9.622	10.142	-	10.142	6.206	9.641	11.935	12.419	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/SLQ-32(V) provides a family of modular ship born electronic warfare equipment which is installed on all surface combatants, aircraft carriers, amphibious ships and auxiliaries in the surface Navy. The system provides early detection, analysis, threat warning and protection from anti-ship missiles. The OPN 2312 budget supports the AN/SLQ-32(V)6 and AN/SLQ-32(V)7 variants through procurement and installation. The SEWIP Block 1B3 and Block 2 units are installed conjunctively and comprise the AN/SLQ-32(V)6 system. The SEWIP Block 1B3, Block 2 and Block 3 units are installed conjunctively and comprise the AN/SLQ-32(V)7 system.

TC056: SURFACE ELECTRONIC WARFARE (EW) IMPROVEMENTS BLOCK 1
The Surface Electronic Warfare (EW) Improvement Program (SEWIP) will develop a modern, highly capable family of EW systems by block upgrade of the current AN/SLQ-32 system that is robust in detecting and countering current and future threats and will extend the service life of AN/SLQ3-2(V) systems. Funding procures upgrades to the current AN/SLQ-32 system.

BLOCK 1B1 - SMALL SHIP ELECTRONIC SUPPORT MEASURES SYSTEM (SSESM):
Small Ship Electronic Support Measures System (SSESM) provides Specific Emitter Identification (SEI) capability to various ships/ship classes in a stand-alone configuration.

BLOCK 1B2 - FEDERATED SPECIFIC EMITTER IDENTIFICATION (SEI):
The SEWIP Block 1B2 federated Specific Emitter Identification (SEI), consisting of SEI hardware plus an Improved Console And Display (ICAD) modification kit, fully integrates SEI functionality with the ICAD/ Q-70 console.

BLOCK 1B3 - HIGH GAIN HIGH SENSITIVITY (HGHS):
High Gain High Sensitivity (HGHS) Adjunct Sensor is a critical improvement for threat correlation, situational awareness, and extending the battle space. The SEWIP Block 1B3 and Block 2 units are installed conjunctively to compose the AN/SLQ-32(V)6 system. The SEWIP Block 1B3, Block 2 and Block 3 units are installed conjunctively to compose the AN/SLQ-32(V)7 system. The SEWIP Block 1B3 P-3a funding is broken out to separately show systems installed with SEWIP Block 2 (FMP Block 1B3 for SLQ-32 (V)6)and systems installed with SEWIP Block 2 and Block 3 (FMP Block 1B3 for SLQ-32 (V)7).

TC059: SURFACE ELECTRONIC WARFARE (EW) IMPROVEMENTS BLOCK 2
SEWIP Block 2 provides an upgraded antenna, receiver, and combat systems interface. The upgrades will pace the evolving threat, improve detection and accuracy and mitigate Electromagnetic Interference (EMI). The Block 2 hardware cost includes the SEWIP Block 2 ES system, Blanker-Video Mixer Group (AN/SLA-10D), Common Processing System, Common Display System, Liquid Conditioning Unit and Data

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 4: Electronic Warfare Equipment	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** 0204228N	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Adaptation Processor. The SEWIP Block 1B3 and Block 2 units are installed conjunctively and compose the AN/SLQ-32(V)6 system. The SEWIP Block 1B3, Block 2 and Block 3 units are installed conjunctively to compose the AN/SLQ-32(V)7 system. The SEWIP Block 2 P-3a funding is broken out to separately show systems installed with SEWIP Block 1B3 (FMP Block 2 for SLQ-32 (V)6) and systems installed with SEWIP Block 1B3 and Block 3 (FMP Block 2 for SLQ-32 (V)7).

TC060: SURFACE ELECTRONIC WARFARE (EW) IMPROVEMENTS BLOCK 3:
Block 3 provides Electronic Attack (EA) capability improvement required for the AN/SLQ-32(V) system to keep pace with the evolving threat. The program builds on the EW Electronic Support (ES) capability delivered by Blocks 1 and 2 and will provide a common EA capability to surface ships (CVN, DDG and LHD).

TC070: Scaled Onboard Electronic Attack (SOEA)
Scaled Onboard Electronic Attack (SOEA) is intended to provide an advanced Electronic Attack (EA) counter targeting capability to keep pace with the evolving Anti-Ship Missile Defense (ASMD) threat. It will assimilate into the SEWIP Family of shipboard Electromagnetic Warfare systems. The program is intended to be scalable for Surface Combatants with Size, Weight, Power, and Cooling (SWaP-C) constraints that cannot support SEWIP Block 3 (AN/SLQ-32(V)7).

[P40A / TC956 - USCG WMSL AN/SLQ-32 B(V)2]: TC956 - UNITED STATES COAST GUARD (USCG) WMSL AN/SLQ-32B(V)2
This supports USCG Maritime Security Cutter, Large (WMSL) 758 and 759 with AN/SLQ-32B(V)2 systems and is in accordance with the requirements of OPNAVINST 4000.79A for Navy Type - Navy Owned (NTNO) material. NTNO material is procured by the Navy and installed by the USCG.

[P40A / TC959 - SEWIP LITE FOR USCG SHIPS]: TC959 - SEWIP LITE FOR UNITED STATES COAST GUARD (USCG) SHIPS:
This details the requirements for SEWIP Block 1B2 and SEWIP Lite systems in support of USCG ships, including Offshore Patrol Cutter (OPC), WMSL and Polar Security Cutter (PSC). OPNAVINST 4000.79A for Navy Type - Navy Owned (NTNO) material applies. USN is responsible for equipment procurement & USCG is responsible for the install. SEWIP Lite is a variant of the SEWIP Block 2 specifically tailored for the needs of small ships, such as Littoral Combat Ship (LCS), OPC, WMSL and PSC to address fleet emergent needs for a robust, capable, and sustainable EW system that meets the space, weight and power limitations of these smaller ships. This line also supports SEWIP Lite Shore systems provided as Navy Type - Navy Owned to the USCG in accordance with OPNAVINST 4000.79A for NTNO material.

[P40A / TC960 - AN/SLQ-32 (V) TRAINING SYSTEMS]: TC960 - AN/SLQ-32 (V) TRAINING SYSTEMS
This TC supports the procurement and installation of training systems in support of the AN/SLQ-32(V)6 and (V)7 systems including the Multipurpose Reconfigurable Training System (MRTS) and Electronic Warfare Tactical Simulator (TACSIM). MRTS provides support for Fleet maintenance training for SEWIP Block 2 and SEWIP Block 3. MRTS simulates the tactical system's components and subcomponents necessary for training without requiring the procurement of a full SEWIP Block 1B3, Block 2, or Block 3 system. The TACSIM training system provides tactically-representative SEWIP operator training for EW operators, including simulation capabilities for SLQ-32(V)6, SLQ-32(V)7, Soft Kill Coordination System (SKCS), combat system simulation of Ship Self Defense Ship (SSDS) and AEGIS, and system integration with the onboard Surface Electronic Warfare Team Trainer (SEWTT).

[P40A / TC961 - SOLID STATE PRODUCT SUPPORT INTEGRATOR (PSI)]: TC961 - SOLID STATE PRODUCT SUPPORT INTEGRATOR (PSI)
The Solid State Product Support Integrator (PSI) for Radio Frequency (RF) funding line supports the stand-up of this capability for select components of SEWIP Block 3. The Solid State PSI will provide engineering analysis and product support strategies as well as test and repair capabilities for the high band (HB) and low band (LB) transmit (Tx) and receive (Rx) components of SEWIP Block 3. Solid State PSI funding supports the procurements (investment expense) of HB and LB Tx and Rx module test and repair equipment in FY21-FY26. The engineering support in FY24-FY27 includes the logistics, acquisition engineering, equipment installation, repair development, and program management associated with the Solid State PSI.

[P40A / TC962 AN/SLQ-32 ENGINEERING CHANGE PROPOSALS]: TC962 - AN/SLQ-32 (V)6 Engineering Change Proposals (ECP)]: TC962 - AN/SLQ-32 (V)6 Engineering Change Proposals
AN/SLQ-32(V)6 Engineering Change Proposals (ECP) supports the Non-Recurring Engineering (NRE), procurement of ECP kits and integration / installation of ECP kits that address documented deficiencies in system reliability, maintainability, survivability and obsolescence.

[P40A / TC963 AN/SLQ-32 Test Sets]: TC963 - AN/SLQ-32 Test Sets supports the Non-Recurring Engineering (NRE) and procurement of test sets (above the investment threshold) for use in the organic AN/SLQ-32(V)6 and AN/SLQ-32(V)7 Depot. The AN/SLQ-32(V)6 has been designated a core capability per 10 USC and Depot Source of Repair (DSOR) has been assigned to NSWC Crane. AN/SLQ-32(V)7 is

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 4: Electronic Warfare Equipment	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** 0204228N	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

currently going through the COR and DSOR process. As the number of fielded (V)6, C(V)6 and (V)7 continues to increase and the systems are expected to remain in service through the 2050s, an organic depot must be established to ensure the repair and return of failed Lowest Replaceable Units (LRUs), thus ensuring appropriate operational availability of the system. The organic and commercial industrial bases are not prepared to support the volume of AN/SLQ-32(V)6, C(V)6 and (V)7 repairs as the population of these systems continue to increase in the Fleet.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy | **Date:** March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 4: Electronic Warfare Equipment

P-1 Line Item Number / Title:
2312 / AN/SLQ-32

ID Code (A=Service Ready, B=Not Service Ready): A | **Program Elements for Code B Items:** 0204228N | **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	AN/SLQ-32	P-5a			- / 141.387	- / 57.444	- / 42.784	- / 68.398	- / -	- / 68.398
P-3a	1 / TC056 - BLOCK 1B2 FEDERATED SEI (SHIPALT/AIT)				- / 63.274	- / 1.135	- / 0.936	- / 0.434	- / 0.000	- / 0.434
P-3a	2 / TC056 - BLOCK 1B3 HGHS (SHIPALT/AIT)				- / 166.995	- / 7.936	- / 6.840	- / 6.249	- / 0.000	- / 6.249
P-3a	3 / TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM (SHIPALT/AIT)				- / 1,397.282	- / 42.825	- / 67.995	- / 32.892	- / 0.000	- / 32.892
P-3a	4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM (SHIPALT/AIT)				- / 337.099	- / 204.477	- / 173.862	- / 221.540	- / 0.000	- / 221.540
P-3a	5 / TC070 - Scaled Onboard Electronic Attack (SOEA) (SHIPALT/AIT)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40	**Total Gross/Weapon System Cost**				**- / 2,106.037**	**- / 313.817**	**- / 292.417**	**- / 329.513**	**- / 0.000**	**- / 329.513**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	AN/SLQ-32	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / TC056 - BLOCK 1B2 FEDERATED SEI (SHIPALT/AIT)				- / 1.030	- / 2.055	- / 0.667	- / 0.919	- / 3.595	- / 74.045
P-3a	2 / TC056 - BLOCK 1B3 HGHS (SHIPALT/AIT)				- / 10.757	- / 9.323	- / 6.422	- / 4.033	- / 3.226	- / 221.781
P-3a	3 / TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM (SHIPALT/AIT)				- / 54.626	- / 44.802	- / 35.504	- / 13.253	- / 4.931	- / 1,694.110
P-3a	4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM (SHIPALT/AIT)				- / 155.822	- / 325.739	- / 358.953	- / 368.437	- / 3,629.787	- / 5,775.716
P-3a	5 / TC070 - Scaled Onboard Electronic Attack (SOEA) (SHIPALT/AIT)				- / 0.000	- / 40.001	- / 98.700	- / 98.602	- / 15.750	- / 253.053
P-40	**Total Gross/Weapon System Cost**				**- / 278.251**	**- / 513.853**	**- / 594.041**	**- / 606.214**	**- / 3,871.034**	**- / 8,905.177**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	P-1 Line Item Number / Title: 2312 / AN/SLQ-32	Aggregated Items Title: AN/SLQ-32

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) TC956 - USCG WMSL AN/SLQ-32 B(V)2																				
1.1) WMSL 758 AN/ SLQ-32 B(V)2	A		2,513K	1	2.513	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) WMSL 759 AN/ SLQ-32 B(V)2	A		2,543K	1	2.543	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) TC956 - USCG WMSL AN/SLQ-32 B(V)2			**-**	**-**	***5.056***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2) TC959 - SEWIP LITE FOR USCG SHIPS																				
2.1) SEWIP BLOCK 1B2 (1)(†)	A		400,000.00	6	2.400	399,333.33	3	1.198	-	-	-	407,333.33	3	1.222	-	-	-	407,333.33	3	1.222
2.2) SEWIP BLOCK 1B2 SHORE	A		370,000.00	2	0.740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.3) SEWIP BLOCK 2 LITE(†)	A		4,903K	7	34.319	4,387K	3	13.160	4,857K	2	9.714	5,007K	3	15.021	-	-	-	5,007K	3	15.021
2.4) SEWIP LITE SHORE	A		4,693K	2	9.386	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5) SEWIP CPS and CDS for LITE (2)(†)	A		766,000.00	2	1.532	796,500.00	2	1.593	813,000.00	1	0.813	370,000.00	3	1.110	-	-	-	370,000.00	3	1.110
2.6) SEWIP BLOCK 2 LITE SHORE INSTALL	A		414,500.00	2	0.829	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.7) PRODUCTION SUPPORT	A		-	-	2.627	-	-	0.917	-	-	1.048	-	-	1.079	-	-	-	-	-	1.079
2.8) ENGINEERING CHANGE PROPOSALS (ECPs)	A		-	-	1.868	-	-	0.583	-	-	0.595	-	-	0.613	-	-	-	-	-	0.613
2.9) INCO SPARES	A		-	-	3.079	-	-	1.022	-	-	1.042	-	-	1.073	-	-	-	-	-	1.073
Subtotal: 2) TC959 - SEWIP LITE FOR USCG SHIPS			**-**	**-**	***56.780***	**-**	**-**	***18.473***	**-**	**-**	***13.212***	**-**	**-**	***20.118***	**-**	**-**	**-**	**-**	**-**	***20.118***
3) TC960 - AN/SLQ-32 (V) TRAINING SYSTEMS																				
3.1) SEWIP BLOCK 2 MRTS UNITS	A		600,000.00	2	1.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.2) SEWIP BLOCK 3 MRTS UNITS	A		705,000.00	2	1.410	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3) SEWIP BLOCK 2 MRTS SOFTWARE NRE	A		-	-	3.752	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.4) SEWIP BLOCK 3 MRTS SOFTWARE NRE	A		-	-	4.102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5) TACSIM	A		178,900.00	10	1.789	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) TC960 - AN/SLQ-32 (V) TRAINING SYSTEMS			**-**	**-**	***12.253***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
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Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
4) TC961 - SOLID STATE PRODUCT SUPPORT INTEGRATOR (PSI) (3)																				
4.1) HIGH BAND TRANSMIT AND RECEIVE EQUIPMENT(†)	A		1,240K	2	2.479	785,000.00	1	0.785	801,000.00	1	0.801	817,000.00	1	0.817	-	-	-	817,000.00	1	0.817
4.2) LOW BAND TRANSMIT AND RECEIVE EQUIPMENT(†)	A		920,500.00	2	1.841	785,000.00	1	0.785	801,000.00	1	0.801	817,000.00	1	0.817	-	-	-	817,000.00	1	0.817
4.3) Engineering Support	A		-	-	-	-	-	-	-	-	-	-	-	2.199	-	-	-	-	-	2.199
Subtotal: 4) TC961 - SOLID STATE PRODUCT SUPPORT INTEGRATOR (PSI)			**-**	**-**	***4.320***	**-**	**-**	***1.570***	**-**	**-**	***1.602***	**-**	**-**	***3.833***	**-**	**-**	**-**	**-**	**-**	***3.833***
5) TC962 AN/SLQ-32 ENGINEERING CHANGE PROPOSALS (4)																				
5.1) RMA/INT Non Recurring Engineering (5)	A		-	-	49.135	-	-	2.239	-	-	3.677	-	-	2.580	-	-	-	-	-	2.580
5.2) RMA/INT Kit Procurement (Installation Cost Required)(†)	A		263,000.00	2	0.526	268,476.19	42	11.276	-	-	-	-	-	-	-	-	-	-	-	-
5.3) RMA/INT Kit Procurement (Installation Cost Not Required) (6)(†)	A		263,000.00	2	0.526	268,466.67	15	4.027	273,826.09	23	6.298	260,800.00	25	6.520	-	-	-	260,800.00	25	6.520
5.4) RMA/INT Kit Installation(†)	A		42,000.00	2	0.084	42,761.90	42	1.796	-	-	-	-	-	-	-	-	-	-	-	-
5.5) Environmental Non Recurring Engineering (7)	A		-	-	2.995	-	-	0.240	-	-	3.496	-	-	2.580	-	-	-	-	-	2.580
5.6) Environmental Kit Procurement (Installation Cost Required) (8)(†)	A		13,500.00	8	0.108	14,000.00	1	0.014	14,000.00	2	0.028	-	-	-	-	-	-	-	-	-
5.7) Environmental Kit Procurement (Installation Cost Not Required) (9)(†)	A		13,484.85	66	0.890	13,750.00	208	2.860	14,022.22	180	2.524	13,356.44	202	2.698	-	-	-	13,356.44	202	2.698
5.8) Environmental Kit Installation (10)(†)	A		10,201.34	149	1.520	10,375.00	8	0.083	11,000.00	1	0.011	-	-	-	-	-	-	-	-	-
5.9) Obsolescence Non Recurring Engineering (11)	A		-	-	5.282	-	-	8.632	-	-	7.168	-	-	5.004	-	-	-	-	-	5.004

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
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Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
5.10) Obsolescence Kit Procurement (Installation Cost Not Required) (12)(†)	A		-	-	-	191,750.00	5	0.959	195,500.00	22	4.301	186,210.53	38	7.076	-	-	-	186,210.53	38	7.076
5.11) Liquid Cooling Unit Back Fit Installation (13)(†)	A		40,555.56	9	0.365	41,666.67	9	0.375	42,454.55	11	0.467	43,200.00	5	0.216	-	-	-	43,200.00	5	0.216
Subtotal: 5) TC962 AN/SLQ-32 ENGINEERING CHANGE PROPOSALS			**-**	**-**	***61.431***	**-**	**-**	***32.501***	**-**	**-**	***27.970***	**-**	**-**	***26.674***	**-**	**-**	**-**	**-**	**-**	***26.674***
6) TC963 AN/SLQ-32 Test Sets (14)																				
6.1) (V)6 Test Set NRE and Support	A		-	-	1.547	-	-	3.742	-	-	-	-	-	4.862	-	-	-	-	-	4.862
6.2) AN/SLQ-32(V)6 Test Sets(†)	A		-	-	-	1,158K	1	1.158	-	-	-	1,325K	5	6.625	-	-	-	1,325K	5	6.625
6.3) (V)7 Test Set NRE and Support	A		-	-	-	-	-	-	-	-	-	-	-	2.060	-	-	-	-	-	2.060
6.4) AN/SLQ-32(V)7 Test Sets(†)	A		-	-	-	-	-	-	-	-	-	1,056K	4	4.226	-	-	-	1,056K	4	4.226
Subtotal: 6) TC963 AN/SLQ-32 Test Sets			**-**	**-**	***1.547***	**-**	**-**	***4.900***	**-**	**-**	**-**	**-**	**-**	***17.773***	**-**	**-**	**-**	**-**	**-**	***17.773***
Total			**-**	**-**	**141.387**	**-**	**-**	**57.444**	**-**	**-**	**42.784**	**-**	**-**	**68.398**	**-**	**-**	**-**	**-**	**-**	**68.398**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) The NTNO modernization plan does not have a requirement to procure SEWIP Block 1B2 (2.1) in FY23. SEWIP Block 1B2 (2.1) FY23 to FY24 qtys align with requirements for USCG ships.

(2) SEWIP CPS and CDS for Lite (2.5): Unit cost decreases from FY23 to FY24. Beginning in FY24, USN is responsible for providing only the CDS as part of the NTNO requirement. FY24 and forward unit cost for 2.5 reflects only the CDS cost.

(3) SOLID STATE PRODUCT SUPPORT INTEGRATOR (PSI) TC961 increases from FY23 to FY24 due to the start of Engineering Support that includes the logistics, acquisition engineering, equipment installation, repair documentation, and program management associated with the Solid State PSI.

(4) AN/SLQ-32(V)6 Engineering Change Proposals (ECP) supports the Non-Recurring Engineering (NRE), procurement of ECP kits and integration / installation of ECP kits that address documented deficiencies in system reliability, maintainability, survivability and obsolescence. ECP kits will be incorporated into one of two methods. The ECP kit will be installed during Production Integration Test (PIT) for units delivered to the Government but not yet installed on ships. There is no installation cost associated with units incorporated during PIT. The requirement for these kits is reflected in 5.3, 5.7, and 5.10 (Installation Cost Not required). The second method is for units already installed on ships and installed during a ship's Window of Opportunity (WoO). The requirements for these kits are reflected in 5.2, 5.6, and 5.11 (Installation Cost Required). Reliability, Maintainability and Availability (RM&A) / Integration (INT), (ECP) efforts are to maintain and meet Operational Availability (Ao) requirements. Current metrics show that the systems are performing below reliability requirements (5.1, 5.2, 5.3 and 5.4). Environmental ECP efforts are to correct identified issues with environmental survivability, including correction of shock deficiencies, and to meet system survivability requirements (5.5, 5.6, 5.7 and 5.8). Obsolescence ECPs correct identified obsolete parts issues and implement corrective action to ensure that the systems remain supportable, sustainable, and affordable throughout the planned lifecycle (5.9 and 5.10).

(5) RMA/INT Non Recurring Engineering: Requirement for 5.1 decreased from FY23 to FY24 to align with efforts for software changes, technical studies and sustainment analysis, configuration and data management, and engineering investigations in support of RMA/INT ECPs.

(6) RMA/INT Kit Procurement (Installation Cost Not Required): Requirements for 5.3 increased from FY23 to FY24 due to increase in procurement quantities to 25. In FY24, unit cost decreased due to anticipated learning curve and quantity price breaks.

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(7) Environmental Non Recurring Engineering: Requirements for 5.5 decreased in FY24 to align with requirements for software changes, technical studies and sustainment analysis, configuration and data management, and engineering investigations in support of ECPs.

(8) Environmental Kit Procurement (Installation Cost Required): Requirements for 5.6 decreased from FY23 to FY24 due to decrease in procurement quantities to 0.

(9) Environmental Kit Procurement (Installation Cost Not Required): Requirements for 5.7 increased from FY23 to FY24 due to increase in procurement quantities to 202. In FY24, unit cost decreased due to anticipated learning curve and quantity price break.

(10) Environmental Kit Installation: Requirements for 5.8 decreased from FY23 to FY24 due to no install requirements in FY24.

(11) Obsolescence Non-Recurring Engineering: Requirements for 5.9 decreased from FY23 to FY24 to align with reduced efforts for software changes, technical studies and sustainment analysis, configuration and data management, and engineering investigations in support of ECPs.

(12) Obsolescence Kit Procurement (Installation Cost Not Required): Requirements for 5.10 increased from FY23 to FY24 due to increased procurement quantities to 38. In FY24, unit cost decreased due to anticipated learning curve and quantity-price breaks.

(13) Liquid Cooling Unit Back Fit Installation: Requirements for 5.11 decreased from FY23 to FY24 due to decrease in installation quantities to 5.

(14) AN/SLQ-32 Test Sets supports the Non-Recurring Engineering (NRE) and procurement of test sets (above the investment threshold) for use in the organic AN/SLQ-32(V)6 and (V)7 Depot. TC963 has been restructured for the FY24 budget submission: 6.1 and 6.2 are for AN/SLQ-32(V)6 and 6.3 and 6.4 are for AN/SLQ-32(V)7. Equipment procured in FY22 was to support AN/SLQ-32(V)6. TC963 increases in FY24 to align with the requirement for Organic Depot Standup in support of AN/SLQ-32(V)6 and (V)7 systems. The FY24 (V)6 Test set procurement requirement includes material and effort required to procure test sets for the following 5 LRUs: Hybrid Processor Circuit Card, Radio Frequency Dual Transmitter, Radio Frequency Quad Receiver, High Probability of Intercept Tuner Circuit Card Assembly and Uninterrupted Power Supply. The (V)7 test set requirement in FY24 supports 1 EA High Band Transmit and Receive Test Set, 1 EA Low Band Transmit and Receive Test Set, 1 EA High Voltage Test Suite, and 1 EA Low Voltage Test Suite. The following non-recurring depot stand up support efforts are required for each (V)6 and (V)7 LRU: Technical Data Review, Facility Assessment, Manpower Assessment, Capacity Analysis, and Packaging, Handling, Storage & Transportation Unit (PHS&T). Unit cost will vary from year to year depending on the type and quantity of test equipment sets being procured.

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Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) TC959 - SEWIP LITE FOR USCG SHIPS												
2.1) SEWIP BLOCK 1B2 (1)		2021 (15)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	May 2021	Jun 2023	4	391,500.00	Y		Mar 2016
2.1) SEWIP BLOCK 1B2 (1)		2022	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Oct 2021	Jun 2023	3	399,333.33	Y		Mar 2016
2.1) SEWIP BLOCK 1B2 (1)		2024	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Mar 2024	Nov 2024	3	407,333.33	Y		Mar 2016
2.3) SEWIP BLOCK 2 LITE		2022 (16)	Lockheed Martin / Syracuse, NY	C / FFP	Washington Navy Yard	Jun 2022	Nov 2023	3	4,387K	Y		Dec 2019
2.3) SEWIP BLOCK 2 LITE		2023 (17)	Lockheed Martin / Syracuse, NY	C / FFP	Washington Navy Yard	Mar 2023	Jun 2024	2	4,857K	Y		Dec 2019
2.3) SEWIP BLOCK 2 LITE		2024	Lockheed Martin / Syracuse, NY	C / FFP	Washington Navy Yard	Mar 2024	Jun 2025	3	5,007K	Y		Dec 2019
2.5) SEWIP CPS and CDS for LITE (2)		2022 (18)	DRS Laurel Tech / Johnstown, PA / Johnstown, PA	C / FFP	Washington Navy Yard	Jul 2022	Dec 2023	2	796,500.00	Y		Mar 2019
2.5) SEWIP CPS and CDS for LITE (2)		2023	DRS Laurel Tech / Johnstown, PA / Johnstown, PA	C / FFP	Washington Navy Yard	Mar 2023	Jul 2024	1	813,000.00	Y		Mar 2019
2.5) SEWIP CPS and CDS for LITE (2)		2024	DRS Laurel Tech / Johnstown, PA / Johnstown, PA	C / FFP	Washington Navy Yard	Mar 2024	Jul 2025	3	370,000.00	Y		Mar 2019
4) TC961 - SOLID STATE PRODUCT SUPPORT INTEGRATOR (PSI)												
4.1) HIGH BAND TRANSMIT AND RECEIVE EQUIPMENT		2022	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jan 2022	Feb 2023	1	785,000.00	Y		Oct 2020
4.1) HIGH BAND TRANSMIT AND RECEIVE EQUIPMENT		2023	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Mar 2023	Apr 2024	1	801,000.00	Y		Oct 2020
4.1) HIGH BAND TRANSMIT AND RECEIVE EQUIPMENT		2024	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Mar 2024	Apr 2025	1	817,000.00	Y		Oct 2020
4.2) LOW BAND TRANSMIT AND RECEIVE EQUIPMENT		2022	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jan 2022	Feb 2023	1	785,000.00	Y		Oct 2020
4.2) LOW BAND TRANSMIT AND RECEIVE EQUIPMENT		2023	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Mar 2023	Apr 2024	1	801,000.00	Y		Oct 2020
4.2) LOW BAND TRANSMIT AND RECEIVE EQUIPMENT		2024	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Mar 2024	Apr 2025	1	817,000.00	Y		Oct 2020
5) TC962 AN/SLQ-32 ENGINEERING CHANGE PROPOSALS												
5.2) RMA/INT Kit Procurement (Installation Cost Required)		2022 (19)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jul 2022	Sep 2023	42	268,476.19	Y		Oct 2020
5.3) RMA/INT Kit Procurement (Installation Cost Not Required) (6)		2022 (20)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jul 2022	Oct 2023	15	268,466.67	Y		Oct 2020
5.3) RMA/INT Kit Procurement (Installation Cost Not Required) (6)		2023 (21)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	May 2023	Aug 2024	23	273,826.09	Y		Oct 2020
5.3) RMA/INT Kit Procurement (Installation Cost Not Required) (6)		2024	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Mar 2024	Jun 2025	25	260,800.00	Y		Oct 2020

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Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
5.4) RMA/INT Kit Installation		2022 (22)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jul 2022	Sep 2023	42	42,761.90	N		Oct 2020
5.6) Environmental Kit Procurement (Installation Cost Required) (8)		2022 (23)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jul 2022	Sep 2023	1	14,000.00	Y		Oct 2020
5.6) Environmental Kit Procurement (Installation Cost Required) (8)		2023 (24)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	May 2023	Aug 2024	2	14,000.00	Y		Oct 2020
5.7) Environmental Kit Procurement (Installation Cost Not Required) (9)		2022 (25)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jul 2022	Sep 2023	208	13,750.00	Y		Oct 2020
5.7) Environmental Kit Procurement (Installation Cost Not Required) (9)		2023 (26)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	May 2023	Aug 2024	180	14,022.22	Y		Oct 2020
5.7) Environmental Kit Procurement (Installation Cost Not Required) (9)		2024	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jul 2024	Jun 2025	202	13,356.44	Y		Oct 2020
5.8) Environmental Kit Installation (10)		2022 (27)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jul 2022	Sep 2023	8	10,375.00	Y		Oct 2020
5.8) Environmental Kit Installation (10)		2023 (28)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	May 2023	Aug 2024	1	11,000.00	Y		Oct 2020
5.10) Obsolescence Kit Procurement (Installation Cost Not Required) (12)		2022	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Jul 2022	Oct 2023	5	191,750.00	Y		Oct 2020
5.10) Obsolescence Kit Procurement (Installation Cost Not Required) (12)		2023 (29)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	May 2023	Aug 2024	22	195,500.00	Y		Oct 2020
5.10) Obsolescence Kit Procurement (Installation Cost Not Required) (12)		2024	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Mar 2024	Jun 2025	38	186,210.53	Y		Oct 2020
5.11) Liquid Cooling Unit Back Fit Installation (13)		2022	Crane Organic / Crane, / Indiana / NSWC Crane	C / FFP	NSWC Crane	Nov 2021	Oct 2022	9	41,666.67	Y		Dec 2017
5.11) Liquid Cooling Unit Back Fit Installation (13)		2023	Crane Organic / Crane, / Indiana / NSWC Crane	C / FFP	NSWC Crane	Nov 2022	Oct 2023	11	42,454.55	Y		Dec 2017
5.11) Liquid Cooling Unit Back Fit Installation (13)		2024	Crane Organic / Crane, / Indiana / NSWC Crane	C / FFP	NSWC Crane	Nov 2023	Oct 2024	5	43,200.00	Y		Dec 2017
6) TC963 AN/SLQ-32 Test Sets												
6.2) AN/SLQ-32(V)6 Test Sets		2022 (30)	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Aug 2022	Aug 2023	1	1,158K	Y		Mar 2021
6.2) AN/SLQ-32(V)6 Test Sets		2024	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Mar 2024	Mar 2025	5	1,325K	Y		Mar 2021
6.4) AN/SLQ-32(V)7 Test Sets		2024	Crane Organic / Crane, Indiana	C / FFP	NSWC Crane	Mar 2024	Jul 2025	4	1,056K	Y		Dec 2022

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Footnotes:

(15) FY21 delivery date has shifted from Dec 2022 to Jun 2023 due to circuit card obsolescence issues.

(16) Award date slipped to Jun 2022 due to late receipt of funding.

(17) At the FY23 budget submission, the award date and delivery date were cited incorrectly for the FY23 systems. The dates have been corrected in this budget submission.

(18) FY22 contract award date has slipped to July 2022 due to late receipt of funding. Subsequently, the delivery date has slipped to Dec 2023.

(19) Award of all FY22 ECP kits with the exception of Liquid Cooling units were delayed to Jul 2022 due to late receipt of funding.

(20) Award of all FY22 ECP kits with the exception of Liquid Cooling units were delayed to Jul 2022 due to late receipt of funding.

(21) Award of all FY23 ECP kits with the exception of Liquid Cooling units were delayed to May 2023 due to late receipt of funding.

(22) Award of all FY22 ECP kits with the exception of Liquid Cooling units were delayed to Jul 2022 due to late receipt of funding.

(23) Award of all FY22 ECP kits with the exception of Liquid Cooling units were delayed to Jul 2022 due to late receipt of funding.

(24) Award of all FY23 ECP kits with the exception of Liquid Cooling units were delayed to May 2023 due to late receipt of funding.

(25) Award of all FY22 ECP kits with the exception of Liquid Cooling units were delayed to Jul 2022 due to late receipt of funding.

(26) Award of all FY23 ECP kits with the exception of Liquid Cooling units were delayed to May 2023 due to late receipt of funding.

(27) Award of all FY22 ECP kits with the exception of Liquid Cooling units were delayed to Jul 2022 due to late receipt of funding.

(28) Award of all FY23 ECP kits with the exception of Liquid Cooling units were delayed to May 2023 due to late receipt of funding.

(29) Award of all FY23 ECP kits with the exception of the Liquid Cooling Units were delayed to May 2023 due to late receipt of funding.

(30) FY22 contract award date slipped to Aug 2022 due to late receipt of funding; Subsequently, the delivery date slipped to Aug 2023.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 1 / TC056 - BLOCK 1B2 FEDERATED SEI
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	63.274	1.135	0.936	0.434	0.000	0.434	1.030	2.055	0.667	0.919	3.595	74.045
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	63.274	1.135	0.936	0.434	0.000	0.434	1.030	2.055	0.667	0.919	3.595	74.045
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**63.274**	**1.135**	**0.936**	**0.434**	**0.000**	**0.434**	**1.030**	**2.055**	**0.667**	**0.919**	**3.595**	**74.045**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The SEWIP Block 1B2 federated Specific Emitter Identification (SEI), consisting of SEI hardware plus an Improved Console And Display (ICAD) modification kit, fully integrates SEI functionality with the ICAD/ Q-70 console.

Notes:

(1) The SEWIP Block 1B2 system is being installed as a back fit on the limited number of ships that did not receive the upgrade during the initial fielding. Both the procurement and installation schedules have changed significantly due to several factors including units procured in prior years, changes in ship availabilities and the ship decommissioning schedule.
- Due to changes in ship availabilities since the FY23 budget request, units procured in prior years will meet planned installation schedules through FY26. Additionally, CG 66 has been removed from the SEWIP Block 1B2 installation schedule due to being decommissioned in Sep 2022. Subsequently, the total quantity has been reduced from 74 to 73.
- Installations planned for FY22 and FY23 have moved to FY25 and forward.

(2) The FY24 budget request of $0.434M supports spares, production support and the Design Services Allocation requirements for future year installations.

(3) For FMP Block 1B2 systems, the production lead time is 20 months, 14 months for production and 6 months for systems integration prior to delivery to a ship for installation. The system integrator, NSWC Crane, conducts integration, testing, and preparation for shipment. The 6 month integration period is for integration and testing of the SEWIP Blocks 1B2, 1B3 and 2 into an SLQ-32(V)6 system, preparation for shipment and delivery to the shipyard 30 days prior to the start of the availability (A-30).

(4) SEWIP installations are phased over three years with planning efforts being conducted in the two fiscal years prior to the installation of the unit on the ship. The funding requirements are phased in accordance with the Navy Modernization Process Management and Operational Manual (NMP MOM) SL720-AA-MAN-030 Rev 4. Funding is provided in the two years before the physical shipboard installation for Design Allocation Services (DSA) and installation kit material. DSA includes ship check, ship installation drawings and bill of materials creation. Installation kit material is composed of all items marked government furnished material on the bill of materials. These items take longer than 30 days to procure and therefore cannot be supported by the installing activity. Total cost for installations shows cost for year of install onboard ships and DSA in the two years prior to the installation.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 1 / TC056 - BLOCK 1B2 FEDERATED SEI
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: TC056 SURFACE EW IMPROVEMENTS BLOCK 1: BLOCK 1B2 - FEDERATED SEI	**Modification Type:** SHIPALT/AIT	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: TC056 - BLOCK 1B2 FEDERATED SEI												
B Kits												
Recurring												
1.1.1) FMP SHIP UNITS - NonOrganic (31)	71 / 26.549	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.424	1 / 0.436	- / -	- / -	73 / 27.409
1.1.2) NON-FMP SHORE SITE UNITS - NonOrganic	3 / 1.138	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.138
1.1.3) Installation and Check Out (INCO) Spares - Organic	- / 0.570	- / 0.165	- / 0.196	- / 0.200	- / -	- / 0.200	- / -	- / -	- / -	- / -	- / -	- / 1.131
Subtotal: Recurring	*- / 28.257*	*- / 0.165*	*- / 0.196*	*- / 0.200*	*- / -*	*- / 0.200*	*- / -*	*- / 0.424*	*- / 0.436*	*- / -*	*- / 0.000*	*- / 29.678*
Subtotal: TC056 - BLOCK 1B2 FEDERATED SEI	*74 / 28.257*	*- / 0.165*	*- / 0.196*	*- / 0.200*	*- / -*	*- / 0.200*	*- / -*	*1 / 0.424*	*1 / 0.436*	*- / -*	*- / -*	*76 / 29.678*
Subtotal: Procurement, All Modification Items	*- / 28.257*	*- / 0.165*	*- / 0.196*	*- / 0.200*	*- / -*	*- / 0.200*	*- / -*	*- / 0.424*	*- / 0.436*	*- / -*	*- / 0.000*	*- / 29.678*
Support *(All Modification Items)*												
2.1) Production Support	- / 9.160	- / 0.134	- / 0.148	- / 0.131	- / -	- / 0.131	- / 0.135	- / 0.139	- / 0.143	- / 0.147	- / 1.473	- / 11.610
2.2) Tech Refresh	- / 5.739	- / 0.760	- / 0.362	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.122	- / 8.983
2.3) Engineering Change Proposals (ECPs)	- / 0.137	- / 0.036	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.173
Subtotal: Support	*- / 15.036*	*- / 0.930*	*- / 0.510*	*- / 0.131*	*- / -*	*- / 0.131*	*- / 0.135*	*- / 0.139*	*- / 0.143*	*- / 0.147*	*- / 3.595*	*- / 20.766*
Installation												
Modification Item 1 of 1: TC056 - BLOCK 1B2 FEDERATED SEI	- / 19.981	- / 0.040	- / 0.230	- / 0.103	- / 0.000	- / 0.103	- / 0.895	- / 1.492	- / 0.088	- / 0.772	- / 0.000	- / 23.601
Subtotal: Installation	*- / 19.981*	*- / 0.040*	*- / 0.230*	*- / 0.103*	*- / -*	*- / 0.103*	*- / 0.895*	*- / 1.492*	*- / 0.088*	*- / 0.772*	*- / 0.000*	*- / 23.601*
Total												
Total Cost (Procurement + Support + Installation)	**63.274**	**1.135**	**0.936**	**0.434**	**0.000**	**0.434**	**1.030**	**2.055**	**0.667**	**0.919**	**3.595**	**74.045**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 1 / TC056 - BLOCK 1B2 FEDERATED SEI

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: TC056 - BLOCK 1B2 FEDERATED SEI

Manufacturer Information

Manufacturer Name: Crane Organic | Manufacturer Location: Crane, Indiana

Administrative Leadtime *(in Months)*: 0 | Production Leadtime *(in Months)*: 20

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates					Feb 2026	Feb 2027	
Delivery Dates					Oct 2027	Oct 2028	

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: FMP SHIP UNITS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	65 / 19.541	0 / 0.040	0 / 0.010	0 / 0.103	0 / 0.000	0 / 0.103	2 / 0.895	4 / 1.482	- / -	- / -	0 / 0.000	71 / 22.071
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.005	0 / 0.044	1 / 0.386	0 / 0.000	1 / 0.435
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.005	0 / 0.044	1 / 0.386	0 / 0.000	1 / 0.435
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	65 / 19.541	0 / 0.040	0 / 0.010	0 / 0.103	0 / 0.000	0 / 0.103	2 / 0.895	4 / 1.492	0 / 0.088	2 / 0.772	0 / 0.000	73 / 22.941

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	65	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	1	1	-	-	-	-	1	-	-	1	-	73
Out	61	-	-	-	-	1	1	1	-	1	-	-	-	-	-	-	-	-	1	-	1	1	-	1	2	-	-	-	-	2	73

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 1 / TC056 - BLOCK 1B2 FEDERATED SEI

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: TC056 - BLOCK 1B2 FEDERATED SEI

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: NON-FMP SHORE SITE UNITS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	2 / 0.440	- / -	1 / 0.220	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 0.660
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	2 / 0.440	- / -	1 / 0.220	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 0.660

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Out	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3

Footnotes:

(31) Due to changes in ship availabilities since the FY23 budget request, units procured in prior years will meet planned installation schedules through FY26. Additionally, CG 66 has been removed from the SEWIP Block 1B2 installation schedule due to being decommissioned in Sep 2022. Subsequently, the total quantity has been reduced from 74 to 73. FY22 installation funding decreased by $0.760M due to a reduction of prior year installations by two units. FY23 installation funding decreased by $0.362M due to a reduction in prior year installations by one unit. Installations of these units have been moved to FY26. Delta of the FY22 and FY23 funds were moved to tech refresh to support the SEI tuner and chassis redesign efforts.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 2 / TC056 - BLOCK 1B3 HGHS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	166.995	7.936	6.840	6.249	0.000	6.249	10.757	9.323	6.422	4.033	3.226	221.781
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	166.995	7.936	6.840	6.249	0.000	6.249	10.757	9.323	6.422	4.033	3.226	221.781
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**166.995**	**7.936**	**6.840**	**6.249**	**0.000**	**6.249**	**10.757**	**9.323**	**6.422**	**4.033**	**3.226**	**221.781**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Block 1B3: High Gain High Sensitivity (HGHS)
High Gain High Sensitivity (HGHS) Adjunct Sensor is a critical improvement for threat correlation, situational awareness, and extending the battle space. The SEWIP Block 1B3 and Block 2 units are installed conjunctively to compose the AN/SLQ-32(V)6 system. The SEWIP Block 1B3, Block 2 and Block 3 units are installed conjunctively to compose the AN/SLQ-32(V)7 system. The SEWIP Block 1B3 P-3a funding is broken out to separately show systems installed with SEWIP Block 2 (FMP Block 1B3 for SLQ-32 (V)6) and systems installed with SEWIP Block 2 and Block 3 (FMP Block 1B3 for SLQ-32 (V)7.

Notes:

(1) The SEWIP Block 1B3 system is being installed as a back fit on the limited number of ships. The budget submission reflects that the procurement and installation schedules have changed significantly due to several factors including the number of units procured in prior years, changes in ship availabilities and the ship decommissioning schedules.

(2) The FY24 budget request of $6.249M includes procurement of spares, production support, the installation of 4 FMP Block 1B3 systems for AN/SLQ-32(V)6 and Design Services Allocation for units to be installed in future years.

(3) Production Support provides government oversight for production of hardware and hardware components and is composed primarily of Warfare Center Activity and Original Equipment Manufacturer (OEM) support of production related software and hardware problems through Software Support Activity (SSA), Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), Technical Design Agent (TDA) and Professional Support Services (PSS). Also includes support for cybersecurity compliance packages in the enterprise mission assurance support service (eMASS), element, and combat system certifications.

(4) Installation cost estimates are based on actual costs of installations to date.

(5) For FMP Block 1B3 systems, the production lead time is 23 months, (17 months for production and 6 months for systems integration prior to delivery to the ship for installation). The systems integrator, NSWC Crane, conducts integration, testing, and preparation for shipment. The 6-month integration period is for integration and testing of the SEWIP Blocks 1B2, 1B3, and 2 into a SLQ-32(V)6 system, preparation for shipment and delivery to the shipyard 30 days prior to the start of the availability (A-30).

(6) SEWIP installations are phased over three years with planning efforts being conducted in the two fiscal years prior to the installation of the unit on the ship. The funding requirements are phased in accordance with the Navy Modernization Process Management and Operational Manual (NMP MOM) SL720-AA-MAN-030 Rev 4. Funding is provided in the two years before the physical shipboard installation for Design Allocation Services (DSA) and installation kit material. DSA includes ship check, ship installation drawings and bill of materials creation. Installation kit material is composed of all items marked government

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 2 / TC056 - BLOCK 1B3 HGHS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

furnished material on the bill of materials. These items take longer than 30 days to procure and therefore cannot be supported by the installing activity. Total cost for installations shows cost for year of install onboard ships and DSA in the two years prior to the installation.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 2 / TC056 - BLOCK 1B3 HGHS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: TC056 SURFACE EW IMPROVEMENTS BLOCK 1 - BLOCK 1B3 HGHS	**Modification Type:** SHIPALT/AIT	**Related RDT&E PEs:** 0604757N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: TC056 - BLOCK 1B3 HGHS												
B Kits												
Recurring												
1.1.1) FMP BLOCK 1B3 for SLQ-32 (V)6 - NonOrganic (32)	93 / 76.328	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.012	- / -	- / -	94 / 77.340
1.1.2) FMP BLOCK 1B3 for SLQ-32 (V)7 - NonOrganic	4 / 3.201	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 3.201
1.1.3) NON-FMP BLOCK 1B3 SHORE SITE - NonOrganic	7 / 8.466	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 8.466
1.1.4) BLK 1B3 GFE UNIT FOR BLK 3 OEM - NonOrganic	2 / 2.602	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.602
1.1.5) Installation and Check Out (INCO) Spares - Organic	- / 3.809	- / 0.775	- / -	- / 0.792	- / -	- / 0.792	- / 0.506	- / 0.497	- / 0.567	- / -	- / -	- / 6.946
Subtotal: Recurring	*- / 94.406*	*- / 0.775*	*- / -*	*- / 0.792*	*- / -*	*- / 0.792*	*- / 0.506*	*- / 0.497*	*- / 1.579*	*- / -*	*- / 0.000*	*- / 98.555*
Subtotal: TC056 - BLOCK 1B3 HGHS	*106 / 94.406*	*- / 0.775*	*- / -*	*- / 0.792*	*- / -*	*- / 0.792*	*- / 0.506*	*- / 0.497*	*1 / 1.579*	*- / -*	*- / -*	*107 / 98.555*
Subtotal: Procurement, All Modification Items	*- / 94.406*	*- / 0.775*	*- / -*	*- / 0.792*	*- / -*	*- / 0.792*	*- / 0.506*	*- / 0.497*	*- / 1.579*	*- / -*	*- / 0.000*	*- / 98.555*
Support *(All Modification Items)*												
2.1) Production Support (33)	- / 21.179	- / 2.315	- / 2.097	- / 1.266	- / -	- / 1.266	- / 1.623	- / 1.813	- / 1.867	- / 1.923	- / 1.981	- / 36.064
Subtotal: Support	*- / 21.179*	*- / 2.315*	*- / 2.097*	*- / 1.266*	*- / -*	*- / 1.266*	*- / 1.623*	*- / 1.813*	*- / 1.867*	*- / 1.923*	*- / 1.981*	*- / 36.064*
Installation												
Modification Item 1 of 1: TC056 - BLOCK 1B3 HGHS	- / 51.410	- / 4.846	- / 4.743	- / 4.191	- / 0.000	- / 4.191	- / 8.628	- / 7.013	- / 2.976	- / 2.110	- / 1.245	- / 87.162
Subtotal: Installation	*- / 51.410*	*- / 4.846*	*- / 4.743*	*- / 4.191*	*- / -*	*- / 4.191*	*- / 8.628*	*- / 7.013*	*- / 2.976*	*- / 2.110*	*- / 1.245*	*- / 87.162*
Total												
Total Cost (Procurement + Support + Installation)	**166.995**	**7.936**	**6.840**	**6.249**	**0.000**	**6.249**	**10.757**	**9.323**	**6.422**	**4.033**	**3.226**	**221.781**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 2 / TC056 - BLOCK 1B3 HGHS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: TC056 - BLOCK 1B3 HGHS

Manufacturer Information

Manufacturer Name: LOCKHEED MARTIN	Manufacturer Location: SYRACUSE, NY
Administrative Leadtime *(in Months)*: 0	Production Leadtime *(in Months)*: 23

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates						Mar 2027	
Delivery Dates						Feb 2029	

Installation Information

Method of Implementation: [none specified]:: Installation Name: FMP BLOCK 1B3 for SLQ-32 (V)6

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	60 / 47.734	5 / 4.833	2 / 2.356	4 / 4.165	0 / 0.000	4 / 4.165	9 / 7.805	8 / 7.013	3 / 2.901	2 / 2.079	0 / 0.000	93 / 78.886
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.075	0 / 0.031	1 / 1.245	1 / 1.351
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	60 / 47.734	5 / 4.833	2 / 2.356	4 / 4.165	0 / 0.000	4 / 4.165	9 / 7.805	8 / 7.013	3 / 2.976	2 / 2.110	1 / 1.245	94 / 80.237

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	60	-	-	-	5	-	-	-	2	-	2	2	-	6	1	1	1	5	-	2	1	1	1	-	1	1	-	-	1	1	94
Out	34	1	1	3	2	8	3	4	1	1	1	-	1	5	1	1	3	1	2	2	2	3	-	4	2	2	-	1	-	5	94

Method of Implementation: SHIPALT/AIT:: Installation Name: FMP BLOCK 1B3 for SLQ-32 (V)7

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	1 / 1.660	0 / 0.013	2 / 1.620	0 / 0.026	0 / 0.000	0 / 0.026	1 / 0.823	- / -	- / -	- / -	0 / 0.000	4 / 4.142

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 2 / TC056 - BLOCK 1B3 HGHS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: TC056 - BLOCK 1B3 HGHS

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: FMP BLOCK 1B3 for SLQ-32 (V)7

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	1 / 1.660	0 / 0.013	2 / 1.620	0 / 0.026	0 / 0.000	0 / 0.026	1 / 0.823	- / -	- / -	- / -	0 / 0.000	4 / 4.142

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Out	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	1	-	-	4

Method of Implementation: SHIPALT/AIT:: Installation Name: NON-FMP BLOCK 1B3 SHORE SITE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	6 / 1.656	- / -	1 / 0.767	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 2.423
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	6 / 1.656	- / -	1 / 0.767	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 2.423

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 2 / TC056 - BLOCK 1B3 HGHS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: TC056 - BLOCK 1B3 HGHS

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: NON-FMP BLOCK 1B3 SHORE SITE

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	6	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Out	6	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7

Method of Implementation: SHIPALT/AIT:: Installation Name: BLK 1B3 GFE UNIT FOR BLK 3 OEM

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	2 / 0.360	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 0.360
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	2 / 0.360	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 0.360

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Out	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

Footnotes:

(32) The SEWIP Block 1B3 system is being installed as a back fit on the limited number of ships. The budget submission reflects that the procurement and installation schedules have changed significantly due to several factors including the number of units procured in prior years, changes in ship availabilities and schedules. As a result of these factors, the total quantity of 1.1.1 has reduced from 99 to 94. These factors have also resulted in the FY22 FMP Block 1B3 systems for SLQ-32(V)6 Non-Organic quantity of two (2) being identified as buying ahead of need and FY22 Prior Year installation quantity being reduced from 11 to 5. $47M of OPN LI 2312 ($5.6M for Block 1B3 and $41.4M for Block 2) funding is approved per the FY22 OMNIBUS ATR to support higher DoN priorities. The Navy has rephased the procurements and

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
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ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

installations within existing budget controls for FY24 and forward. Block 1B3 FMP for (V)6 installations increase from 2 in FY23 to 4 in FY24 to meet install requirements based on ship modernization availability periods .

(33) Production support decreases from FY23 to FY24 due to the transition of Software Support Activity and some Integrated Logistics tasks from production to sustainment. Requirements for government oversight of the production contract, monitoring system manufacture, delivery and core Technical Data Package management continue through the FYDP.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 3 / TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1,397.282	42.825	67.995	32.892	0.000	32.892	54.626	44.802	35.504	13.253	4.931	1,694.110
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1,397.282	42.825	67.995	32.892	0.000	32.892	54.626	44.802	35.504	13.253	4.931	1,694.110
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1,397.282**	**42.825**	**67.995**	**32.892**	**0.000**	**32.892**	**54.626**	**44.802**	**35.504**	**13.253**	**4.931**	**1,694.110**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM
SEWIP Block 2 provides AN/SLQ-32(V) an upgraded antenna, receiver, and combat systems interface. The upgrades will pace the evolving threat, improve detection and accuracy and mitigate Electromagnetic Interference (EMI). The Block 2 hardware cost includes the SEWIP Block 2 ES system, Blanker-Video Mixer Group (AN/SLA-10D), Common Processing System, Common Display System, Liquid Conditioning Unit and Data Adaptation Processor. The SEWIP Block 1B3 and Block 2 units are installed conjunctively and compose the AN/SLQ-32(V)6 system. The SEWIP Block 1B3, Block 2 and Block 3 units are installed conjunctively to compose the AN/SLQ-32(V)7 system. The SEWIP Block 2 P-3a funding is broken out to separately show systems installed with SEWIP Block 1B3 (FMP Block 2 for SLQ-32 (V)6) and systems installed with SEWIP Block 1B3 and Block 3 (FMP Block 2 for SLQ-32(V)7).

Notes:

(1) The SEWIP Block 2 system is being installed as a back fit on the limited number of ships. The budget submission reflects that the procurement and installation schedules have changed significantly due to several factors including the number of units procured in prior years, changes in ship availabilities and the ship decommissioning schedules.

(2) The FY24 budget request of $32.892M supports procurement of spares, production support, refurbishment of rotatable pool assets and installation of 4 FMP Block 2 systems with V6 and Design Services Allocation for units to be installed in future years.

(3) Production Support provides government oversight for production of hardware and hardware components and is composed primarily of Warfare Center Activity and Original Equipment Manufacturer (OEM) support of production related software and hardware problems through Software Support Activity (SSA), Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), Technical Design Agent (TDA) and Professional Support Services (PSS). Also includes support for cybersecurity compliance packages in the enterprise mission assurance support service (eMASS), element, and combat system certifications.

(4) For FMP Block 2 systems, the production lead time is 23 months, 17 months for production and 6 months for systems integration prior to delivery to a ship for installation. The system integrator, NSWC Crane, conducts integration, testing, and preparation for shipment. The 6-month integration period is composed for integration and testing of the SEWIP Blocks 1B2, 1B3 and 2 into an SLQ-32(V)6 system, preparation for shipment and delivery to the shipyard 30 days prior to the start of the availability (A-30).

(5) SEWIP installations are phased over three years with planning efforts being conducted in the two fiscal years prior to the installation of the unit on the ship. The funding requirements are phased in accordance with the Navy Modernization Process Management and Operational Manual (NMP MOM) SL720-AA-MAN-030 Rev 4. Installation funding for AP and planning yard DSA is required in both of the 2 years prior to

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ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

the year of installation to support individual ship class drawing packages, ship checks and long lead material unique to the installation in order to maintain alignment with ship availability schedules. Total cost for installations shows both current year installation funding for the quantity of installations in addition to AP and planning yard DSA for current year and/or following year installs.

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ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: TC059 SURFACE EW IMPROVEMENTS BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM	**Modification Type:** SHIPALT/AIT	**Related RDT&E PEs:** 0604757N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM												
B Kits												
Recurring												
1.1.1) FMP BLOCK 2 for SLQ-32 (V)6 - NonOrganic [34]	93 / 899.387	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 11.145	- / -	- / -	94 / 910.532
1.1.2) FMP BLOCK 2 for SLQ-32 (V)7 - NonOrganic	4 / 38.367	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 38.367
1.1.3) NON-FMP BLK2 SHORE SITE UNITS - NonOrganic [35]	7 / 52.598	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 52.598
1.1.4) BLK2 GFE FOR BLK3 OEM - NonOrganic	1 / 11.556	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 11.556
1.1.5) BLK2 Rotatable Pool - NonOrganic	- / -	- / -	4 / 34.707	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 34.707
1.1.6) BLK2 Refurbishment - NonOrganic [36]	- / -	- / -	- / -	- / 2.570	- / -	- / 2.570	- / 1.766	- / -	- / -	- / -	- / -	- / 4.336
1.1.7) Installation and Check Out (INCO) Spares - Organic [37]	- / 22.236	- / 6.592	- / -	- / 0.535	- / -	- / 0.535	- / 3.500	- / 5.026	- / 5.729	- / -	- / -	- / 43.618
Subtotal: Recurring	*- / 1,024.144*	*- / 6.592*	*- / 34.707*	*- / 3.105*	*- / -*	*- / 3.105*	*- / 5.266*	*- / 5.026*	*- / 16.874*	*- / -*	*- / 0.000*	*- / 1,095.714*
Subtotal: TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM	*105 / 1,024.144*	*- / 6.592*	*4 / 34.707*	*- / 3.105*	*- / -*	*- / 3.105*	*- / 5.266*	*- / 5.026*	*1 / 16.874*	*- / -*	*- / -*	*110 / 1,095.714*
Subtotal: Procurement, All Modification Items	*- / 1,024.144*	*- / 6.592*	*- / 34.707*	*- / 3.105*	*- / -*	*- / 3.105*	*- / 5.266*	*- / 5.026*	*- / 16.874*	*- / -*	*- / 0.000*	*- / 1,095.714*
Support *(All Modification Items)*												
2.1) Production Support [38]	- / 71.001	- / 5.179	- / 3.878	- / 2.420	- / -	- / 2.420	- / 3.433	- / 3.898	- / 4.057	- / 4.042	- / 0.304	- / 98.212
Subtotal: Support	*- / 71.001*	*- / 5.179*	*- / 3.878*	*- / 2.420*	*- / -*	*- / 2.420*	*- / 3.433*	*- / 3.898*	*- / 4.057*	*- / 4.042*	*- / 0.304*	*- / 98.212*
Installation												
Modification Item 1 of 1: TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM	- / 302.137	- / 31.054	- / 29.410	- / 27.367	- / 0.000	- / 27.367	- / 45.927	- / 35.878	- / 14.573	- / 9.211	- / 4.627	- / 500.184
Subtotal: Installation	*- / 302.137*	*- / 31.054*	*- / 29.410*	*- / 27.367*	*- / -*	*- / 27.367*	*- / 45.927*	*- / 35.878*	*- / 14.573*	*- / 9.211*	*- / 4.627*	*- / 500.184*
Total												
Total Cost (Procurement + Support + Installation)	**1,397.282**	**42.825**	**67.995**	**32.892**	**0.000**	**32.892**	**54.626**	**44.802**	**35.504**	**13.253**	**4.931**	**1,694.110**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 3 / TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM

Manufacturer Information

Manufacturer Name: Lockheed Martin | Manufacturer Location: Syracuse, NY

Administrative Leadtime *(in Months)*: 0 | Production Leadtime *(in Months)*: 23

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Mar 2023				Mar 2027	
Delivery Dates		Feb 2025				Feb 2029	

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: FMP BLOCK 2 for SLQ-32 (V)6

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	60 / 287.530	5 / 30.693	2 / 18.198	4 / 27.003	0 / 0.000	4 / 27.003	9 / 41.933	8 / 35.878	3 / 13.500	2 / 8.804	0 / 0.000	93 / 463.539
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 1.073	0 / 0.407	1 / 4.627	1 / 6.107
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	60 / 287.530	5 / 30.693	2 / 18.198	4 / 27.003	0 / 0.000	4 / 27.003	9 / 41.933	8 / 35.878	3 / 14.573	2 / 9.211	1 / 4.627	94 / 469.646

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	60	-	-	-	5	-	-	-	2	-	2	2	-	6	1	1	1	5	-	2	1	1	1	-	1	1	-	-	1	1	94
Out	34	1	1	3	2	8	3	4	1	1	1	-	1	5	1	1	3	1	2	2	2	3	-	4	2	2	-	1	-	5	94

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 3 / TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: FMP BLOCK 2 for SLQ-32 (V)7

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	1 / 8.283	0 / 0.361	2 / 7.492	0 / 0.364	0 / 0.000	0 / 0.364	1 / 3.994	- / -	- / -	- / -	0 / 0.000	4 / 20.494
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	1 / 8.283	0 / 0.361	2 / 7.492	0 / 0.364	0 / 0.000	0 / 0.364	1 / 3.994	- / -	- / -	- / -	0 / 0.000	4 / 20.494

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Out	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	1	-	-	4

Method of Implementation: SHIPALT/AIT:: Installation Name: NON-FMP BLK2 SHORE SITE UNITS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	6 / 5.466	- / -	1 / 3.720	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 9.186
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 3 / TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: NON-FMP BLK2 SHORE SITE UNITS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	6 / 5.466	- / -	1 / 3.720	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 9.186

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	6	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Out	6	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7

Method of Implementation: SHIPALT/AIT:: Installation Name: BLK2 GFE FOR BLK3 OEM

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	1 / 0.858	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.858
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	1 / 0.858	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.858

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 3 / TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: TC059 - BLOCK 2 ELECTRONIC SUPPORT (ES) SYSTEM

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: BLK2 GFE FOR BLK3 OEM

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

Footnotes:

(34) The SEWIP Block 2 system is being installed as a back fit on the limited number of ships. The budget submission reflects that the procurement and installation schedules have changed significantly due to several factors including the number of units procured in prior years, changes in ship availabilities and schedules. As a result of these factors, the total quantity of 1.1.1 has reduced from 99 to 94. These factors have also resulted in the FY22 FMP Block 2 systems for SLQ-32(V)6 Non-Organic quantity of two (2) being identified as buying ahead of need and FY22 Prior Year installation quantity being reduced from 11 to 5. $47M of OPN LI 2312 ($5.6M for Block 1B3 and $41.4M for Block 2) funding is approved per the FY22 OMNIBUS ATR to support higher DON priorities. The Navy has rephased the procurements and installations within existing budget controls for FY24 and forward. Block 2 FMP for (V)6 installations increase from 2 in FY23 to 4 in FY24 to meet install requirements based on ship modernization availability periods.

(35) FY23 installation funding supports 4 Fleet units and 1 shore site. FY24 installation funding supports 4 Fleet units only. The decrease in installation cost from FY23 to FY24 is due to the shore site unit installation in FY23.

(36) Block 2 refurbishment begins in FY24 to support refurbishment of rotatable pool assets for future installations.

(37) FY22 INCO spares requirements have increased due to higher than expected failure rates. Spares requirement increases in FY24 to meet projected failure rates of Block 2 Lowest Repairable Units (LRUs).

(38) Production support decreases from FY23 to FY24 due to the transition of Software Support Activity and some Integrated Logistics tasks from production to sustainment. Requirements for government oversight of the production contract, monitoring system manufacture, delivery and core Technical Data Package management continue through the FYDP.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	337.099	204.477	173.862	221.540	0.000	221.540	155.822	325.739	358.953	368.437	3,629.787	5,775.716
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	337.099	204.477	173.862	221.540	0.000	221.540	155.822	325.739	358.953	368.437	3,629.787	5,775.716
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**337.099**	**204.477**	**173.862**	**221.540**	**0.000**	**221.540**	**155.822**	**325.739**	**358.953**	**368.437**	**3,629.787**	**5,775.716**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Block 3 provides an Electronic Attack (EA) capability improvement required for the AN/SLQ-32(V) system to keep pace with the evolving threat. The program builds on the EW Electronic Support (ES) capability delivered by Blocks 1 and 2 and will provide a common EA capability to surface ships (CVN, DDG and LHD).

Notes:

(1) The FY24 budget request of $221.540M supports procurement and production support for two SEWIP Block 3 Fleet units, procurement of spares, production support, Tech Refresh, ECPs, and the installation of 2 FMP units as well as Design Services Allocation for the installation of units in future years..

(2) Production Support provides government oversight for the production of hardware and hardware components. It is composed primarily of Warfare Center support of production related software and hardware problems through Software Support Activity (SSA), Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), and Professional Support Services (PSS). It also includes support for cybersecurity compliance packages in the enterprise mission assurance support service (eMASS), element, and combat system certifications.

(3) Spares requirements have been modeled based on the Navy's Model Based Product Support Ready Based Spares Model and vary with the number of units being procured as well as the maturity of the system. Spares requirements are based on the production maturity of the system as well lessons learned from early LRIP Lowest Repairable Unit (LRU) failure rates for similar systems (including SEWIP Block 1B3 and 2).

(4) SEWIP Block 3 Tech Refresh includes the procurement and integration of EA subsystem Diminishing Manufacturing Sources and Material Shortages (DMSMS) components.

(5) SEWIP Block 3 Engineering Change Proposal (ECP) supports anticipated changes during production to address known reliability and other issues. ECP efforts include software and firmware updates, EA subsystem Diminishing Manufacturing Sources and Material Shortages (DMSMS) monitoring and mitigation, and Cooling Equipment Unit (CEU) and Prime Power Equipment (PPE) modifications. ECP decreases from FY23 to FY24 due to system design stabilization coinciding with completion of Land Based Test events.

(6) For FMP Block 3 systems, the production lead time is 30 months, 24 months for the production and 6 months for systems integration prior to delivery to the ship for installation. The anticipated delivery rate is 1 SEWIP Block 3 system every 5 months. The systems integrator, NSWC Crane, conducts integration, testing, and preparation for shipment. The 6-month integration period is for integration and testing of the SEWIP Blocks 1B2, 1B3, 2 and 3 into a SLQ-32(V)7 system, preparation for shipment and delivery to the shipyard 30 days prior to the start of the availability (A-30).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(7) SEWIP Block 3 installation hardware unit price (1.1.1) includes the procurement of the four (4) quad plates per shipset and other ancillary hardware equipment including the quad plate shipping container fabrication, RAM structure assembly, supply manifold assembly, Radio Frequency (RF) cables, quad plate piping fabrication and installation.

(8) The SEWIP Block 3 installation is significantly more complex than the SEWIP Block 2 installation. The SEWIP Block 3 installation includes the fabrication and outfitting of steel sponson structures to house the arrays, electronic processing racks, and cooling equipment hardware. The installation also includes the cost for internal space reconfiguration to fit the four-bay prime power equipment.

(9) SEWIP installations are phased over three years with planning efforts being conducted in the two fiscal years prior to the installation of the unit on the ship. The funding requirements are phased in accordance with the Navy Modernization Process Management and Operational Manual (NMP MOM) SL720-AA-MAN-030 Rev 4. Installation funding for AP and planning yard DSA is required in both of the 2 years prior to the year of installation to support individual ship class drawing packages, ship checks and long lead material unique to the installation in order to maintain alignment with ship availability schedules. Total cost for installations shows both current year installation funding for the quantity of installations in addition to AP and planning yard DSA for current year and/or following year installs.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: TC060 SURFACE EW IMPROVEMENTS BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM	**Modification Type:** SHIPALT/AIT	**Related RDT&E PEs:** 0604757N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM												
B Kits												
Recurring												
1.1.1) FMP BLOCK 3 (SMALL RCS) for SLQ-32(V)7 - NonOrganic [39]	4 / 174.385	3 / 169.245	1 / 74.520	2 / 130.803	- / -	2 / 130.803	1 / 71.990	4 / 247.600	4 / 255.055	4 / 260.160	17 / 1,032.910	40 / 2,416.668
1.1.2) FMP BLOCK 3 (Quad Configuration) for SLQ-32(V)7 - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 828.587	10 / 828.587
1.1.3) CVN/LHD Chiller Procurement - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 103.671	7 / 103.671
1.1.4) NON-FMP BLK3 SHORE SITE UNITS - NonOrganic	1 / 32.970	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 32.970
1.1.5) Installation and Check Out (INCO) Spares - Organic [40]	- / 15.390	1 / 8.575	1 / 8.747	2 / 17.843	- / -	2 / 17.843	1 / 9.100	2 / 18.564	2 / 18.935	2 / 19.314	27 / 260.739	38 / 377.207
Subtotal: Recurring	*- / 222.745*	*- / 177.820*	*- / 83.267*	*- / 148.646*	*- / -*	*- / 148.646*	*- / 81.090*	*- / 266.164*	*- / 273.990*	*- / 279.474*	*- / 2,225.907*	*- / 3,759.103*
Subtotal: TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM	*5 / 222.745*	*4 / 177.820*	*2 / 83.267*	*4 / 148.646*	*- / -*	*4 / 148.646*	*2 / 81.090*	*6 / 266.164*	*6 / 273.990*	*6 / 279.474*	*61 / 2,225.907*	*96 / 3,759.103*
Subtotal: Procurement, All Modification Items	*- / 222.745*	*- / 177.820*	*- / 83.267*	*- / 148.646*	*- / -*	*- / 148.646*	*- / 81.090*	*- / 266.164*	*- / 273.990*	*- / 279.474*	*- / 2,225.907*	*- / 3,759.103*
Support *(All Modification Items)*												
2.1) Production Support [41]	- / 37.525	- / 9.806	- / 10.709	- / 10.747	- / -	- / 10.747	- / 10.833	- / 11.358	- / 11.745	- / 12.096	- / 62.424	- / 177.243
2.2) Tech Refresh	- / -	- / -	- / 5.689	- / 5.803	- / -	- / 5.803	- / 6.117	- / 6.412	- / 5.126	- / 5.093	- / 274.087	- / 308.327
2.3) Engineering Change Proposals (ECPs) [42]	- / 17.180	- / 7.336	- / 15.885	- / 10.479	- / -	- / 10.479	- / 11.048	- / 11.779	- / 9.528	- / 9.387	- / 48.611	- / 141.233
2.4) LHD/CVN Electronic Attack (EA) Subsystem Design Change	- / 17.308	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 17.308
Subtotal: Support	*- / 72.013*	*- / 17.142*	*- / 32.283*	*- / 27.029*	*- / -*	*- / 27.029*	*- / 27.998*	*- / 29.549*	*- / 26.399*	*- / 26.576*	*- / 385.122*	*- / 644.111*
Installation												
Modification Item 1 of 1: TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM	- / 42.341	- / 9.515	- / 58.312	- / 45.865	- / 0.000	- / 45.865	- / 46.734	- / 30.026	- / 58.564	- / 62.387	- / 1,018.758	- / 1,372.502
Subtotal: Installation	*- / 42.341*	*- / 9.515*	*- / 58.312*	*- / 45.865*	*- / -*	*- / 45.865*	*- / 46.734*	*- / 30.026*	*- / 58.564*	*- / 62.387*	*- / 1,018.758*	*- / 1,372.502*
Total												

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: TC060 SURFACE EW IMPROVEMENTS BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM	**Modification Type:** SHIPALT/AIT	**Related RDT&E PEs:** 0604757N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total Cost (Procurement + Support + Installation)	**337.099**	**204.477**	**173.862**	**221.540**	**0.000**	**221.540**	**155.822**	**325.739**	**358.953**	**368.437**	**3,629.787**	**5,775.716**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM

Manufacturer Information

Manufacturer Name: NORTHROP GRUMMAN (43) | Manufacturer Location: BALTIMORE, MD

Administrative Leadtime *(in Months)*: 0 | Production Leadtime *(in Months)*: 30

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	May 2022	Mar 2023	Mar 2024	Mar 2025	Mar 2026	Mar 2027	Mar 2028
Delivery Dates	Nov 2024	Sep 2025	Sep 2026	Sep 2027	Sep 2028	Sep 2029	Sep 2030

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: FMP BLOCK 3 (SMALL RCS) for SLQ-32(V)7

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	1 / 42.341	0 / 4.745	2 / 42.520	1 / 19.323	0 / 0.000	1 / 19.323	- / -	- / -	- / -	- / -	0 / 0.000	4 / 108.929
FY 2022	- / -	0 / 4.770	0 / 7.130	1 / 24.137	0 / 0.000	1 / 24.137	2 / 39.420	- / -	- / -	- / -	0 / 0.000	3 / 75.457
FY 2023	- / -	- / -	0 / 2.385	0 / 2.405	0 / 0.000	0 / 2.405	0 / 2.455	1 / 20.104	- / -	- / -	0 / 0.000	1 / 27.349
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	0 / 4.859	0 / 5.008	2 / 41.012	- / -	0 / 0.000	2 / 50.879
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 2.457	0 / 2.554	1 / 20.915	0 / 0.000	1 / 25.926
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 2.457	0 / 10.020	1 / 28.732	3 / 64.003	4 / 105.212
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 4.978	0 / 10.230	4 / 91.506	4 / 106.714
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 2.510	4 / 106.767	4 / 109.277
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 488.092	17 / 488.092
Total	1 / 42.341	0 / 9.515	2 / 52.035	2 / 45.865	0 / 0.000	2 / 45.865	2 / 46.734	1 / 30.026	2 / 58.564	2 / 62.387	28 / 750.368	40 / 1,097.835

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	2	-	-	-	1	1	-	1	1	-	-	1	-	-	1	1	-	-	-	-	-	2	28	40
Out	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2	-	-	-	2	-	-	1	-	-	1	1	32	40

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM

Installation Information

Method of Implementation: [none specified]:: Installation Name: FMP BLOCK 3 (Quad Configuration) for SLQ-32(V)7

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 223.330	10 / 223.330
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 223.330	10 / 223.330

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10

Method of Implementation: SHIPALT/AIT:: Installation Name: CVN/LHD Chiller Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: CVN/LHD Chiller Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 45.060	7 / 45.060
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 45.060	7 / 45.060

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7

Method of Implementation: SHIPALT/AIT:: Installation Name: NON-FMP BLK3 SHORE SITE UNITS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	1 / 6.277	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 6.277
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	1 / 6.277	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 6.277

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 4 / TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: TC060 - BLOCK 3 ELECTRONIC ATTACK (EA) SYSTEM

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: NON-FMP BLK3 SHORE SITE UNITS

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Out	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

Method of Implementation (Organic): Installation and Check Out (INCO) Spares - Not Installed **Installation Quantity:** 38

Footnotes:

(39) SEWIP Block 3 hardware unit cost decreases from FY23 to FY24 based on quantity-dependent step ladder pricing in the SEP 2020 contract. FY23 installation schedule has changed. First FY23 install has moved from a 1QFY23 start to a 3QFY23 start due to a six-month delay in the start of the modernization availability.

(40) Spares requirements have been modeled based on the Navy's Model Based Product Support Ready Based Spares Model and vary with the number of units being procured as well as the maturity of the system. Spares requirements are based on the production maturity of the system as well lessons learned from early LRIP Lowest Repairable Unit (LRU) failure rates for similar systems (including SEWIP Block 1B3 and 2). The FY23 spares kit unit cost was increased based on the FY22 cost plus inflation.

(41) Production Support is not quantity dependent. Production Support provides government oversight for the production of hardware and hardware components. It is composed primarily of Warfare Center support of production related software and hardware problems through Software Support Activity (SSA), Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), and Professional Support Services (PSS). It also includes support for cybersecurity compliance packages in the enterprise mission assurance support service (eMASS), element, and combat system certifications.

(42) ECP decreases from FY23 to FY24 due to system design stabilization coinciding with completion of Land Based Test events.

(43) FY22 contract award date slipped to May 2022 due to late receipt of funding.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 5 / TC070 - Scaled Onboard Electronic Attack (SOEA)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	40.001	98.700	98.602	15.750	253.053
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	40.001	98.700	98.602	15.750	253.053
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**40.001**	**98.700**	**98.602**	**15.750**	**253.053**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Scaled Onboard Electronic Attack (SOEA) is intended to provide an advanced Electronic Attack (EA) counter targeting capability to keep pace with the evolving Anti-Ship Missile Defense (ASMD) threat. It will assimilate into the SEWIP Family of shipboard Electromagnetic Warfare systems. The program is intended to be scalable for Surface Combatants with Size, Weight, Power, and Cooling (SWaP-C) constraints that cannot support SEWIP Block 3 (AN/SLQ-32(V)7).

Notes:

(1) Production Support provides government oversight for the production of hardware and hardware components. It is composed primarily of Warfare Center support of production related software and hardware problems through Software Support Activity (SSA), Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), and Professional Support Services (PSS). It also includes support for cybersecurity compliance packages in the enterprise mission assurance support service (eMASS), element, and combat system certifications.

(2) Spares include initial spares through Material Support Date (MSD), which are required for installations.

(3) SOEA Engineering Change Proposal (ECP) funding supports anticipated changes during production.

(4) For FMP SOEA systems, the production lead is 12 months. This includes system integration prior to delivery to the ship for installation.

(5) SOEA installations will be phased over three years with planning efforts being conducted in the two fiscal years prior to the installation of the unit on the ship. The funding requirements are phased in accordance with the Navy Modernization Process Management and Operational Manual (NMP MOM) SL720-AA-MAN-030 Rev 4. Installation funding for AP and planning yard DSA is required in both of the 2 years prior to the year of installation to support individual ship class drawing packages, ship checks and long lead material unique to the installation in order to maintain alignment with ship availability schedules. Total cost for installations shows both current year installation funding for the quantity of installations in addition to AP and planning yard DSA for current year and/or following year installs.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 5 / TC070 - Scaled Onboard Electronic Attack (SOEA)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: TC070 Scaled Onboard Electronic Attack	**Modification Type:** SHIPALT/AIT	**Related RDT&E PEs:** 0604757N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: TC070 - Scaled Onboard Electronic Attack (SOEA)												
B Kits												
Recurring												
1.1.1) SOEA - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 21.010	4 / 61.800	3 / 50.100	- / -	8 / 132.910
1.1.2) Installation and Check Out (INCO) Spares - Organic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.700	4 / 11.016	3 / 8.427	- / -	8 / 22.143
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 23.710*	*- / 72.816*	*- / 58.527*	*- / 0.000*	*- / 155.053*
Subtotal: TC070 - Scaled Onboard Electronic Attack (SOEA)	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*2 / 23.710*	*8 / 72.816*	*6 / 58.527*	*- / -*	*16 / 155.053*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 23.710*	*- / 72.816*	*- / 58.527*	*- / 0.000*	*- / 155.053*
Support *(All Modification Items)*												
2.1) Production Support	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 9.784	- / 10.153	- / 8.436	- / -	- / 28.373
2.2) Engineering Change Proposals (ECPs)	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.951	- / 5.000	- / 5.252	- / -	- / 15.203
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 14.735*	*- / 15.153*	*- / 13.688*	*- / 0.000*	*- / 43.576*
Installation												
Modification Item 1 of 1: TC070 - Scaled Onboard Electronic Attack (SOEA)	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 1.556	- / 10.731	- / 26.387	- / 15.750	- / 54.424
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 1.556*	*- / 10.731*	*- / 26.387*	*- / 15.750*	*- / 54.424*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**40.001**	**98.700**	**98.602**	**15.750**	**253.053**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 4	**P-1 Line Item Number / Title:** 2312 / AN/SLQ-32	**Modification Number / Title:** 5 / TC070 - Scaled Onboard Electronic Attack (SOEA)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: TC070 - Scaled Onboard Electronic Attack (SOEA)

Manufacturer Information

Manufacturer Name: TBD | Manufacturer Location: TBD

Administrative Leadtime *(in Months)*: 0 | Production Leadtime *(in Months)*: 0

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates					Mar 2026	Mar 2027	Mar 2028
Delivery Dates					Mar 2027	Mar 2028	Mar 2029

Installation Information

Method of Implementation: SHIPALT/AIT:: Installation Name: SOEA

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 1.556	1 / 5.046	- / -	0 / 0.000	1 / 6.602
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 5.685	4 / 20.588	0 / 0.000	4 / 26.273
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 5.799	3 / 15.750	3 / 21.549
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 1.556	1 / 10.731	4 / 26.387	3 / 15.750	8 / 54.424

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	2	2	3	8
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	7	8

Method of Implementation (Organic): Installation and Check Out (INCO) Spares - Not Installed | **Installation Quantity:** 8

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 5: Reconnaissance Equipment	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	2,105.237	261.735	289.974	379.230	0.000	379.230	368.023	397.560	418.278	429.876	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	2,105.237	261.735	289.974	379.230	0.000	379.230	368.023	397.560	418.278	429.876	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**2,105.237**	**261.735**	**289.974**	**379.230**	**0.000**	**379.230**	**368.023**	**397.560**	**418.278**	**429.876**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	10.642	12.790	11.514	-	11.514	9.290	4.011	6.921	7.198	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Shipboard Information Warfare (IW) budget supports Ships Signal Exploitation Equipment (SSEE) Increment F, its variants, and Engineering Change Proposals (ECP) to maintain pace with modernization and signal threats; SSEE Modifications (SSEE MODS); Integrated Communications and Data System (ICADS); Navy Tactical Data Networks (NTDN); Real Time Spectrum Operations (RTSO); and Horizon/ Distributed Operations. The SSEE Family of Systems (FoS) includes variants which introduce scalability and configuration modularity through a permanently installed SSEE systems and Topside Infrastructure (Topside Antennas) supplemented with mission modules to meet platform mission requirements including Anti-Access Area Denial (A2AD), unique signal processing capability or exploitation functionality. Mission module and ECP capabilities integrated into the SSEE Systems will enable maritime power projection by providing surface vessels the ability to disrupt, deny, degrade and defeat adversary (state and non-state) use of radio frequency spectrum, improving the Fleet's ability to communicate and operate therein. These systems will be deployed supporting Assured Command and Control, Battlespace Awareness, and Integrated Fires.

As part of the National Security Agency's (NSA) "Secure the Network" & "Secure the Enterprise" initiatives, NSA and C10F (10th Fleet) requires all systems, including U.S. Navy Surface Cryptologic Systems to migrate to NSAnet. Navy Tactical Data Network (NTDN) is the cybersecurity response to enable National/Tactical Integration with United States (US) Navy Surface Cryptologic Systems by deploying NSAnet afloat with special SIGINT processing capabilities, enterprise services, and a mission data repository allowing automated synchronization with NSA databases.

Overall, the FY 2024 budget request increased by $89.256 million.

[P5 / 1U029 Information Warfare (IW) Training Equipment]: Information Warfare (IW) training equipment provides operator, unit or multi-unit level training on Ships Signal Exploitation Equipment (SSEE) Increment F (V) 7/8. This equipment enhances initial skills, provides refresher training and increases proficiency of the operator on the system through the generation and replay of operational scenarios by software simulation versus hardware simulation. IW training equipment is updated based on new variants of SSEE systems. Additionally, this line supports the procurement of the Stallion (formerly known as Cryptologic On-Line Trainer) hardware for Shipboard IW team training. Stallion is a web-based/Service Oriented Architecture (SOA) scenario training system that emulates Navy Tactical Signal Intelligence (SIGINT)/Information Operations (IO) system functionality. Stallion is delivered turnkey to the Center for Information Warfare Training (CIWTs).

[P5 / 1U014 SSEE Increment F (All Variants) ECP]: Engineering Change Proposal (ECP)/Obsolescence procures Commercial Off-The-Shelf/Non-Developmental Item (COTS/NDI) equipment to replace obsolete and end-of-life (EOL) equipment for the SSEE Increment F program (All Variants) as well as incorporates Pre-Planned Product Improvement (P3I) for the acquisition and localization of the latest Signals of Interest (SOI) and IO capabilities into the host systems. ECP's maintain and improve upon existing capability and relevance within a rapidly evolving threat environment. ECP equipment will also be used to supplement SSEE Family of Systems (FoS) to meet their respective scalable and modular capacities and meet platform mission requirements.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 5: Reconnaissance Equipment	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

The Navy Tactical Data Network (NTDN) is a cybersecurity initiative enabling National/Tactical Integration with U.S. Navy Surface Cryptologic Systems by deploying NSAnet afloat with special SIGINT processing capabilities, enterprise services, and a mission data repository allowing automated synchronization with National Security Agency (NSA) databases. This ECP will back-fit force-level SSEE Increment F(V)1/2 systems as well as integrating the shore component with Classic Reach. NTDN Network & Information Technology (IT) infrastructure (afloat & shore) that will be connected to the Automated Digital Network System (ADNS) Increment 3 Routers, Switch, Tac Lane, Wide Area Network (WAN) Optimizer, & Server, Cross Domain Solutions (CDS) appliance between NTDN and SCI-Networks, Certification and Accreditation of SSEE FoS on peer-intranet NSA enclave afloat. In addition, an NTDN shore component will be deployed to support data flow to/from appropriate NSA data bases.

Classic Reach (CR) enables distributed multi-intelligence operations and provides the Navy with an integrated, distributed, net-centric grid framework. Remote operations allow ashore support to rapidly provide threat indications and warnings. The CR architecture and software enable the entire Signal Intelligence (SIGINT)/Information Operations (IO) enterprise chain (e.g., sensors, analysts, mission systems, services) to execute both strategic and tactical maritime mission objectives. CR increases timeliness and accuracy of combat engagements by providing end-to-end sensor grid management of SIGINT, Electronic Warfare (EW), Counter-Intelligence, Surveillance, and Reconnaissance (C-ISR), and cyber capabilities through a common user interface. Classic Reach operates ashore at Network Operations Centers (NOCs) and afloat on force-level platforms. Classic Reach nodes ashore and afloat will enable establishment of the Distributed Operations framework.

Digital filers replace the outdated, end-of-life filers currently fielded in SSEE Increment F systems. Digital filers will provide the enhanced processing power necessary to host Spectral capability drop capabilities to prosecute future Signals of Interest (SOI) and conduct IO.

[P5 / 1U016 Spectral]: The Spectral Program is an incremental acquisition, Government Off-The-Shelf/Commercial Off-The-Shelf (GOTS/COTS) program that provides cryptologic signals exploitation capabilities designed to meet the requirements for shipboard cryptologic operations within the Ship's Signal Exploitation Space (SSES) aboard a variety of ship classes and shore facilities. The Spectral system will provide a mobile, passive capability to detect, classify, track, and determine the intent of enemy units through exploitation of their command and control emissions. The Spectral System will leverage existing architectures and support the integrated fires construct with Shipboard Combat Systems providing non-kinetic engagement to enhance combat effectiveness. The system will be scalable, reconfigurable to mission, modular, remotable and dynamically reprogrammable in response to new threats and capabilities. The Spectral System will deliver improved information/cyber warfare planning, exploitation, and attack capabilities across Naval platforms.

[P3A - 2 / SSEE Modifications]: See P-3A Description

[P3A - 3 / SSEE Inc F ECPs]: See P-3A Description

[P3A - 4 / Mods ECP]: See P-3A Description

[P3A - 5 / Real Time Spectrum Operations - Own Force Monitoring Hardware]: See P-3A Description

[P3A - 6 / Horizon / Distributed Ops Hardware]: See P-3A Description

[P3A - 7 / Integrated Communications and Data System (ICADS)]: See P3-A Description

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 5: Reconnaissance Equipment	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-5	1 / Shipboard IW Exploit	P-5a			- / 852.448	- / 10.459	- / 10.501	- / 12.156	- / 0.000	- / 12.156
P-3a	1 / SSEE Increment F (All Variants) (TBD)				- / 890.767	- / 75.129	- / 45.521	- / 21.980	- / 0.000	- / 21.980
P-3a	2 / SSEE Modifications (Upgrade)				- / 290.200	- / 84.352	- / 78.404	- / 58.217	- / 0.000	- / 58.217
P-3a	3 / SSEE Inc F ECPs (TBD)				- / 54.734	- / 49.808	- / 71.237	- / 145.364	- / 0.000	- / 145.364
P-3a	4 / Mods ECP (TBD)				- / 17.088	- / 19.345	- / 30.037	- / 77.656	- / 0.000	- / 77.656
P-3a	5 / Real Time Spectrum Operations - Own Force Monitoring Hardware (TBD)				- / 0.000	- / 0.000	- / 8.322	- / 12.110	- / 0.000	- / 12.110
P-3a	6 / Horizon / Distributed Ops Hardware (TBD)				- / 0.000	- / 0.000	- / 27.784	- / 25.125	- / 0.000	- / 25.125
P-3a	7 / Integrated Communications and Data System (ICADS) (TBD)				- / 0.000	- / 22.642	- / 18.168	- / 26.622	- / 0.000	- / 26.622
P-40	**Total Gross/Weapon System Cost**				**- / 2,105.237**	**- / 261.735**	**- / 289.974**	**- / 379.230**	**- / 0.000**	**- / 379.230**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-5	1 / Shipboard IW Exploit	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / SSEE Increment F (All Variants) (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	Continuing	Continuing
P-3a	2 / SSEE Modifications (Upgrade)				- / 7.952	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 519.125
P-3a	3 / SSEE Inc F ECPs (TBD)				- / 79.619	- / 51.344	- / 33.388	- / 25.501	- / 4.371	- / 515.366
P-3a	4 / Mods ECP (TBD)				- / 63.317	- / 36.108	- / 4.471	- / 0.000	- / 0.000	- / 248.022
P-3a	5 / Real Time Spectrum Operations - Own Force Monitoring Hardware (TBD)				- / 6.182	- / 9.869	- / 10.126	- / 10.340	- / 0.000	- / 56.949
P-3a	6 / Horizon / Distributed Ops Hardware (TBD)				- / 15.514	- / 20.954	- / 21.564	- / 22.016	- / 0.000	- / 132.957
P-3a	7 / Integrated Communications and Data System (ICADS) (TBD)				- / 28.678	- / 61.539	- / 94.280	- / 92.309	- / 14.218	- / 358.456
P-40	**Total Gross/Weapon System Cost**				**- / 368.023**	**- / 397.560**	**- / 418.278**	**- / 429.876**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The FY24 budget reflects an overall increase of $89.256M which is primarily attributed to an increase in the procurement of ECPs, the highest increases being for upgrades to SSEE Increment F and SSEE Modifications before the ECPs ramp down due to the fielding of SPECTRAL. These ECPs address key system obsolescence and performance issues to meet fleet cryptologic and SIGINT requirements until the fielding of SPECTRAL occurs.

The following procurement requirements and corresponding funding are aligned to the current fielding plan, which are continuously evolving in order to meet emerging threats in specific areas of responsibility (AORs):

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 5: Reconnaissance Equipment	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

P-5:

(1) Information Warfare (IW) Training Equipment; FY 2024 increase ($.069M) due to inflation.

(5) NTDN Systems; FY 2024 decrease (-$5.388M) is due to the decrease of (7) systems in alignment with the fielding plan, which is ever evolving in order to meet emerging threats in specific AORs.

(4) Classic Reach Systems; FY 2024 increase ($2.734M) is due to the increase of (4) systems to align to current fielding plan.

(16) SSEE Increment F ECP - Digital Filer; FY 2024 increase ($4.240) is for the initial procurement of (16) systems which aligns to current fielding plan.

NOTE: For the P5, The SSEE Inc F (All Var) ECP Production Support line includes production support cost for NTDN, Classic Reach, and SSEE Inc F ECP- Digital Filers.

NOTE: Spectral - Due to Spectral not procuring until FY25, budget has been moved from a P3a to the P5.

P-3a, SSEE Increment F (All Variants): (-$23.541M)

(0) SSEE Increment F(V)7/8 Ship - Below Deck and Core; FY 2024 decrease due to completion of procurements in FY23.
(0) SSEE Increment F(V)7/8 Ship - Infrastructure; FY 2024 decrease due to completion of procurements in FY23.

P-3a, SSEE Modifications:

(3) SSEE MODS Systems; FY 2024 decrease (-$20.187M) reflects the reduction of (6) system in alignment with the fielding plan.

P-3a, SSEE Inc F ECPs:

(18) SSEE Increment F(V)1/2&(V)7/8 - Next Generation Chassis; FY 2024 increase ($5.479M) reflects an increase in installation quantities (18) in FY24 which aligns to current fielding plan.

(29) Spectral Capability Drop Infrastructure; FY 2024 increase ($29.356M) is for the procurement of (13) additional systems which aligns to current fielding plan.

(17) Anti-Access, Area Denial (A2AD) Kits; FY 2024 increase ($3.033M) is for the procurement of (8) additional systems which aligns to current fielding plan.

(7) SSEE Increment F VPX v(7/8) Backfit Kits; FY 2024 increase ($1.952M) reflects an decrease of (11) system and increase in installation quantities (18) in FY24 which aligns to current fielding plan.

(16) SSEE Increment F VPX v(1/2) Backfit Kits; FY 2024 increase ($34.307M) is for the initial procurement of (16) systems which aligns to current fielding plan.

NOTE: The SSEE Inc F ECP P3A Production Support line and DSA line, includes production support and DSA cost for SSEE Increment F(V)1/2&(V)7/8 - Next Generation Chassis, Spectral Capability Drops, Anti-Access, Area Denial (A2AD) Kits, SSEE Inc F v(7/8) VPX Backfits Kits and SSEE Inc F v(1/2) VPX Backfits Kits.

P-3a, Mods ECP:

(18) Graywing NextGen; FY 2024 increase ($4.169M) reflects an increase of (8) system installations.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 5: Reconnaissance Equipment	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

(16) MODS VPX Backfit Kits; FY 2024 increase ($43.450M) is for the initial procurement of (16) systems which aligns to current fielding plan.

NOTE: The Mods ECP P3A Production Support line and DSA line, includes production support and DSA cost for Graywing NextGen and MODS VPX Backfit Kits.

P-3a, Real Time Spectrum Operations (RTSO) Own Force Monitoring (OFM) Hardware:

(14) RTSO OFM Systems; FY 2024 increase ($3.788M) is for the procurement of (4) additional RTSO OFM Systems in which aligns to current fielding plan.

P-3a, Horizon/Distributed Operations Hardware:

(25) Horizon/Distributed Operations Systems; FY 2024 decrease (-$2.659M) reflects a decrease in unit costs based on an updated procurement configuration and fielding plan. Overall QTYs have increased by (14).

P-3a, Integrated Communications and Data Systems (ICADS) Hardware:

(3) Integrated Communications and Data Systems (ICADS); FY 2024 increase ($8.454M) is due to the increased procurement of (1) system which aligns to current fielding plan.

Additionally, FY24 is the peak funding for the Shipboard IW budget, due to procurement of ECPs for SSEE Increment F and SSEE Modifications while the Prime Mission Product contractor production line is still fully active. These ECPs will address key system obsolescence and performance issues to meet fleet cryptologic and SIGINT requirements until the fielding of Spectral.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Item Number / Title [DODIC]:** 1 / Shipboard IW Exploit
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	852.448	10.459	10.501	12.156	0.000	12.156
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	852.448	10.459	10.501	12.156	0.000	12.156
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**852.448**	**10.459**	**10.501**	**12.156**	**0.000**	**12.156**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - Consolidated Prior Year Requirements Cost																		
Recurring Cost																		
1.1.1) Consolidated PY Requirements	-	-	772.312	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*772.312*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Hardware - Consolidated Prior Year Requirements Cost	**-**	**-**	***772.312***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Hardware - 1U029 Information Warfare (IW) Training Equipment Cost																		
Recurring Cost																		
2.1.1) Information Warfare (IW) Training Equipment(†) (1)	1,374.429	21	28.863	3,214.000	1	3.214	3,281.000	1	3.281	3,350.000	1	3.350	-	-	0.000	3,350.000	1	3.350
Subtotal: Recurring Cost	-	-	*28.863*	-	-	*3.214*	-	-	*3.281*	-	-	*3.350*	-	-	*0.000*	-	-	*3.350*
Subtotal: Hardware - 1U029 Information Warfare (IW) Training Equipment Cost	**-**	**-**	***28.863***	**-**	**-**	***3.214***	**-**	**-**	***3.281***	**-**	**-**	***3.350***	**-**	**-**	***0.000***	**-**	**-**	***3.350***
Hardware - 1U014 SSEE Increment F (All Variants) ECP Cost																		
Recurring Cost																		
3.1.1) SSEE Increment F (V)1/2 ECP - 40Mhz Delta Lot 9 Backfits(†)	268.048	63	16.887	201.959	12	2.424	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	P-1 Line Item Number / Title: 2360 / Shipboard IW Exploit	Item Number / Title [DODIC]: 1 / Shipboard IW Exploit
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
3.1.2) Navy Tactical Data Network (NTDN)(†) (2)	496.500	12	5.958	517.000	3	1.551	528.000	12	6.336	40.000	5	0.200	-	-	0.000	40.000	5	0.200
3.1.3) Classic Reach(†) (3)	-	-	0.000	-	-	0.000	-	-	0.000	499.000	4	1.996	-	-	0.000	499.000	4	1.996
3.1.4) SSEE Increment F ECP - Digital Filer(†) (4)	-	-	0.000	-	-	0.000	-	-	0.000	250.000	16	4.000	-	-	0.000	250.000	16	4.000
Subtotal: Recurring Cost	-	-	*22.845*	-	-	*3.975*	-	-	*6.336*	-	-	*6.196*	-	-	*0.000*	-	-	*6.196*
Subtotal: Hardware - 1U014 SSEE Increment F (All Variants) ECP Cost	**-**	**-**	***22.845***	**-**	**-**	***3.975***	**-**	**-**	***6.336***	**-**	**-**	***6.196***	**-**	**-**	***0.000***	**-**	**-**	***6.196***
Support - 1U555 Production Support Cost																		
5.1) SSEE Inc F (All Var) & SSEE Inc F (All Var) ECPs - Production Support	-	-	11.440	-	-	0.223	-	-	0.317	-	-	0.372	-	-	0.000	-	-	0.372
Subtotal: Support - 1U555 Production Support Cost	**-**	**-**	***11.440***	**-**	**-**	***0.223***	**-**	**-**	***0.317***	**-**	**-**	***0.372***	**-**	**-**	***0.000***	**-**	**-**	***0.372***
Support - 1U776 / 1U777 Installation Cost																		
6.1) SSEE Increment F(V)1/2 Intellian Antennas - Install	-	-	9.895	-	-	2.136	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
6.2) SSEE Increment F(V)1/2 Intellian Antennas - DSA	-	-	5.736	-	-	0.465	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
6.3) SSEE Increment F(V)1/2 NTDN - Install	-	-	0.910	-	-	0.310	-	-	0.237	-	-	1.020	-	-	0.000	-	-	1.020
6.4) SSEE Increment F(V)1/2 Classic Reach Systems - Install	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.204	-	-	0.000	-	-	0.204
6.5) SSEE Increment F(V)1/2 NTDN - DSA	-	-	0.447	-	-	0.136	-	-	0.330	-	-	0.600	-	-	0.000	-	-	0.600
6.6) SSEE Increment F(V)1/2 CLASSIC REACH - DSA	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.414	-	-	0.000	-	-	0.414
Subtotal: Support - 1U776 / 1U777 Installation Cost	**-**	**-**	***16.988***	**-**	**-**	***3.047***	**-**	**-**	***0.567***	**-**	**-**	***2.238***	**-**	**-**	***0.000***	**-**	**-**	***2.238***
Gross/Weapon System Cost	**-**	**-**	**852.448**	**-**	**-**	**10.459**	**-**	**-**	**10.501**	**-**	**-**	**12.156**	**-**	**-**	**0.000**	**-**	**-**	**12.156**

Remarks:

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Item Number / Title [DODIC]:** 1 / Shipboard IW Exploit
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

[Hardware] Consolidated Prior Year Requirements - Ships Signal Exploitation Equipment (SSEE) Consolidated Prior Year requirements include: SSEE Inc E, SSEE Inc F (V)1/2 Shore, SSEE MODS- Shore - Land Based Test Facility (LBTF), CUB Replacement, LRIP to FRP Back fit Kits, Red Falcon Upgrade Kits, LBTF Refresh Kits, Blade Delta Kits, Windows 10 NRE, JIRA NRE, SSEE Inc F (V)7/8 Recorders , RFCU kits, DRT, Medusa, XP Eradication, SSEE Increment F (V)1/2 ECP - Processing Upgrades Workstations, SSEE Increment F (V)1/2 In-line Blade Kits, SSEE Increment F (V)7/8 ECP Blade Kits, Intellian Antennas, IO Equipment Modules, SSC-W ECP Modules, SSC-S ECP Modules, Red Falcon ECP Modules, Medusa ECP Modules, as well as associated production support and installation costs.

(†) indicates the presence of a P-5a

Footnotes:

(1) (2.1.1) Information Warfare (IW) Training Equipment - Installations are organic (installed with no direct funding costs).

(2) (3.1.2) Navy Tactical Data Network (NTDN) - FY24 decrease reflects NTDN and Classic Reach being reported in the same cost element in previous budget cycles. NTDN and Classic Reach are now being broken out in FY24 in alignment with unique procurement and fielding requirements.

(3) (3.1.3) Classic Reach - FY24 increase reflects NTDN and Classic Reach being reported in the same cost element in previous budget cycles. NTDN and Classic Reach are now broken out in FY24 in alignment with unique procurement and fielding requirements which is ever evolving in order to meet emerging threats in specific AORs.

(4) (3.1.4) SSEE Increment F ECP - Digital Filer - FY 2024 is the first year of procurement for Digital Filers. Procurements and installations aligned to current fielding plan, which is ever evolving in order to meet emerging threats in specific AORs.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	P-1 Line Item Number / Title: 2360 / Shipboard IW Exploit	Item Number / Title [DODIC]: 1 / Shipboard IW Exploit

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.1.1) Information Warfare (IW) Training Equipment		2022	NIWC PAC / San Diego, CA	WR	San Diego, CA	Nov 2021	Aug 2022	1	3,214.000	Y		
2.1.1) Information Warfare (IW) Training Equipment		2023	NIWC PAC / San Diego, CA	WR	San Diego	Nov 2022	Aug 2023	1	3,281.000	Y		
2.1.1) Information Warfare (IW) Training Equipment		2024	NIWC PAC / San Diego, CA	WR	San Diego	Nov 2023	Aug 2024	1	3,350.000	Y		
3.1.1) SSEE Increment F (V)1/2 ECP - 40Mhz Delta Lot 9 Backfits		2022	Navy System Management Activity (NSMA) / San Diego, Ca	C / FFP	San Diego, CA	Jan 2022	Jan 2023	12	201.959	Y		
3.1.2) Navy Tactical Data Network (NTDN)		2022	Navy System Management Activity (NSMA) / San Diego, CA	C / CPFF	San Diego, CA	Feb 2022	Feb 2023	3	517.000	Y		
3.1.2) Navy Tactical Data Network (NTDN)		2023	Navy System Management Activity (NSMA) / San Diego, CA	C / CPFF	San Diego, CA	Feb 2023	Feb 2024	12	528.000	Y		
3.1.2) Navy Tactical Data Network (NTDN)		2024	Navy System Management Activity (NSMA) / San Diego, CA	C / CPFF	San Diego, CA	Feb 2024	Feb 2025	5	40.000	Y		
3.1.3) Classic Reach		2024	Navy System Management Activity (NSMA) / San Diego, Ca	C / CPFF	San Diego, CA	Feb 2024	Feb 2025	4	499.000	Y		
3.1.4) SSEE Increment F ECP - Digital Filer		2024	Navy System Management Activity (NSMA) / San Diego, CA	C / CPFF	San Diego, CA	Feb 2024	Feb 2025	16	250.000	Y		

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 1 / SSEE Increment F (All Variants)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	890.767	75.129	45.521	21.980	0.000	21.980	0.000	0.000	0.000	0.000	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	890.767	75.129	45.521	21.980	0.000	21.980	0.000	0.000	0.000	0.000	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**890.767**	**75.129**	**45.521**	**21.980**	**0.000**	**21.980**	**0.000**	**0.000**	**0.000**	**0.000**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Ship Signal Exploitation Equipment (SSEE) Increment F (All Variants) program is an incremental acquisition, Commercial Off-The-Shelf/Government Off-The-Shelf (COTS/GOTS) system designed as the cornerstone for maritime Information Warfare (IW) exploitation/Information Operations (IO)/non-kinetic functionality and tactical cryptologic capability across Navy surface combatant platforms. SSEE Increment F and its variants provides IW cryptologists with IO/non-kinetic capabilities and subsequent threat identification and analysis of Communications Intelligence as well as queuing of radio direction finding assets. Equipment includes receivers, Radio Frequency management systems, recorders, audio distribution systems, computers, antennas and ancillary hardware. The system is upgraded incrementally as improvements are developed with system design permitting rapid insertion of new and emerging Pre-Planned Product Improvement (P3I) to address the evolving threat and delivery through ECP. The system utilizes generic processor technology to counteract obsolescence issues with digital signal processing/field programmable gate array technologies and provide software receivers for ease of modification to deal with known and projected threat SOIs. Automated signal acquisition and integrated radio direction finding are incorporated into the SSEE Increment F(V)1/2 system.

SSEE Increment F also includes a small form factor variant, SSEE Increment F(V)7/8, which meets IW/IO/non-kinetic and subsequent tactical cryptologic capability onboard Arleigh Burke Class Destroyers (DDG) Flight I or other designated platforms as a replacement for select SSEE Increment E variants and legacy signals intelligence systems. It is both scalable and modular to allow tailorable configurations to meet platform or mission specific requirements.

SSEE Increment F (All Variants) will provide Carrier Strike Groups with Information Operation (IO)/non-kinetic capabilities and the subsequent ability to exploit Signals of Interest (SOIs) by providing a state-of-the-art system which detects, acquires, and collects data on any potential threat.

[SSEE Increment F(V)7/8 Ship - Infrastructure]

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 1 / SSEE Increment F (All Variants)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0304785N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SSEE Increment F (All Variants)												
B Kits												
Recurring												
1.1.1) SSEE Increment F(V)1/2 Systems (Ship) - NonOrganic	61 / 485.709	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	61 / 485.709
1.1.2) SSEE Increment F(V)7/8 Ship - Below Deck and Core - Organic	27 / 100.680	7 / 29.313	3 / 12.828	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	37 / 142.821
1.1.3) SSEE Increment F(V)7/8 Ship - Infrastructure - NonOrganic	27 / 20.977	7 / 7.085	3 / 3.099	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	37 / 31.161
1.1.4) SSEE Increment F(V)7/8 Shore - Below Deck and Core - Organic	11 / 30.439	2 / 8.235	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 38.674
1.1.5) SSEE Increment F(V)7/8 Shore - Infrastructure - NonOrganic	11 / 18.693	2 / 2.024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 20.717
Subtotal: Recurring	*- / 656.498*	*- / 46.657*	*- / 15.927*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 719.082*
Subtotal: SSEE Increment F (All Variants)	*137 / 656.498*	*18 / 46.657*	*6 / 15.927*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*161 / 719.082*
Subtotal: Procurement, All Modification Items	*- / 656.498*	*- / 46.657*	*- / 15.927*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 719.082*
Support *(All Modification Items)*												
2.1) Production Support	- / 38.023	- / 2.799	- / 2.230	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	Continuing	Continuing
2.2) DSA	- / 38.352	- / 5.829	- / 4.303	- / 0.980	- / 0.000	- / 0.980	- / 0.000	- / 0.000	- / 0.000	- / 0.000	Continuing	Continuing
Subtotal: Support	*- / 76.375*	*- / 8.628*	*- / 6.533*	*- / 0.980*	*- / -*	*- / 0.980*	*- / -*	*- / -*	*- / -*	*- / -*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SSEE Increment F (All Variants)	- / 157.894	- / 19.844	- / 23.061	- / 21.000	- / 0.000	- / 21.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 221.799
Subtotal: Installation	*- / 157.894*	*- / 19.844*	*- / 23.061*	*- / 21.000*	*- / -*	*- / 21.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 221.799*
Total												
Total Cost (Procurement + Support + Installation)	**890.767**	**75.129**	**45.521**	**21.980**	**0.000**	**21.980**	**0.000**	**0.000**	**0.000**	**0.000**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 1 / SSEE Increment F (All Variants)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SSEE Increment F (All Variants)

Manufacturer Information

Manufacturer Name: NSMA - SSEE INC F (V)7/8 Ship & Shore Infrastructure and Below Deck & Core	Manufacturer Location: San Diego, CA
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 15

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023					
Delivery Dates	Apr 2023	Apr 2024					

Installation Information

Method of Implementation: Ship:: Installation Name: SSEE Increment F(V)1/2 Systems (Ship)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	54 / 112.953	7 / 15.492	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	61 / 128.445
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	54 / 112.953	7 / 15.492	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	61 / 128.445

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	54	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61
Out	54	-	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61

Method of Implementation: IMO:: Installation Name: SSEE INC F (V) 7/8 Ship Infrastructure

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	19 / 40.664	2 / 4.352	6 / 13.278	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	27 / 58.294

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 1 / SSEE Increment F (All Variants)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SSEE Increment F (All Variants)

Installation Information

Method of Implementation: IMO:: Installation Name: SSEE INC F (V) 7/8 Ship Infrastructure

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	4 / 8.852	3 / 10.500	0 / 0.000	3 / 10.500	- / -	- / -	- / -	- / -	0 / 0.000	7 / 19.352
FY 2023	- / -	- / -	- / -	3 / 10.500	0 / 0.000	3 / 10.500	- / -	- / -	- / -	- / -	0 / 0.000	3 / 10.500
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	19 / 40.664	2 / 4.352	10 / 22.130	6 / 21.000	0 / 0.000	6 / 21.000	- / -	- / -	- / -	- / -	0 / 0.000	37 / 88.146

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	19	-	2	-	-	-	4	4	2	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37
Out	16	3	-	2	-	-	-	4	4	2	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37

Method of Implementation: IMO:: Installation Name: SSEE INC F (V) 7/8 Shore Infrastructure

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	11 / 4.277	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	11 / 4.277
FY 2022	- / -	- / -	2 / 0.931	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 0.931
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	11 / 4.277	- / -	2 / 0.931	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	13 / 5.208

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 1 / SSEE Increment F (All Variants)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SSEE Increment F (All Variants)

Installation Information

Method of Implementation: IMO:: Installation Name: SSEE INC F (V) 7/8 Shore Infrastructure

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	11	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
Out	9	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13

Method of Implementation (Organic): SSEE Increment F(V)7/8 Ship - Below Deck and Core - Not Installed	**Installation Quantity:** 37
Method of Implementation (Organic): SSEE Increment F(V)7/8 Shore - Below Deck and Core - Not Installed	**Installation Quantity:** 13

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 2 / SSEE Modifications
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	290.200	84.352	78.404	58.217	0.000	58.217	7.952	0.000	0.000	0.000	0.000	519.125
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	290.200	84.352	78.404	58.217	0.000	58.217	7.952	0.000	0.000	0.000	0.000	519.125
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**290.200**	**84.352**	**78.404**	**58.217**	**0.000**	**58.217**	**7.952**	**0.000**	**0.000**	**0.000**	**0.000**	**519.125**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Ship's Signal Exploitation Equipment (SSEE) Modifications is a classified Navy tactical signals intelligence frequency extension capability that integrates and interoperates with SSEE systems. This capability is broken into two major components: Paragon which provides simultaneous detection, collection, processing, Information Operations (IO) and display of communication intelligence data from hostile, high threat and adversary platforms in select frequency ranges that are not prosecuted or countered with SSEE Increment F and its variants; and the Graywing subsystem which is an advanced Electronic Warfare system that integrates with SSEE Increment F systems. It is a critical component of "Ballistic Missile Defense, Executive Committee, Anti-Submarine Warfare, Chief of Naval Operations, Executive Board IO Countermeasure Red Flash" (details held at a higher classification level).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 2 / SSEE Modifications
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Various	**Modification Type:** Upgrade	**Related RDT&E PEs:** 0304785N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SSEE Modifications												
B Kits												
Recurring												
1.1.1) SSEE Modifications (SSEE MODS) - NonOrganic (5)	39 / 216.954	10 / 60.982	9 / 56.036	3 / 24.990	- / -	3 / 24.990	- / -	- / -	- / -	- / -	- / -	61 / 358.962
Subtotal: Recurring	*- / 216.954*	*- / 60.982*	*- / 56.036*	*- / 24.990*	*- / -*	*- / 24.990*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 358.962*
Subtotal: SSEE Modifications	*39 / 216.954*	*10 / 60.982*	*9 / 56.036*	*3 / 24.990*	*- / -*	*3 / 24.990*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*61 / 358.962*
Subtotal: Procurement, All Modification Items	*- / 216.954*	*- / 60.982*	*- / 56.036*	*- / 24.990*	*- / -*	*- / 24.990*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 358.962*
Support *(All Modification Items)*												
2.1) SSEE MODS Production Support	- / 17.862	- / 3.659	- / 2.841	- / 1.499	- / -	- / 1.499	- / -	- / -	- / -	- / -	- / -	- / 25.861
2.2) SSEE MODS DSA	- / 9.783	- / 3.145	- / 2.633	- / 1.728	- / -	- / 1.728	- / 0.294	- / -	- / -	- / -	- / -	- / 17.583
Subtotal: Support	*- / 27.645*	*- / 6.804*	*- / 5.474*	*- / 3.227*	*- / -*	*- / 3.227*	*- / 0.294*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 43.444*
Installation												
Modification Item 1 of 1: SSEE Modifications	- / 45.601	- / 16.566	- / 16.894	- / 30.000	- / 0.000	- / 30.000	- / 7.658	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 116.719
Subtotal: Installation	*- / 45.601*	*- / 16.566*	*- / 16.894*	*- / 30.000*	*- / -*	*- / 30.000*	*- / 7.658*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 116.719*
Total												
Total Cost (Procurement + Support + Installation)	**290.200**	**84.352**	**78.404**	**58.217**	**0.000**	**58.217**	**7.952**	**0.000**	**0.000**	**0.000**	**0.000**	**519.125**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 2 / SSEE Modifications
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SSEE Modifications

Manufacturer Information

Manufacturer Name: NSMA - SSEE Mods - Ship	Manufacturer Location: San Diego, CA
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 15

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Apr 2023	Apr 2024	Apr 2025				

Installation Information

Method of Implementation: IMO:: Installation Name: SSEE Mods

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	26 / 45.601	10 / 16.566	3 / 5.067	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	39 / 67.234
FY 2022	- / -	- / -	7 / 11.827	3 / 7.500	0 / 0.000	3 / 7.500	- / -	- / -	- / -	- / -	0 / 0.000	10 / 19.327
FY 2023	- / -	- / -	- / -	9 / 22.500	0 / 0.000	9 / 22.500	- / -	- / -	- / -	- / -	0 / 0.000	9 / 22.500
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	3 / 7.658	- / -	- / -	- / -	0 / 0.000	3 / 7.658
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	26 / 45.601	10 / 16.566	10 / 16.894	12 / 30.000	0 / 0.000	12 / 30.000	3 / 7.658	- / -	- / -	- / -	0 / 0.000	61 / 116.719

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	26	1	2	2	5	2	1	3	4	3	-	5	4	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	61
Out	24	2	1	2	2	5	2	1	3	4	3	-	5	4	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	61

Footnotes:

(5) (1.1.1) SSEE Modifications (SSEE MODS) - FY 2024 decrease is attributed to the procurement of (6) less systems, which aligns to current fielding plan, which is ever evolving in order to meet emerging threats in specific AORs. Procurement unit cost increase by 25% due to realized pricing on new production contract. Installation unit cost increased by 48% due to realized pricing for current installations.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 3 / SSEE Inc F ECPs
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	54.734	49.808	71.237	145.364	0.000	145.364	79.619	51.344	33.388	25.501	4.371	515.366
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	54.734	49.808	71.237	145.364	0.000	145.364	79.619	51.344	33.388	25.501	4.371	515.366
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**54.734**	**49.808**	**71.237**	**145.364**	**0.000**	**145.364**	**79.619**	**51.344**	**33.388**	**25.501**	**4.371**	**515.366**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Engineering Change Proposal (ECP)/Obsolescence procures Commercial Off-The-Shelf/Non-Developmental Item (COTS/NDI) equipment to replace obsolete and end-of-life (EOL) equipment for the Ship's Signal Exploitation Equipment (SSEE) Increment F program (All Variants) and incorporates Pre-Planned Product Improvement (P3I) for the acquisition and localization of the latest Signals of Interest (SOI) and Information Operations (IO) capabilities into the host systems. ECP's maintain and improve upon existing capability and relevance within a rapidly evolving threat environment.

ECP equipment will also be used to supplement SSEE Family of Systems (FoS) to meet their respective scalable and modular capacities and meet platform mission requirements including Anti-Access Area Denial (A2AD), unique signal processing capability or exploitation functionality and enable SSEE Increment F(V)7/8's (previously referred to as Tactical Cryptologic System (TCS)) scalable and modular capacity.

[SSEE Increment F (V)1/2 & (V)7/8 - Next Generation Chassis] SSEE Increment F (V)1/2 & (V)7/8 - Next Generation Chassis - Next Generation Chassis modifications provide enhanced data processing and greater exposure to existing system services while creating a secondary physical hosting environment to meet constricting size, weight, power, and cooling requirements.

[SSEE Increment F(V)7/8 Spectral Capability Drops] SSEE Increment F(V)7/8 Spectral Capability Drops - Spectral Capability Drops include high maturity, developed Radio Frequency (RF) signal acquisition collection, exploitation capability, or technique supporting host system functionality to maximize Fleet cryptologic resources. Based on prioritized Fleet need, Spectral Capability Drops deliver matured, validated, and available capability leveraging the expanded Spectral requirements base. The Fleet benefits by being able to incorporate and use these capabilities through SSEE Increment F / SSEE Mods as opposed to waiting until full Spectral Engineering Development Model (EDM) is complete. These items specifically are Combat Systems integration solutions, cyber capabilities, antenna solutions covering expanded frequency ranges and targets as well as specialized signal processing and acquisition techniques.

[SSEE Increment F (V)1/2 - A2AD KIT] SSEE Increment F (V)1/2 - Anti-Access Area Denial (A2AD) KIT - A2AD kits are a varied mix of software and hardware components delivering unique signal processing capabilities or exploitation functionality designed to address classified Fleet Integrated Priority Capabilities needs and integrate seamlessly into the host systems to give maritime Fleet Commanders a tactical global advantage.

[SSEE Inc F v(7/8) VPX Backfit Kits] SSEE Inc F VPX Backfit Kits - VPX backfit kits replace outdated, End-of-Life (EoL) equipment within SSEE Inc F v(7/8) system racks, while providing modernized, open system interfaces digitizing much of the Radio Frequency (RF) transport and distribution layers within the system.

[SSEE Inc F v(1/2) VPX Backfit Kits] SSEE Inc F v(1/2) VPX Backfit Kits - VPX backfit kits replace outdated, End-of-Life (EoL) equipment within SSEE Inc F v(1/2) system racks, while providing modernized, open system interfaces digitizing much of the Radio Frequency (RF) transport and distribution layers within the system.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 3 / SSEE Inc F ECPs
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0304785N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SSEE Inc F ECPs												
B Kits												
Recurring												
1.1.1) SSEE Increment F (V)1/2 & (V)7/8 - Next Generation Chassis - NonOrganic (6)	47 / 22.990	12 / 6.034	18 / 9.240	18 / 9.428	- / -	18 / 9.428	10 / 5.348	9 / 4.914	2 / 1.115	7 / 3.984	- / -	123 / 63.053
1.1.2) SSEE Increment F(V)7/8 Spectral Capability Drops - NonOrganic (7)	9 / 16.200	10 / 18.306	16 / 29.905	29 / 55.340	- / -	29 / 55.340	- / -	- / -	- / -	- / -	- / -	64 / 119.751
1.1.3) SSEE Increment F (V)1/2 - A2AD KIT - NonOrganic (8)	30 / 9.309	9 / 2.840	9 / 2.900	17 / 5.593	- / -	17 / 5.593	- / -	- / -	- / -	- / -	- / -	65 / 20.642
1.1.4) SSEE Inc F v(7/8) VPX Backfit Kits - NonOrganic (9)	- / -	12 / 11.066	18 / 16.948	7 / 14.112	- / -	7 / 14.112	7 / 14.408	4 / 8.406	2 / 4.774	- / -	- / -	50 / 69.714
1.1.5) SSEE Inc F v(1/2) VPX Backfit Kits - NonOrganic (10)	- / -	- / -	- / -	16 / 28.800	- / -	16 / 28.800	16 / 29.405	11 / 20.640	8 / 15.326	7 / 13.692	- / -	58 / 107.863
Subtotal: Recurring	*- / 48.499*	*- / 38.246*	*- / 58.993*	*- / 113.273*	*- / -*	*- / 113.273*	*- / 49.161*	*- / 33.960*	*- / 21.215*	*- / 17.676*	*- / 0.000*	*- / 381.023*
Subtotal: SSEE Inc F ECPs	*86 / 48.499*	*43 / 38.246*	*61 / 58.993*	*87 / 113.273*	*- / -*	*87 / 113.273*	*33 / 49.161*	*24 / 33.960*	*12 / 21.215*	*14 / 17.676*	*- / -*	*360 / 381.023*
Subtotal: Procurement, All Modification Items	*- / 48.499*	*- / 38.246*	*- / 58.993*	*- / 113.273*	*- / -*	*- / 113.273*	*- / 49.161*	*- / 33.960*	*- / 21.215*	*- / 17.676*	*- / 0.000*	*- / 381.023*
Support *(All Modification Items)*												
2.1) Inc F ECP Production Support (11)	- / 2.331	- / 2.238	- / 3.539	- / 6.447	- / -	- / 6.447	- / 2.949	- / 1.699	- / 1.274	- / 1.061	- / -	- / 21.538
2.2) Inc F ECP DSA (12)	- / 2.089	- / 3.094	- / 3.691	- / 11.800	- / -	- / 11.800	- / 9.388	- / 5.560	- / 3.480	- / 2.875	- / -	- / 41.977
Subtotal: Support	*- / 4.420*	*- / 5.332*	*- / 7.230*	*- / 18.247*	*- / -*	*- / 18.247*	*- / 12.337*	*- / 7.259*	*- / 4.754*	*- / 3.936*	*- / 0.000*	*- / 63.515*
Installation												
Modification Item 1 of 1: SSEE Inc F ECPs	- / 1.815	- / 6.230	- / 5.014	- / 13.844	- / 0.000	- / 13.844	- / 18.121	- / 10.125	- / 7.419	- / 3.889	- / 4.371	- / 70.828
Subtotal: Installation	*- / 1.815*	*- / 6.230*	*- / 5.014*	*- / 13.844*	*- / -*	*- / 13.844*	*- / 18.121*	*- / 10.125*	*- / 7.419*	*- / 3.889*	*- / 4.371*	*- / 70.828*
Total												
Total Cost (Procurement + Support + Installation)	**54.734**	**49.808**	**71.237**	**145.364**	**0.000**	**145.364**	**79.619**	**51.344**	**33.388**	**25.501**	**4.371**	**515.366**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 3 / SSEE Inc F ECPs
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SSEE Inc F ECPs

Manufacturer Information

Manufacturer Name: NSMA - Next Generation Chassis				Manufacturer Location: San Diego, CA			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Jan 2023	Jan 2024	Jan 2025				

Manufacturer Name: NSMA - Spectral Capability Drop				Manufacturer Location: San Diego, CA			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Jan 2023	Jan 2024	Jan 2025				

Manufacturer Name: NSMA - A2AD				Manufacturer Location: San Diego, CA			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Jan 2023	Jan 2024	Jan 2025				

Manufacturer Name: NSMA - VPX V(7/8) BACKFIT KITS				Manufacturer Location: San Diego, CA			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Jan 2023	Jan 2024	Jan 2025				

Manufacturer Name: NSMA - VPX V(1/2) BACKFIT KITS				Manufacturer Location: San Diego, Ca			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates			Jan 2024				
Delivery Dates			Jan 2025				

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 3 / SSEE Inc F ECPs
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SSEE Inc F ECPs

Installation Information

Method of Implementation: IMO:: Installation Name: SSEE INC F Next Generation Chassis

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	20 / 1.815	27 / 2.513	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	47 / 4.328
FY 2022	- / -	- / -	12 / 1.140	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	12 / 1.140
FY 2023	- / -	- / -	- / -	18 / 4.734	0 / 0.000	18 / 4.734	- / -	- / -	- / -	- / -	0 / 0.000	18 / 4.734
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	18 / 4.833	- / -	- / -	- / -	0 / 0.000	18 / 4.833
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 2.742	- / -	- / -	0 / 0.000	10 / 2.742
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 2.519	- / -	0 / 0.000	9 / 2.519
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.572	0 / 0.000	2 / 0.572
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.041	7 / 2.041
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	20 / 1.815	27 / 2.513	12 / 1.140	18 / 4.734	0 / 0.000	18 / 4.734	18 / 4.833	10 / 2.742	9 / 2.519	2 / 0.572	7 / 2.041	123 / 22.909

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	20	-	9	9	9	-	6	5	1	-	6	6	6	-	6	6	6	-	4	3	3	-	3	3	3	-	1	1	-	7	123
Out	20	-	9	9	9	-	6	5	1	-	6	6	6	-	6	6	6	-	4	3	3	-	3	3	3	-	1	1	-	7	123

Method of Implementation: FIO:: Installation Name: SSEE INC F Spectral Capability Drops

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	9 / 1.350	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 1.350
FY 2022	- / -	- / -	10 / 1.532	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 1.532
FY 2023	- / -	- / -	- / -	16 / 2.502	0 / 0.000	16 / 2.502	- / -	- / -	- / -	- / -	0 / 0.000	16 / 2.502
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	29 / 4.630	- / -	- / -	- / -	0 / 0.000	29 / 4.630
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 3 / SSEE Inc F ECPs
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SSEE Inc F ECPs

Installation Information

Method of Implementation: FIO:: Installation Name: SSEE INC F Spectral Capability Drops

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	- / -	9 / 1.350	10 / 1.532	16 / 2.502	0 / 0.000	16 / 2.502	29 / 4.630	- / -	- / -	- / -	0 / 0.000	64 / 10.014

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	3	3	3	-	5	5	-	-	6	5	5	-	10	10	9	-	-	-	-	-	-	-	-	-	-	-	-	-	64
Out	-	-	3	3	3	-	5	5	-	-	6	5	5	-	10	10	9	-	-	-	-	-	-	-	-	-	-	-	-	-	64

Method of Implementation: FIO:: Installation Name: SSEE INC F A2AD

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	30 / 2.367	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	30 / 2.367
FY 2022	- / -	- / -	9 / 0.725	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 0.725
FY 2023	- / -	- / -	- / -	9 / 0.740	0 / 0.000	9 / 0.740	- / -	- / -	- / -	- / -	0 / 0.000	9 / 0.740
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	17 / 1.427	- / -	- / -	- / -	0 / 0.000	17 / 1.427
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	30 / 2.367	9 / 0.725	9 / 0.740	0 / 0.000	9 / 0.740	17 / 1.427	- / -	- / -	- / -	0 / 0.000	65 / 5.259

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	10	10	10	-	5	4	-	-	3	3	3	-	6	6	5	-	-	-	-	-	-	-	-	-	-	-	-	-	65
Out	-	-	10	10	10	-	5	4	-	-	3	3	3	-	6	6	5	-	-	-	-	-	-	-	-	-	-	-	-	-	65

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 3 / SSEE Inc F ECPs
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SSEE Inc F ECPs

Installation Information

Method of Implementation: FIO:: Installation Name: SSEE INC F VPX BACKFIT KITS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	12 / 1.617	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	12 / 1.617
FY 2023	- / -	- / -	- / -	18 / 5.868	0 / 0.000	18 / 5.868	- / -	- / -	- / -	- / -	0 / 0.000	18 / 5.868
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.330	- / -	- / -	- / -	0 / 0.000	7 / 2.330
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.379	- / -	- / -	0 / 0.000	7 / 2.379
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.388	- / -	0 / 0.000	4 / 1.388
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.709	0 / 0.000	2 / 0.709
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	12 / 1.617	18 / 5.868	0 / 0.000	18 / 5.868	7 / 2.330	7 / 2.379	4 / 1.388	2 / 0.709	0 / 0.000	50 / 14.291

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	6	6	-	-	6	6	6	-	4	3	-	-	4	3	-	-	2	2	-	-	1	1	-	-	50
Out	-	-	-	-	-	-	6	6	-	-	6	6	6	-	4	3	-	-	4	3	-	-	2	2	-	-	1	1	-	-	50

Method of Implementation: IMO:: Installation Name: SSEE Inc F v(1/2) VPX Backfit Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	16 / 4.901	- / -	- / -	- / -	0 / 0.000	16 / 4.901
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 5.004	- / -	- / -	0 / 0.000	16 / 5.004
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 3.512	- / -	0 / 0.000	11 / 3.512
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 2.608	0 / 0.000	8 / 2.608
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.330	7 / 2.330
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 3 / SSEE Inc F ECPs
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SSEE Inc F ECPs

Installation Information

Method of Implementation: IMO:: Installation Name: SSEE Inc F v(1/2) VPX Backfit Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	- / -	- / -	- / -	- / -	- / -	- / -	16 / 4.901	16 / 5.004	11 / 3.512	8 / 2.608	7 / 2.330	58 / 18.355

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	5	5	-	6	5	5	-	4	4	3	-	3	3	2	7	58
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	5	5	-	6	5	5	-	4	4	3	-	3	3	2	7	58

Footnotes:

(6) (1.1.1)SSEE Increment F (V)1/2 & (V)7/8 - Next Generation Chassis - FY 2024 increase reflects an increase of (6) system installations.

(7) (1.1.2) SSEE Increment F(V)7/8 Spectral Capability Drops - FY 2024 increase reflects an increase of (13) systems, which is aligned to current fielding plan, which is ever evolving in order to meet emerging threats in AORs.

(8) (1.1.3) SSEE Increment F (V)1/2 - A2AD KIT - FY 2024 increase reflects an increase of (8) systems, which is aligned to current fielding plan, which is ever evolving in order to meet emerging threats in specific AORs.

(9) (1.1.4) SSEE Inc F v(7/8) VPX Backfit Kits - FY 2024 increase reflects an increase of (6) system installations. FY 2024 procurement unit costs increased due to a new hardware configuration that meets current threat requirements for v(7/8) system backfits. These requirements align to the current plan, which is ever evolving to meet the current threats.

(10) (1.1.5) SSEE Inc F v(1/2) VPX Backfit Kits - FY 2024 is the first year of procurement for the SSEE Inc F v(1/2) VPX Backfit Kits.

(11) (2.1) Inc F ECP Production Support: FY 2024 increase is attributed to an increase in procurements to support the fielding of INC-F v1/2, A2AD Kits and Spectral Capability Drops.

(12) (2.2) Inc F ECP DSA: FY 2024 increase is attributed to an increase in procurements and installations to support fielding of INC-F v1/2, A2AD Kits and Spectral Capability Drops

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 4 / Mods ECP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	17.088	19.345	30.037	77.656	0.000	77.656	63.317	36.108	4.471	0.000	0.000	248.022
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	17.088	19.345	30.037	77.656	0.000	77.656	63.317	36.108	4.471	0.000	0.000	248.022
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**17.088**	**19.345**	**30.037**	**77.656**	**0.000**	**77.656**	**63.317**	**36.108**	**4.471**	**0.000**	**0.000**	**248.022**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Ship Signal Exploitation Equipment Modification (SSEE Mods) Engineering Change Proposal (ECP) Next Generation Graywing below-deck embedded signal processing and analysis adds advanced capabilities and system enhancements to Graywing. This includes a combination of hardware and software components added to the system baseline to meet operational system requirements. Next Generation Graywing consists of multiple modifications and upgrades (topside and below deck) to pace specific classified Radio Frequency (RF) target sets (details held at higher classification). These threats have evolved and to ensure maximum performance against the newer target sets requires advanced RF input and processing, as well as modernized front-end and update to open system software architecture to ensure acquisition and exploitation Key Performance Parameters (KPPs) can still be met. The end-state ECP is intended to be fielded on multiple SSEE Modifications platforms.

VPX backfit kits replace outdated, End-of-Life (EoL) equipment within the SSEE Modifications rack, while providing modernized, open system interfaces digitizing much of the Radio Frequency (RF) transport and distribution layers. ECP is required to field SSEE Modifications with VPX-enabled Increment F systems.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 4 / Mods ECP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Mods ECP												
B Kits												
Recurring												
1.1.1) Graywing Nextgen - Ship - NonOrganic (13)	12 / 14.076	10 / 11.929	18 / 21.924	18 / 22.392	- / -	18 / 22.392	14 / 17.850	8 / 11.184	- / -	- / -	- / -	80 / 99.355
1.1.2) MODS VPX BACKFIT KITS - NonOrganic (14)	- / -	- / -	- / -	16 / 37.312	- / -	16 / 37.312	12 / 28.572	6 / 14.586	- / -	- / -	- / -	34 / 80.470
Subtotal: Recurring	*- / 14.076*	*- / 11.929*	*- / 21.924*	*- / 59.704*	*- / -*	*- / 59.704*	*- / 46.422*	*- / 25.770*	*- / -*	*- / -*	*- / 0.000*	*- / 179.825*
Subtotal: Mods ECP	*12 / 14.076*	*10 / 11.929*	*18 / 21.924*	*34 / 59.704*	*- / -*	*34 / 59.704*	*26 / 46.422*	*14 / 25.770*	*- / -*	*- / -*	*- / -*	*114 / 179.825*
Subtotal: Procurement, All Modification Items	*- / 14.076*	*- / 11.929*	*- / 21.924*	*- / 59.704*	*- / -*	*- / 59.704*	*- / 46.422*	*- / 25.770*	*- / -*	*- / -*	*- / 0.000*	*- / 179.825*
Support *(All Modification Items)*												
2.1) Production Support	- / 0.980	- / 0.716	- / 1.315	- / 3.481	- / -	- / 3.481	- / 2.785	- / 1.357	- / -	- / -	- / -	- / 10.634
2.2) DSA	- / 2.032	- / 1.900	- / 2.730	- / 7.024	- / -	- / 7.024	- / 5.995	- / 3.465	- / 0.415	- / -	- / -	- / 23.561
Subtotal: Support	*- / 3.012*	*- / 2.616*	*- / 4.045*	*- / 10.505*	*- / -*	*- / 10.505*	*- / 8.780*	*- / 4.822*	*- / 0.415*	*- / -*	*- / 0.000*	*- / 34.195*
Installation												
Modification Item 1 of 1: Mods ECP	- / 0.000	- / 4.800	- / 4.068	- / 7.447	- / 0.000	- / 7.447	- / 8.115	- / 5.516	- / 4.056	- / 0.000	- / 0.000	- / 34.002
Subtotal: Installation	*- / 0.000*	*- / 4.800*	*- / 4.068*	*- / 7.447*	*- / -*	*- / 7.447*	*- / 8.115*	*- / 5.516*	*- / 4.056*	*- / -*	*- / 0.000*	*- / 34.002*
Total												
Total Cost (Procurement + Support + Installation)	**17.088**	**19.345**	**30.037**	**77.656**	**0.000**	**77.656**	**63.317**	**36.108**	**4.471**	**0.000**	**0.000**	**248.022**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 4 / Mods ECP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Mods ECP

Manufacturer Information

Manufacturer Name: NSMA - Graywing Ship | Manufacturer Location: San Diego, CA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Jan 2023	Jan 2024	Jan 2025				

Manufacturer Name: NSMA - VPX BACKFIT KITS | Manufacturer Location: San Diego, Ca

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Jan 2024				
Delivery Dates			Jan 2025				

Installation Information

Method of Implementation: IMO:: Installation Name: Graywing Nextgen - Ship

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	12 / 4.800	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	12 / 4.800
FY 2022	- / -	- / -	10 / 4.068	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 4.068
FY 2023	- / -	- / -	- / -	18 / 7.447	0 / 0.000	18 / 7.447	- / -	- / -	- / -	- / -	0 / 0.000	18 / 7.447
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	18 / 7.603	- / -	- / -	- / -	0 / 0.000	18 / 7.603
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / 5.124	- / -	- / -	0 / 0.000	14 / 5.124
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 3.856	- / -	0 / 0.000	8 / 3.856
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	12 / 4.800	10 / 4.068	18 / 7.447	0 / 0.000	18 / 7.447	18 / 7.603	14 / 5.124	8 / 3.856	- / -	0 / 0.000	80 / 32.898

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	6	6	-	3	3	4	-	6	6	6	-	6	6	6	-	6	4	4	-	3	3	2	-	-	-	-	-	80
Out	-	-	-	6	6	-	3	3	4	-	6	6	6	-	6	6	6	-	6	4	4	-	3	3	2	-	-	-	-	-	80

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 4 / Mods ECP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Mods ECP

Installation Information

Method of Implementation: IMO:: Installation Name: MODS VPX BACKFIT KITS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	16 / 0.512	- / -	- / -	- / -	0 / 0.000	16 / 0.512
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.392	- / -	- / -	0 / 0.000	12 / 0.392
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.200	- / -	0 / 0.000	6 / 0.200
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	16 / 0.512	12 / 0.392	6 / 0.200	- / -	0 / 0.000	34 / 1.104

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	6	-	4	4	4	-	2	2	2	-	-	-	-	-	34
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	6	-	4	4	4	-	2	2	2	-	-	-	-	-	34

Footnotes:

(13) 1.1.1 Graywing Nextgen-Ship- FY 2024 increase reflects an increase of (8) system installations.

(14) (1.1.2) MODS VPX BACKFIT KITS - FY 2024 is the first year of procurement for MODS VPX Backfit Kits. Procurements and installations aligned to current fielding plan, which is ever evolving in order to meet emerging threats in specific AORs.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 5 / Real Time Spectrum Operations - Own Force Monitoring Hardware
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	8.322	12.110	0.000	12.110	6.182	9.869	10.126	10.340	0.000	56.949
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	8.322	12.110	0.000	12.110	6.182	9.869	10.126	10.340	0.000	56.949
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**8.322**	**12.110**	**0.000**	**12.110**	**6.182**	**9.869**	**10.126**	**10.340**	**0.000**	**56.949**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Real-Time Spectrum Operations (RTSO) effort researches and develops software and hardware to automate analyses of the Electromagnetic (EM) Environmental Effects (E3) between shipboard transmitters and receivers on ships and the interactions of the EM systems within the other systems installed on units within a strike group. RTSO develops and updates numerical models, algorithms, data bases, and software which aids and supports warfighter spectrum planning, sensing and monitoring characterization and prediction, and managing and maneuvering within the EM spectrum.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 5 / Real Time Spectrum Operations - Own Force Monitoring Hardware
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0605886N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Real Time Spectrum Operations - Own Force Monitoring Hardware												
B Kits												
Recurring												
1.1.1) Real Time Spectrum Operations - Own Force Monitoring Hardware - NonOrganic (15)	- / -	- / -	10 / 4.200	14 / 6.003	- / -	14 / 6.003	7 / 3.065	11 / 4.917	11 / 5.020	11 / 5.126	- / -	64 / 28.331
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / 4.200*	*- / 6.003*	*- / -*	*- / 6.003*	*- / 3.065*	*- / 4.917*	*- / 5.020*	*- / 5.126*	*- / 0.000*	*- / 28.331*
Subtotal: Real Time Spectrum Operations - Own Force Monitoring Hardware	*- / -*	*- / -*	*10 / 4.200*	*14 / 6.003*	*- / -*	*14 / 6.003*	*7 / 3.065*	*11 / 4.917*	*11 / 5.020*	*11 / 5.126*	*- / -*	*64 / 28.331*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / 4.200*	*- / 6.003*	*- / -*	*- / 6.003*	*- / 3.065*	*- / 4.917*	*- / 5.020*	*- / 5.126*	*- / 0.000*	*- / 28.331*
Support *(All Modification Items)*												
2.1) Production Support	- / -	- / -	- / 0.210	- / 0.361	- / -	- / 0.361	- / 0.184	- / 0.246	- / 0.301	- / 0.308	- / -	- / 1.610
2.2) DSA	- / -	- / -	- / 0.712	- / 1.172	- / -	- / 1.172	- / 0.598	- / 0.960	- / 0.980	- / 1.001	- / -	- / 5.423
Subtotal: Support	*- / 0.000*	*- / -*	*- / 0.922*	*- / 1.533*	*- / -*	*- / 1.533*	*- / 0.782*	*- / 1.206*	*- / 1.281*	*- / 1.309*	*- / 0.000*	*- / 7.033*
Installation												
Modification Item 1 of 1: Real Time Spectrum Operations - Own Force Monitoring Hardware	- / 0.000	- / 0.000	- / 3.200	- / 4.574	- / 0.000	- / 4.574	- / 2.335	- / 3.746	- / 3.825	- / 3.905	- / 0.000	- / 21.585
Subtotal: Installation	*- / 0.000*	*- / -*	*- / 3.200*	*- / 4.574*	*- / -*	*- / 4.574*	*- / 2.335*	*- / 3.746*	*- / 3.825*	*- / 3.905*	*- / 0.000*	*- / 21.585*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**8.322**	**12.110**	**0.000**	**12.110**	**6.182**	**9.869**	**10.126**	**10.340**	**0.000**	**56.949**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 5 / Real Time Spectrum Operations - Own Force Monitoring Hardware

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Real Time Spectrum Operations - Own Force Monitoring Hardware

Manufacturer Information

Manufacturer Name: NIWC PAC | Manufacturer Location: San Diego, Ca

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 3

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Jan 2023	Jan 2024				
Delivery Dates		Apr 2023	Apr 2024				

Installation Information

Method of Implementation: FIO:: Installation Name: Real Time Spectrum Operations - Own Force Monitoring Hardware

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	10 / 3.200	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 3.200
FY 2024	- / -	- / -	- / -	14 / 4.574	0 / 0.000	14 / 4.574	- / -	- / -	- / -	- / -	0 / 0.000	14 / 4.574
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.335	- / -	- / -	- / -	0 / 0.000	7 / 2.335
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 3.746	- / -	- / -	0 / 0.000	11 / 3.746
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 3.825	- / -	0 / 0.000	11 / 3.825
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 3.905	0 / 0.000	11 / 3.905
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	10 / 3.200	14 / 4.574	0 / 0.000	14 / 4.574	7 / 2.335	11 / 3.746	11 / 3.825	11 / 3.905	0 / 0.000	64 / 21.585

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	5	5	-	-	7	7	-	-	4	3	-	-	6	5	-	-	6	5	-	-	6	5	-	64
Out	-	-	-	-	-	-	-	-	5	5	-	-	7	7	-	-	4	3	-	-	6	5	-	-	6	5	-	-	6	5	64

Footnotes:

(15) (1.1.1) Real Time Spectrum Operations - Own Force Monitoring Hardware - FY 2024 increase reflects an increase of (4) systems which is aligned to current fielding plan, which is ever evolving in order to meet emerging threats in specific AORs.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 6 / Horizon / Distributed Ops Hardware
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	27.784	25.125	0.000	25.125	15.514	20.954	21.564	22.016	0.000	132.957
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	27.784	25.125	0.000	25.125	15.514	20.954	21.564	22.016	0.000	132.957
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**27.784**	**25.125**	**0.000**	**25.125**	**15.514**	**20.954**	**21.564**	**22.016**	**0.000**	**132.957**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Horizon and Distributed Operations (DO) delivers the Navy's Integrated Fires capability solution via Afloat/Shore across all operational domains required to meet the Great Power Competition (GPC) high end threat. Horizon provides the initial Battle Management Aids (BMA) vital to plan and execute offensive and defensive IW in the Electromagnetic (EM) spectrum and physical space. DO as the follow-on to CLASSIC REACH provides the enabling sea/shore infrastructure needed to expand assets on a Distributed Signal Intelligence (SIGINT) Operations (DSO) grid. The development and engineering effort is intended to fulfil Department of Defense (DoD) level capability requirement voids for shipboard cryptologic systems including SSEE and Spectral.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 6 / Horizon / Distributed Ops Hardware
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0304785N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Horizon / Distributed Ops Hardware												
B Kits												
Recurring												
1.1.1) Horizon / Distributed Ops Hardware - NonOrganic (16)	- / -	- / -	11 / 17.435	25 / 20.000	- / -	25 / 20.000	15 / 12.252	20 / 16.679	20 / 17.029	20 / 17.387	- / -	111 / 100.782
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / 17.435*	*- / 20.000*	*- / -*	*- / 20.000*	*- / 12.252*	*- / 16.679*	*- / 17.029*	*- / 17.387*	*- / 0.000*	*- / 100.782*
Subtotal: Horizon / Distributed Ops Hardware	*- / -*	*- / -*	*11 / 17.435*	*25 / 20.000*	*- / -*	*25 / 20.000*	*15 / 12.252*	*20 / 16.679*	*20 / 17.029*	*20 / 17.387*	*- / -*	*111 / 100.782*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / 17.435*	*- / 20.000*	*- / -*	*- / 20.000*	*- / 12.252*	*- / 16.679*	*- / 17.029*	*- / 17.387*	*- / 0.000*	*- / 100.782*
Support *(All Modification Items)*												
2.1) Production Support	- / -	- / -	- / 0.872	- / 1.000	- / -	- / 1.000	- / 0.735	- / 0.834	- / 1.022	- / 1.043	- / -	- / 5.506
2.2) DSA	- / -	- / -	- / 1.667	- / 0.575	- / -	- / 0.575	- / 0.352	- / 0.480	- / 0.490	- / 0.500	- / -	- / 4.064
Subtotal: Support	*- / 0.000*	*- / -*	*- / 2.539*	*- / 1.575*	*- / -*	*- / 1.575*	*- / 1.087*	*- / 1.314*	*- / 1.512*	*- / 1.543*	*- / 0.000*	*- / 9.570*
Installation												
Modification Item 1 of 1: Horizon / Distributed Ops Hardware	- / 0.000	- / 0.000	- / 7.810	- / 3.550	- / 0.000	- / 3.550	- / 2.175	- / 2.961	- / 3.023	- / 3.086	- / 0.000	- / 22.605
Subtotal: Installation	*- / 0.000*	*- / -*	*- / 7.810*	*- / 3.550*	*- / -*	*- / 3.550*	*- / 2.175*	*- / 2.961*	*- / 3.023*	*- / 3.086*	*- / 0.000*	*- / 22.605*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**27.784**	**25.125**	**0.000**	**25.125**	**15.514**	**20.954**	**21.564**	**22.016**	**0.000**	**132.957**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 6 / Horizon / Distributed Ops Hardware
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Horizon / Distributed Ops Hardware

Manufacturer Information

Manufacturer Name: NIWC PAC	Manufacturer Location: San Diego, Ca
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 3

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Jan 2023	Jan 2024				
Delivery Dates		Apr 2023	Apr 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: Horizon / Distributed Ops Hardware

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	11 / 7.810	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	11 / 7.810
FY 2024	- / -	- / -	- / -	25 / 3.550	0 / 0.000	25 / 3.550	- / -	- / -	- / -	- / -	0 / 0.000	25 / 3.550
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	15 / 2.175	- / -	- / -	- / -	0 / 0.000	15 / 2.175
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 2.961	- / -	- / -	0 / 0.000	20 / 2.961
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 3.023	- / -	0 / 0.000	20 / 3.023
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 3.086	0 / 0.000	20 / 3.086
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	11 / 7.810	25 / 3.550	0 / 0.000	25 / 3.550	15 / 2.175	20 / 2.961	20 / 3.023	20 / 3.086	0 / 0.000	111 / 22.605

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	6	5	-	-	13	12	-	-	8	7	-	-	10	10	-	-	10	10	-	-	10	10	-	111
Out	-	-	-	-	-	-	-	-	6	5	-	13	12	-	-	8	7	-	-	10	10	-	-	10	10	-	-	10	10	-	111

Footnotes:

(16) (1.1.1) Horizon / Distributed Ops Hardware - FY 2024 increase reflects a decrease in unit costs based on an updated procurement configuration and fielding plan. Overall QTYs have increased by (14).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 7 / Integrated Communications and Data System (ICADS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	22.642	18.168	26.622	0.000	26.622	28.678	61.539	94.280	92.309	14.218	358.456
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	22.642	18.168	26.622	0.000	26.622	28.678	61.539	94.280	92.309	14.218	358.456
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**22.642**	**18.168**	**26.622**	**0.000**	**26.622**	**28.678**	**61.539**	**94.280**	**92.309**	**14.218**	**358.456**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Integrated Communications and Data System (ICADS) Increment II is a Chief of Naval Operations (CNO) directed mission critical system providing advanced simulation capabilities and limited back-up communications for Naval platforms. ICADS Increment II provides a scalable capability dependent on host platform requirements. Specific program details held at a higher classification.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 7 / Integrated Communications and Data System (ICADS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0304785N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Integrated Communications and Data System (ICADS)												
B Kits												
Recurring												
1.1.1) ICADS Hardware - NonOrganic [17]	- / -	3 / 21.512	2 / 14.642	3 / 22.425	- / -	3 / 22.425	3 / 22.896	7 / 54.546	10 / 79.559	9 / 73.107	- / -	37 / 288.687
Subtotal: Recurring	*- / 0.000*	*- / 21.512*	*- / 14.642*	*- / 22.425*	*- / -*	*- / 22.425*	*- / 22.896*	*- / 54.546*	*- / 79.559*	*- / 73.107*	*- / 0.000*	*- / 288.687*
Subtotal: Integrated Communications and Data System (ICADS)	*- / -*	*3 / 21.512*	*2 / 14.642*	*3 / 22.425*	*- / -*	*3 / 22.425*	*3 / 22.896*	*7 / 54.546*	*10 / 79.559*	*9 / 73.107*	*- / -*	*37 / 288.687*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / 21.512*	*- / 14.642*	*- / 22.425*	*- / -*	*- / 22.425*	*- / 22.896*	*- / 54.546*	*- / 79.559*	*- / 73.107*	*- / 0.000*	*- / 288.687*
Support *(All Modification Items)*												
2.1) Production Support	- / -	- / 1.130	- / 0.734	- / 1.346	- / -	- / 1.346	- / 1.416	- / 2.536	- / 4.102	- / 3.714	- / -	- / 14.978
Subtotal: Support	*- / 0.000*	*- / 1.130*	*- / 0.734*	*- / 1.346*	*- / -*	*- / 1.346*	*- / 1.416*	*- / 2.536*	*- / 4.102*	*- / 3.714*	*- / 0.000*	*- / 14.978*
Installation												
Modification Item 1 of 1: Integrated Communications and Data System (ICADS)	- / 0.000	- / 0.000	- / 2.792	- / 2.851	- / 0.000	- / 2.851	- / 4.366	- / 4.457	- / 10.619	- / 15.488	- / 14.218	- / 54.791
Subtotal: Installation	*- / 0.000*	*- / -*	*- / 2.792*	*- / 2.851*	*- / -*	*- / 2.851*	*- / 4.366*	*- / 4.457*	*- / 10.619*	*- / 15.488*	*- / 14.218*	*- / 54.791*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**22.642**	**18.168**	**26.622**	**0.000**	**26.622**	**28.678**	**61.539**	**94.280**	**92.309**	**14.218**	**358.456**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2360 / Shipboard IW Exploit	**Modification Number / Title:** 7 / Integrated Communications and Data System (ICADS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Integrated Communications and Data System (ICADS)

Manufacturer Information

Manufacturer Name: NSMA - ICADS Hardware | Manufacturer Location: San Diego, Ca

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Feb 2022	Feb 2023	Feb 2024				
Delivery Dates	Feb 2023	Feb 2024	Feb 2025				

Installation Information

Method of Implementation: [none specified]:: Installation Name: ICADS Hardware

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	3 / 2.792	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 2.792
FY 2023	- / -	- / -	- / -	2 / 2.851	0 / 0.000	2 / 2.851	- / -	- / -	- / -	- / -	0 / 0.000	2 / 2.851
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	3 / 4.366	- / -	- / -	- / -	0 / 0.000	3 / 4.366
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 4.457	- / -	- / -	0 / 0.000	3 / 4.457
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 10.619	- / -	0 / 0.000	7 / 10.619
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 15.488	0 / 0.000	10 / 15.488
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 14.218	9 / 14.218
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	3 / 2.792	2 / 2.851	0 / 0.000	2 / 2.851	3 / 4.366	3 / 4.457	7 / 10.619	10 / 15.488	9 / 14.218	37 / 54.791

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	3	-	-	-	2	-	-	-	1	1	1	-	1	1	1	-	3	2	2	-	4	3	3	9	37
Out	-	-	-	-	-	-	3	-	-	-	2	-	-	-	1	1	1	-	1	1	1	-	3	2	2	-	4	3	3	9	37

Footnotes:

(17) (1.1.1) ICADS Hardware - FY 2024 increase reflects an increased procurement of (1) system, which is aligned to current fielding plan. ICADS Inc II and ICADS Infrastructure were reported under separate cost elements in previous budget cycles but are now combined due to design and concept of employment changes during the prototyping phase. Previous budget submission had the ICADS program stated on the P-5.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 5: Reconnaissance Equipment	**P-1 Line Item Number / Title:** 2361 / Automatic Identification System (AIS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	23.244	3.777	2.487	4.082	0.000	4.082	4.690	4.245	4.299	4.355	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	23.244	3.777	2.487	4.082	0.000	4.082	4.690	4.245	4.299	4.355	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**23.244**	**3.777**	**2.487**	**4.082**	**0.000**	**4.082**	**4.690**	**4.245**	**4.299**	**4.355**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.067	0.022	0.020	-	0.020	0.039	0.018	0.017	0.017	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

1U030: Automatic Identification System (AIS) is required for safety of navigation for all surface ships and submarines. AIS is a maritime Very High Frequency (VHF) communication system, which allows ships to exchange navigation, ship identification, and cargo information machine-to-machine via VHF transponders. AIS provides vessels with the ability to rapidly identify and track commercial shipping, which significantly increases the Navy's ability to distinguish between normal and suspicious merchant ships headed towards United States and allied ports around the globe. AIS provides critical track data to the Common Operational Picture (COP) on surface ships, AN/BYG-1 Combat System on submarines, Global Command and Control System-Maritime (GCCS-M) on Force level ships, and Global Command and Control System-Joint (GCCS-J) at Fleet Maritime Operations Centers (MOC). The AIS submarine configuration provides an interface to the AN/BYG-1 Combat System and encrypted AIS capability. This capability dramatically improves the Combatant Commanders' situational awareness and Maritime Domain Awareness (MDA) data sharing capabilities in support of regional engagement, and tracking efforts against potential maritime terrorism threats.

Funds will be used to continue the initial fielding of AIS V9 systems for various classes of submarines. The AIS submarine variant consists of a combination of government/commercial software, AIS Power and Navigation Subsystem, AIS Antenna Selector Switch, AIS Antenna Interface Unit, AIS Data Distribution laptop, and AIS Terminal Data Processing Unit. The need for AIS systems is especially important for submarines, which have limited maneuverability. The AIS V9 Submarine configuration provides situational awareness (to include encrypted AIS message traffic from United States Coast Guard vessels) during time-constrained ascents to communications depth, thereby significantly reducing the risk of a collision.

In order to address potential vulnerabilities identified by the Naval Cyber Warfare Development Group (NCWDG) and in compliance with the N2N6 directed "Expression of Cyber Requirement for Automatic Identification System" dated 31 Jan 2017, a Cybersecurity Engineering Change will be implemented on all AIS systems in order to protect downstream systems from malformed or anomalous AIS data. Funds will be used to procure and install a new Warship AIS compliant transponder and AIS Terminal Box on all AIS V1 equipped surface ships; a new Small Form Factor AIS workstation will be procured and installed on Force Level ships equipped with AIS V2 systems and Fleet HQ MOCs equipped with AIS V5 systems; New AIS laptops and Warship AIS compatible transponders will be procured and installed on all submarines equipped with an AIS V3 or AIS V9 system. The above hardware configuration changes are required in order to implement software and firmware modifications that will detect, log, and filter all incoming AIS data from unverified sources, alert operators to the presence of anomalous AIS data and protect systems and users of AIS data downstream from the data collection point. These users include GCCS-M, GCCS-J, Distributed Common Ground System - Navy (DCGS-N), Electronic Chart Display and Information System - Navy (ECDIS-N), BYG-1, and others.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 5: Reconnaissance Equipment	**P-1 Line Item Number / Title:** 2361 / Automatic Identification System (AIS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	1U030 Automatic Identification System (AIS)	P-5a			- / 23.244	- / 3.777	- / 2.487	- / 4.082	- / -	- / 4.082
P-40	**Total Gross/Weapon System Cost**				**- / 23.244**	**- / 3.777**	**- / 2.487**	**- / 4.082**	**- / 0.000**	**- / 4.082**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
Increase in AIS procurements from FY23 to FY24 is due to a change in requirements that requires AIS to field on all surface and submarine fleets in order to stay cyber compliant. The FY 2024 budget will procure the following:

- (9) Automatic Identification Systems (AIS)
- (26) Cyber Security Hardware

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	**P-1 Line Item Number / Title:** 2361 / Automatic Identification System (AIS)	**Aggregated Items Title:** 1U030 Automatic Identification System (AIS)

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
1) 1U030 Automatic Identification Systems (AIS)																				
1.1) AIS - Procurement (1)(†)	A		78.500	32	2.512	96.000	5	0.480	137.000	3	0.411	139.740	9	1.258	-	-	-	139.740	9	1.258
1.2) Cyber Security Hardware - Procurement (2)(†)	A		21.817	126	2.749	24.000	21	0.504	25.000	10	0.250	25.469	26	0.662	-	-	-	25.469	26	0.662
Subtotal: 1) 1U030 Automatic Identification Systems (AIS)			**-**	**-**	***5.261***	**-**	**-**	***0.984***	**-**	**-**	***0.661***	**-**	**-**	***1.920***	**-**	**-**	**-**	**-**	**-**	***1.920***
2) Installations																				
2.1) AIS - Installation (3)	A		-	-	4.945	-	-	0.789	-	-	0.790	-	-	0.483	-	-	-	-	-	0.483
2.2) Cyber Security Hardware - Installation (4)	A		-	-	4.397	-	-	1.629	-	-	0.832	-	-	1.061	-	-	-	-	-	1.061
Subtotal: 2) Installations			**-**	**-**	***9.342***	**-**	**-**	***2.418***	**-**	**-**	***1.622***	**-**	**-**	***1.544***	**-**	**-**	**-**	**-**	**-**	***1.544***
3) Support																				
3.1) Production Support	A		-	-	1.288	-	-	0.068	-	-	0.039	-	-	0.149	-	-	-	-	-	0.149
3.2) AIS - DSA	A		-	-	1.145	-	-	0.128	-	-	0.078	-	-	0.239	-	-	-	-	-	0.239
3.3) Cyber Security Hardware - DSA	A		-	-	0.530	-	-	0.179	-	-	0.087	-	-	0.230	-	-	-	-	-	0.230
Subtotal: 3) Support			**-**	**-**	***2.963***	**-**	**-**	***0.375***	**-**	**-**	***0.204***	**-**	**-**	***0.618***	**-**	**-**	**-**	**-**	**-**	***0.618***
4) Consolidated Prior Year Requirements (5)																				
4.1) Consolidated Prior Year Requirements	A		-	-	5.678	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) Consolidated Prior Year Requirements			**-**	**-**	***5.678***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total			**-**	**-**	**23.244**	**-**	**-**	**3.777**	**-**	**-**	**2.487**	**-**	**-**	**4.082**	**-**	**-**	**-**	**-**	**-**	**4.082**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) 1.1) AIS - Procurement: FY 2023 to FY 2024 increase in procurements due to increased investment to procure AIS (V)1/2 (surface units), (V)5 (MOCs), and (V)3/9 (submarines) for Fleet requirements.

(2) 1.2) Cyber Security Hardware - Procurement: FY 2023 to FY 2024 increase in procurements due to increased investment to procure AIS (V)1/2 critical cyber hardening upgrades for unit-level surface ships.

(3) 2.1) AIS - Installation: FY2023 to FY2024 decrease attributed to (2) less installations in alignment with the current fielding plan.

(4) 2.2) Cyber Security Hardware - Installation: FY2023 to FY2024 increase attributed to (16) additional installations in alignment with the current fielding plan.

(5) Consolidated Prior Year Requirements includes: Engineering Change Proposals (ECPs), Transponders, Combat Workstations and associated installation costs.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 5	P-1 Line Item Number / Title: 2361 / Automatic Identification System (AIS)	Aggregated Items: 1U030 Automatic Identification System (AIS)

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) 1U030 Automatic Identification Systems (AIS)												
1.1) AIS - Procurement (1)		2022	SRC / Atlanta, GA	C / CPFF	NIWC - Atlantic	Nov 2021	Sep 2022	5	96.000	Y		
1.1) AIS - Procurement (1)		2023	SRC / Atlanta, GA	C / CPFF	NIWC - Atlantic	Nov 2022	Sep 2023	3	137.000	Y		
1.1) AIS - Procurement (1)		2024	SRC / Atlanta, GA	C / CPFF	NIWC - Atlantic	Nov 2023	Sep 2024	9	139.740	Y		
1.2) Cyber Security Hardware - Procurement (2)		2022	SRC / Atlanta, GA	C / CPFF	NIWC - Atlantic	Dec 2021	Jun 2022	21	24.000	Y		
1.2) Cyber Security Hardware - Procurement (2)		2023	SRC / Atlanta, GA	C / CPFF	NIWC - Atlantic	Dec 2022	Jun 2023	10	25.000	Y		
1.2) Cyber Security Hardware - Procurement (2)		2024	SRC / Atlanta, GA	C / CPFF	NIWC - Atlantic	Dec 2023	Jun 2024	26	25.469	Y		

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0607658N, 0603658N	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	947.944	24.641	33.200	37.677	0.000	37.677	27.410	33.075	33.731	34.448	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	947.944	24.641	33.200	37.677	0.000	37.677	27.410	33.075	33.731	34.448	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**947.944**	**24.641**	**33.200**	**37.677**	**0.000**	**37.677**	**27.410**	**33.075**	**33.731**	**34.448**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.297	0.473	0.476	-	0.476	0.366	0.469	0.810	0.842	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Cooperative Engagement Capability (CEC) significantly improves Battle Force Anti-Air Warfare (AAW) capability by coordinating all Battle Force AAW sensors into a single, real-time, composite track picture capable of fire control quality. CEC distributes sensor data from each ship and aircraft, or cooperating unit (CU), to all other CUs in the battle force through a real-time, line of sight, high data rate sensor and engagement data distribution network. CEC is highly resistant to jamming and provides accurate gridlocking between CUs. Each CU independently employs high capacity, parallel processing and advanced algorithms to combine all distributed sensor data into a fire control quality track picture which is the same for all CUs. CEC data is presented as a superset of the best AAW sensor capabilities from each CU; all of which are integrated into a single input to each CU's combat weapons system. CEC significantly improves Battle Force defense in depth, including both local area and ship defense capabilities against current and future AAW threats. Moreover, CEC provides critical connectivity and integration of over-land air defense systems capable of countering emerging air threats, including land attack cruise missiles, in a complex littoral environment.

CEC consists of the Data Distribution System (DDS), the Cooperative Engagement Processor (CEP), and Combat System modifications. The DDS encodes and distributes ownship sensor and engagement data and is a high capacity, jam resistant, directive system providing a precision gridlocking and high throughput of data. The CEP is a high capacity distributed processor that is able to process force levels of data in near real time. This data is passed to the ship's combat system as high quality data for which the ship can cue its onboard sensors or use the data to engage targets without actually tracking them. The CEC suite contains a C-Band antenna, the antenna's power and cooling equipment, a Signal Data Processor (SDP), and system support equipment. The current CEC Shipboard antenna variants include the Shipboard Active Aperture (SBAA) and the Planar Array Antenna Assembly (PAAA). The SDP hosts the CEP software and is common across all CEC variants. The USG-2B articles in this budget procure support hardware consisting of a ruggedized 19-inch rack that contains a Cesium time standard, input/output converter, power distribution and user interface control devices. The 19-inch rack holds the SDP. SBAA and PAAA support are provided by an Antenna Environmental Control Unit (AECU) or Environmental Control System Controller (ECSC), which provide power and cooling oil to the CEC shipboard antenna. Funding provided also procures the required Weapon Replaceable Assembly (WRA) hardware required for airborne variants of CEC.

A family of antennas approach will be used to satisfy CEC requirements with lower life cycle costs (procurement, installation, and maintenance) and reduced weight (on mast and below deck). These antennas enable future capability as well as providing a solution extensible to additional platforms. A competitive contract for Common Array Block (CAB) antenna development and production was awarded late FY13. CEC is planned for shipboard installations at various Naval and commercial shipyards aboard CG/CG Mod, DDG/DDG Mod, CV/CVN, LPD, LHD, DDG 1000, and LHA ship classes during scheduled ship availability periods and at land based test sites (LBTS).

[P40A / UC002 - AN/UYQ-70 DISPLAY]: This is a sunk cost to fund the procurement of the AN/UYQ-70 display system for use and integration with the CEC system.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** 0607658N, 0603658N	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P40A / UC004 - ECP/KIT PROCUREMENT]: These funds are for the procurement and installation of Engineering Change Proposals (ECPs)(AN/USG-2 to AN/USG-2B upgrades/AN/USG-2A to AN/USG-2B upgrades) Field Change Kits to address CEC parts obsolescence associated with interfacing systems on multiple platforms.

[P40A / UC005 - NON-RECURRING DEPOT COST]: This is a sunk cost to establish a depot for the CEC system.

[P40A / UC006 - VISUAL INTERACTIVE SIMULATED TRAINING APPLICATION (VISTA) TRAINING]: This is a sunk cost to fund VISTA training related to the CEC system.

[P40A / UC008 - SUPPLY SUPPORT]: This is a sunk cost for Supply Support for the CEC system.

[P40A / UC011 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)]: Funds are for the procurement of Signal Data Processors (SDP) backfits at Land Based Test Sites (LBTSs). There are no installation costs associated with these procurements because the installations will be performed by employees at the LBTSs.

[P40A / UC013 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)]: Funds are for the procurement of AN/USG-2B hardware conversion kits for the CEC AN/USG-2 system configuration.

[P40A / UC014 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2A)]: Funds are for the procurement of AN/USG-2B hardware conversion kits for the AN/USG-2A CEC system configuration.

[P40A / UC015 - AN/USG-2B HARDWARE CONVERSION KITS (LBTS)]: Funds are for the procurement of AN/USG-2B hardware conversion kits for CEC LBTS.

[P40A / UC830 - PRODUCTION ENGR. SUPPORT]: These funds are required for the production engineering support of all CEC systems. This Cost Element includes indirect costs associated with the procurement and installation of individual field changes and upgrades. These costs would include field change and upgrade support, consolidated engineering support, Program Office support, and other costs. These costs will fluctuate with increases and decreases of overall budget, number and type of field changes and upgrades, and required support.

[P40A / UCCA1 - CONGRESSIONAL ADD]: These are Congressional add funds.

[P40A / UC016 SYSTEM COMPONENT UPGRADES]: These funds are for the procurement and installation of replacement CEC system components (Surface and Airborne) due to existing component degradation and corrosion as a result of these existing components being in use beyond their intended service life. Funds will support procurement of Environmental Control System Controllers (ECSC) Units and replacement ECSC components, Antenna Environmental Control Units (AECU) and replacement AECU components, Airborne Weapons Replaceable Assemblies (WRAs), replacement components of the Shipboard Active Array (SBAA) Antenna, and replacement components of the Planar Array Antenna Assembly (PAAA) Antenna

[P40A / UC017 SIGNAL DATA PROCESSORS (SDP) CAPABILITY ENHANCEMENT]: The Cooperative Engagement Capability (CEC) Signal Data Processor (SDP) will be modernized to support future CEC capabilities including CEC Enhanced Network, NIFC Passive, and integration of Office of Naval Research's (ONR) Communications and Interoperability for Integrated Fires (CIIF) Mission-based Networking for DDS (MiND) and Communications as a Service (CaaS) FNC products. This effort procures the quantities necessary to upgrade existing SDPs that will include Crypto Mod, New Transmit and Receive Cards, and CEN Firmware.

[P3A / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)]: These funds are for the procurement of CEC to backfit CG, DDG, CVN, and LHD ship classes, as well as LBTSs.

[P3A - 2 / UC003 - PAAA BACKFIT KITS]: These funds are for the procurement of Planar Antenna Array Assembly (PAAA) backfit kits.

[P3A - 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)]: Funds are for the procurement of Signal Data Processors (SDP) backfits.

[P3A - 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)]: Funds are for the procurement of Signal Data Processors (SDP) backfits for AN/USG-2A equipment.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0607658N, 0603658N	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	COOPERATIVE ENGAGEMENT CAPABILITY	P-5a			- / 349.399	- / 16.152	- / 18.843	- / 17.057	- / -	- / 17.057
P-3a	1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B) (SGAAW)				- / 463.144	- / 0.000	- / 3.560	- / 2.900	- / 0.000	- / 2.900
P-3a	2 / UC003 - PAAA BACKFIT KITS (SGAAW)				- / 74.733	- / 6.956	- / 10.797	- / 17.720	- / 0.000	- / 17.720
P-3a	3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/ USG-2) (SGAAW)				- / 43.950	- / 1.533	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/ USG-2A) (SGAAW)				- / 16.718	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40	**Total Gross/Weapon System Cost**				**- / 947.944**	**- / 24.641**	**- / 33.200**	**- / 37.677**	**- / 0.000**	**- / 37.677**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	COOPERATIVE ENGAGEMENT CAPABILITY	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B) (SGAAW)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 469.604
P-3a	2 / UC003 - PAAA BACKFIT KITS (SGAAW)				- / 12.099	- / 16.602	- / 19.367	- / 20.441	Continuing	Continuing
P-3a	3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/ USG-2) (SGAAW)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 45.483
P-3a	4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/ USG-2A) (SGAAW)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 16.718
P-40	**Total Gross/Weapon System Cost**				**- / 27.410**	**- / 33.075**	**- / 33.731**	**- / 34.448**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

Funds are to procure hardware and provide associated support for the CEC system. Requirements are driven by planned procurements of Planar Array Antenna Assembly (PAAA), USG-2B ECP/Kits, System Component Upgrades (AECUs, ECSCs, WRAs, Replacement components for SBAA and PAAA antennas), Installation of CEC Systems for LHD 3 and 5 (UC001-FY 2021 Installs), Installation of Signal Data Processor (SDP) back-fit kits, and Procurement of Signal Data Processor (SDP) Capability Enhancements (No associated installation cost)

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Aggregated Items Title:** COOPERATIVE ENGAGEMENT CAPABILITY

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) UC002 - AN/UYQ-70 DISPLAY																				
1.1) AN/UYQ-70 DISPLAY	A		-	-	21.493	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) UC002 - AN/UYQ-70 DISPLAY			**-**	**-**	***21.493***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2) UC004 - ECP/KIT PROCUREMENT																				
2.1) ECP/KIT PROCUREMENT	A		-	-	127.666	-	-	4.806	-	-	5.855	-	-	5.863	-	-	-	-	-	5.863
Subtotal: 2) UC004 - ECP/KIT PROCUREMENT			**-**	**-**	***127.666***	**-**	**-**	***4.806***	**-**	**-**	***5.855***	**-**	**-**	***5.863***	**-**	**-**	**-**	**-**	**-**	***5.863***
3) UC005 - NON-RECURRING DEPOT COST																				
3.1) NON-RECURRING DEPOT SUPPORT	A		-	-	4.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) UC005 - NON-RECURRING DEPOT COST			**-**	**-**	***4.500***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
4) UC006 - VISUAL INTERACTIVE SIMULATED TRAINING APPLICATION (VISTA) TRAINING																				
4.1) VISUAL INTERACTIVE SIMULATED TRAINING APPLICATION (VISTA) TRAINING	A		-	-	0.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) UC006 - VISUAL INTERACTIVE SIMULATED TRAINING APPLICATION (VISTA) TRAINING			**-**	**-**	***0.700***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
5) UC008 - SUPPLY SUPPORT																				
5.1) SUPPLY SUPPORT	A		-	-	6.094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) UC008 - SUPPLY SUPPORT			**-**	**-**	***6.094***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
6) UC011 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)																				
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)(†)	A		323,520.00	25	8.088	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) UC011 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)			**-**	**-**	***8.088***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
7) UC013 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)																				
7.1) AN/USG-2B HARDWARE	A		372,735.29	34	12.673	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Aggregated Items Title:** COOPERATIVE ENGAGEMENT CAPABILITY

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
CONVERSION KITS (AN/USG-2)(†)																				
Subtotal: 7) UC013 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)			-	-	***12.673***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8) UC014 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2A)																				
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A)(†)	A		279,375.00	16	4.470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 8) UC014 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2A)			-	-	***4.470***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9) UC015 - AN/USG-2B HARDWARE CONVERSION KITS (LBTS)																				
9.1) AN/USG-2B HARDWARE CONVERSION KITS (LBTS)(†)	A		389,588.24	17	6.623	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 9) UC015 - AN/USG-2B HARDWARE CONVERSION KITS (LBTS)			-	-	***6.623***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10) UC830 - PRODUCTION ENGR. SUPPORT (1)																				
10.1) PRODUCTION ENGR. SUPPORT	A		-	-	112.853	-	-	4.746	-	-	5.905	-	-	5.794	-	-	-	-	-	5.794
Subtotal: 10) UC830 - PRODUCTION ENGR. SUPPORT			-	-	***112.853***	-	-	***4.746***	-	-	***5.905***	-	-	***5.794***	-	-	-	-	-	***5.794***
11) UCCA1 - CONGRESSIONAL ADD																				
11.1) CONGRESSIONAL ADD	A		-	-	23.249	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 11) UCCA1 - CONGRESSIONAL ADD			-	-	***23.249***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12) UC6IN - NON-FMP INSTALLATION																				
12.1) NON-FMP INSTALLATION	A		-	-	14.290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 12) UC6IN - NON-FMP INSTALLATION			-	-	***14.290***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13) UC016 SYSTEM COMPONENT UPGRADES (2)																				
13.1) SYSTEM COMPONENT UPGRADES	A		-	-	6.700	-	-	2.700	-	-	3.183	-	-	1.400	-	-	-	-	-	1.400
Subtotal: 13) UC016 SYSTEM COMPONENT UPGRADES			-	-	***6.700***	-	-	***2.700***	-	-	***3.183***	-	-	***1.400***	-	-	-	-	-	***1.400***

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Aggregated Items Title:** COOPERATIVE ENGAGEMENT CAPABILITY

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
14) UC017 SIGNAL DATA PROCESSORS (SDP) CAPABILITY ENHANCEMENT (3)																				
14.1) SIGNAL DATA PROCESSORS (SDP) CAPABILIY ENHANCEMENT (4)(†)	A		-	-	-	185,714.29	21	3.900	185,714.29	21	3.900	190,476.19	21	4.000	-	-	-	190,476.19	21	4.000
Subtotal: 14) UC017 SIGNAL DATA PROCESSORS (SDP) CAPABILITY ENHANCEMENT			**-**	**-**	***0.000***	**-**	**-**	***3.900***	**-**	**-**	***3.900***	**-**	**-**	***4.000***	**-**	**-**	**-**	**-**	**-**	***4.000***
Total			**-**	**-**	**349.399**	**-**	**-**	**16.152**	**-**	**-**	**18.843**	**-**	**-**	**17.057**	**-**	**-**	**-**	**-**	**-**	**17.057**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) These funds are required for the production engineering support of all CEC systems. This Cost Element includes indirect costs associated with the procurement and installation of individual field changes and upgrades. These costs would include field change and upgrade support, consolidated engineering support, Program Office support, and other costs. These costs will fluctuate with increases and decreases of overall budget, number and type of field changes and upgrades, and required support.

(2) Funds are for the procurement of replacement CEC system components (Surface and Airborne) due to existing component degradation and corrosion as a result of these existing components being in use beyond their intended service life.

(3) The Cooperative Engagement Capability (CEC) Signal Data Processor (SDP) will be modernized to support future CEC capabilities including CEC Enhanced Network, NIFC Passive, and integration of Office of Naval Research's (ONR) Communications and Interoperability for Integrated Fires (CIIF) Mission-based Networking for DDS (MiND) and Communications as a Service (CaaS) FNC products. This effort procures the quantities necessary to upgrade existing SDPs that will include Crypto Mod, New Transmit and Receive Cards, and CEN Firmware.

(4) The Cooperative Engagement Capability (CEC) Signal Data Processor (SDP) will be modernized to support future CEC capabilities including CEC Enhanced Network, NIFC Passive, and integration of Office of Naval Research's (ONR) Communications and Interoperability for Integrated Fires (CIIF) Mission-based Networking for DDS (MiND) and Communications as a Service (CaaS) FNC products. This effort procures the quantities necessary to upgrade existing SDPs that will include Crypto Mod, New Transmit and Receive Cards, and CEN Firmware. This effort is to procure the Enhanced Capability SDPs and does not have associated installation costs at this time.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2606 / Cooperative Engagement Capability	Aggregated Items: COOPERATIVE ENGAGEMENT CAPABILITY

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
6) UC011 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)												
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2018	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	May 2018	Nov 2019	5	231,697.00	Y		
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2019 (5)	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	May 2019	May 2020	1	236,331.00	Y		
6.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (LBTS)		2020 (6)	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	May 2020	May 2021	4	241,058.00	Y		
7) UC013 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)												
7.1) AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)		2018	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	Mar 2018	May 2019	3	391,600.00	Y		
7.1) AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)		2019	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	Mar 2019	Mar 2020	9	399,545.00	Y		
7.1) AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2)		2020	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	Mar 2020	Mar 2021	3	407,536.00	Y		
8) UC014 - AN/USG-2B HARDWARE CONVERSION KITS (AN/USG-2A)												
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A)		2018	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	Mar 2018	May 2019	1	299,000.00	Y		
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A)		2019 (7)	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	Mar 2019	Mar 2020	1	304,837.00	Y		
8.1) AN/USG-2B HARDWARE CONVERSION KIT (AN/USG-2A)		2020 (8)	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	Mar 2020	Mar 2021	2	314,200.00	Y		
9) UC015 - AN/USG-2B HARDWARE CONVERSION KITS (LBTS)												
9.1) AN/USG-2B HARDWARE CONVERSION KITS (LBTS)		2018	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	Mar 2018	May 2019	5	394,300.00	Y		
9.1) AN/USG-2B HARDWARE CONVERSION KITS (LBTS)		2019	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	Mar 2019	Mar 2020	1	402,124.00	Y		
9.1) AN/USG-2B HARDWARE CONVERSION KITS (LBTS)		2020	DRS Laurel Technologies / Largo, FL	SS / FFP	Washington, DC	Mar 2020	Mar 2021	4	410,000.00	Y		
14) UC017 SIGNAL DATA PROCESSORS (SDP) CAPABILITY ENHANCEMENT												
14.1) SIGNAL DATA PROCESSORS (SDP) CAPABILIY ENHANCEMENT (4)		2022 (9)	TBD / TBD	C / FFP	Washington, DC	Apr 2022	Apr 2023	21	185,714.29	Y		
14.1) SIGNAL DATA PROCESSORS (SDP) CAPABILIY ENHANCEMENT (4)		2023	TBD / TBD	C / TBD	** NO PCO **	Oct 2022	Oct 2023	21	185,714.29	N		

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Aggregated Items:** COOPERATIVE ENGAGEMENT CAPABILITY

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty *(Each)*	Unit Cost *($)*	Specs Avail Now?	Date Revision Available	RFP Issue Date
14.1) SIGNAL DATA PROCESSORS (SDP) CAPABILIY ENHANCEMENT (4)		2024	TBD / TBD	C / TBD	** NO PCO **	Oct 2023	Oct 2024	21	190,476.19	N		

Footnotes:

(5) 2019 - Option Year 2 of DRS SDP-S Contract

(6) 2020 - Option Year 3 of DRS SDP-S Contract

(7) 2019 - Option Year 4 of DRS Production Contract

(8) 2020 - Option Year 5 of DRS Production Contract

(9) This is a competitively awarded contract (Q3 FY22) with options in FY23.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	463.144	0.000	3.560	2.900	0.000	2.900	0.000	0.000	0.000	0.000	0.000	469.604
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	463.144	0.000	3.560	2.900	0.000	2.900	0.000	0.000	0.000	0.000	0.000	469.604
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**463.144**	**0.000**	**3.560**	**2.900**	**0.000**	**2.900**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**469.604**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Strike Group Anti-Air Warfare (AAW) Improvement. These funds are for the procurement and installation of CEC to backfit CG, DDG, CVN, and LHD ship classes, as well as various Land Based Test Sites (LBTSs).

[COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)] LHD3 and LHD5 installation availabilities have moved into FY23 and FY24 respectively.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: UC001 COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (CETPS) (AN/USG-2/2A/2B)	**Modification Type:** SGAAW	**Related RDT&E PEs:** 0603755N, 0603658N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)												
B Kits												
Recurring												
1.1.1) COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B) - NonOrganic	52 / 384.035	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	52 / 384.035
Subtotal: Recurring	*- / 384.035*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 384.035*
Subtotal: UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)	*52 / 384.035*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*52 / 384.035*
Subtotal: Procurement, All Modification Items	*- / 384.035*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 384.035*
Installation												
Modification Item 1 of 1: UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)	- / 79.109	- / 0.000	- / 3.560	- / 2.900	- / 0.000	- / 2.900	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 85.569
Subtotal: Installation	*- / 79.109*	*- / -*	*- / 3.560*	*- / 2.900*	*- / -*	*- / 2.900*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 85.569*
Total												
Total Cost (Procurement + Support + Installation)	**463.144**	**0.000**	**3.560**	**2.900**	**0.000**	**2.900**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**469.604**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 1 / UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: UC001 - COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSING SET (USG-2/2A/2B)

Manufacturer Information

Manufacturer Name: DRS Laurel Technologies | Manufacturer Location: Largo, FL

Administrative Leadtime *(in Months)*: 1 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: COOPERATIVE ENGAGEMENT TRANSMISSION PROCESSI

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	50 / 79.109	- / -	1 / 3.560	1 / 2.900	0 / 0.000	1 / 2.900	- / -	- / -	- / -	- / -	0 / 0.000	52 / 85.569
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	50 / 79.109	- / -	1 / 3.560	1 / 2.900	0 / 0.000	1 / 2.900	- / -	- / -	- / -	- / -	0 / 0.000	52 / 85.569

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	50	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52
Out	50	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 2 / UC003 - PAAA BACKFIT KITS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	74.733	6.956	10.797	17.720	0.000	17.720	12.099	16.602	19.367	20.441	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	74.733	6.956	10.797	17.720	0.000	17.720	12.099	16.602	19.367	20.441	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**74.733**	**6.956**	**10.797**	**17.720**	**0.000**	**17.720**	**12.099**	**16.602**	**19.367**	**20.441**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Strike Group Anti-Air Warfare (AAW) Improvement. The Planar Antenna Array Assembly (PAAA) Backfit Kit procurements will be replaced with Common Array Block (CAB) - Shipboard Antenna procurements commencing in FY 2019. PAAA Backfit Kits are installed on CG, DDG, CVN, LPD, and LHD ship classes. Production restart in FY 2020. As of FY 2020 the PAAA will be the CEC Antenna program of record vice the CAB Antenna. The CAB Antenna program has been canceled.

[PAAA BACKFIT KITS] The Planar Antenna Array Assembly (PAAA) antenna being installed in FY 2020 will replace an older Shipboard Active Aperture (SBAA) antenna currently in the Fleet. These SBAAs are very expensive to maintain and some of the parts are becoming obsolete. PAAA Backfit Kits are installed on CG, DDG, CVN, LPD, and LHD ship classes. Production Restart in FY 2020. As of FY 2020 the PAAA will be the CEC Antenna program of record vice the CAB Antenna. The CAB Antenna program has been canceled.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 2 / UC003 - PAAA BACKFIT KITS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: UC003 PAAA BACKFIT KITS	**Modification Type:** SGAAW	**Related RDT&E PEs:** 0603755N, 0603658N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: UC003 - PAAA BACKFIT KITS												
B Kits												
Non-Recurring												
1.1.1) PAAA BACKFIT KITS - NonOrganic [10]	16 / 52.432	2 / 6.242	3 / 9.549	5 / 16.235	- / -	5 / 16.235	3 / 9.936	4 / 13.512	5 / 17.230	5 / 17.575	Continuing	Continuing
Subtotal: Non-Recurring	*- / 52.432*	*- / 6.242*	*- / 9.549*	*- / 16.235*	*- / -*	*- / 16.235*	*- / 9.936*	*- / 13.512*	*- / 17.230*	*- / 17.575*	*Continuing*	*Continuing*
Subtotal: UC003 - PAAA BACKFIT KITS	*16 / 52.432*	*2 / 6.242*	*3 / 9.549*	*5 / 16.235*	*- / -*	*5 / 16.235*	*3 / 9.936*	*4 / 13.512*	*5 / 17.230*	*5 / 17.575*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 52.432*	*- / 6.242*	*- / 9.549*	*- / 16.235*	*- / -*	*- / 16.235*	*- / 9.936*	*- / 13.512*	*- / 17.230*	*- / 17.575*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: UC003 - PAAA BACKFIT KITS	- / 22.301	- / 0.714	- / 1.248	- / 1.485	- / 0.000	- / 1.485	- / 2.163	- / 3.090	- / 2.137	- / 2.866	Continuing	Continuing
Subtotal: Installation	*- / 22.301*	*- / 0.714*	*- / 1.248*	*- / 1.485*	*- / -*	*- / 1.485*	*- / 2.163*	*- / 3.090*	*- / 2.137*	*- / 2.866*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**74.733**	**6.956**	**10.797**	**17.720**	**0.000**	**17.720**	**12.099**	**16.602**	**19.367**	**20.441**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 2 / UC003 - PAAA BACKFIT KITS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: UC003 - PAAA BACKFIT KITS

Manufacturer Information

Manufacturer Name: RAYTHEON				Manufacturer Location: ST. PETERSBURG, FL			
Administrative Leadtime *(in Months)*: 1				Production Leadtime *(in Months)*: 18			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates							
Delivery Dates							
Manufacturer Name: RAYTHEON (11)				Manufacturer Location: ST.PETERSBURG, FL			
Administrative Leadtime *(in Months)*: 0				Production Leadtime *(in Months)*: 14			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	May 2022	May 2023	May 2024				
Delivery Dates	Jul 2023	Jul 2024	Jul 2025				
Manufacturer Name: TBD				Manufacturer Location: TBD			
Administrative Leadtime *(in Months)*: 0				Production Leadtime *(in Months)*: 14			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates				May 2025	May 2026	May 2027	May 2028
Delivery Dates				Jul 2026	Jul 2027	Jul 2028	Jul 2029

Installation Information

Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: PAAA BACKFIT KITS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	13 / 22.301	1 / 0.714	2 / 1.040	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	16 / 24.055
FY 2022	- / -	- / -	0 / 0.208	2 / 1.061	0 / 0.000	2 / 1.061	- / -	- / -	- / -	- / -	0 / 0.000	2 / 1.269
FY 2023	- / -	- / -	- / -	0 / 0.424	0 / 0.000	0 / 0.424	3 / 1.623	- / -	- / -	- / -	0 / 0.000	3 / 2.047
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.540	5 / 2.760	- / -	- / -	0 / 0.000	5 / 3.300
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.330	3 / 1.689	- / -	0 / 0.000	3 / 2.019
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.448	4 / 2.296	0 / 0.000	4 / 2.744
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.570	5 / 2.925	5 / 3.495
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 3.565	5 / 3.565
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	13 / 22.301	1 / 0.714	2 / 1.248	2 / 1.485	0 / 0.000	2 / 1.485	3 / 2.163	5 / 3.090	3 / 2.137	4 / 2.866	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 2 / UC003 - PAAA BACKFIT KITS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: UC003 - PAAA BACKFIT KITS

Installation Information

Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: PAAA BACKFIT KITS

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	13	-	1	-	-	-	2	-	-	-	1	1	-	-	2	1	-	-	2	3	-	-	1	2	-	-	2	2	-	26	59
Out	13	-	1	-	-	-	2	-	-	-	1	1	-	-	2	1	-	-	2	3	-	-	1	2	-	-	2	2	-	26	59

Footnotes:

(10) FY 2023 Quantity was reduced by 1 due to Congressional Mark of $1.3M

(11) PAAA Production line has been restarted with award of new competitive contract to Raytheon in May 2020. PAAA will be the CEC Antenna program of record vice the CAB antenna moving forward. Last option year for this contract is FY 2024.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	43.950	1.533	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	45.483
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	43.950	1.533	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	45.483
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**43.950**	**1.533**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**45.483**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Strike Group Anti-Air Warfare (AAW) Improvement. Funds are for the procurement of Signal Data Processors (SDP) backfits in alignment with Fleet Modernization Procurement and Installation Plan for CEC Backfit to CG, DDG, CVN, and LHD ship classes

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: UC009 SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2)	**Modification Type:** SGAAW	**Related RDT&E PEs:** 0603755N, 0603658N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)												
B Kits												
Recurring												
1.1.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2) - NonOrganic	45 / 16.038	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	45 / 16.038
Subtotal: Recurring	*- / 16.038*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 16.038*
Subtotal: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)	*45 / 16.038*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*45 / 16.038*
Subtotal: Procurement, All Modification Items	*- / 16.038*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 16.038*
Installation												
Modification Item 1 of 1: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)	- / 27.912	- / 1.533	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 29.445
Subtotal: Installation	*- / 27.912*	*- / 1.533*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 29.445*
Total												
Total Cost (Procurement + Support + Installation)	**43.950**	**1.533**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**45.483**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)

Manufacturer Information

Manufacturer Name: Sechan Electronics, Inc. | Manufacturer Location: Lititz, PA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Manufacturer Name: DRS Laurel Technologies | Manufacturer Location: Largo, FL

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/US

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	42 / 27.912	3 / 1.533	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	45 / 29.445
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	42 / 27.912	3 / 1.533	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	45 / 29.445

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 3 / UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: UC009 - SIGNAL DATA PROCESSOR (SDP) BACKFITS (AN/USG-2)

Installation Information

Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/US

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	42	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45
Out	42	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	16.718	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.718
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	16.718	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.718
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**16.718**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**16.718**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Strike Group Anti-Air Warfare (AAW) Improvement. Funds are for the procurement of Signal Data Processors (SDP) backfits for AN/USG-2A equipment in alignment with Fleet Modernization Procurement and Installation Plan for CEC Backfit to CG, DDG, CVN, and LHD ship classes

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)

ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:

Models of Systems Affected: UC010 SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)	Modification Type: SGAAW	Related RDT&E PEs: 0603755N, 0603658N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)												
B Kits												
Recurring												
1.1.1) SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A) - NonOrganic	26 / 8.673	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	26 / 8.673
Subtotal: Recurring	*- / 8.673*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 8.673*
Subtotal: UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)	*26 / 8.673*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*26 / 8.673*
Subtotal: Procurement, All Modification Items	*- / 8.673*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 8.673*
Installation												
Modification Item 1 of 1: UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)	- / 8.045	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 8.045
Subtotal: Installation	*- / 8.045*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 8.045*
Total												
Total Cost (Procurement + Support + Installation)	**16.718**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**16.718**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)

Manufacturer Information

Manufacturer Name: Sechan Electronics, Inc. | Manufacturer Location: Lititz, PA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Manufacturer Name: DRS Laurel Technologies | Manufacturer Location: Largo, FL

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/US

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	26 / 8.045	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	26 / 8.045
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	26 / 8.045	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	26 / 8.045

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2606 / Cooperative Engagement Capability	**Modification Number / Title:** 4 / UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: UC010 - SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/USG-2A)

Installation Information

Method of Implementation: ALTERATION INSTALLATION TEAM (AIT):: Installation Name: SIGNAL DATA PROCESSORS (SDP) BACKFITS (AN/US

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26
Out	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2611 / Naval Tact Cmd Supt Sys (NTCSS)

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	687.801	14.439	19.038	15.374	0.000	15.374	17.536	17.845	18.194	18.610	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	687.801	14.439	19.038	15.374	0.000	15.374	17.536	17.845	18.194	18.610	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**687.801**	**14.439**	**19.038**	**15.374**	**0.000**	**15.374**	**17.536**	**17.845**	**18.194**	**18.610**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.331	0.252	0.296	-	0.296	0.207	0.329	0.334	0.342	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Naval Tactical Command Support System (NTCSS) is the logistics information system which enables combat lethality by generating and sustaining Navy and Marine Corps force maintenance and logistics readiness for operational commanders afloat and ashore. NTCSS provides organizational maintenance management capabilities for all afloat and ashore operational forces (ships, submarines, expeditionary, and cyber), as well as organizational and intermediate maintenance management to maintain operational availability of deployed and deployable aircraft. NTCSS also provides personnel administration capabilities, planning and execution of warehouse and inventory management functions for repair parts and consumable material, financial accountability thereof, and support services of food and afloat retail point-of-sale operations. NTCSS system upgrades procures afloat and ashore ruggedized, commercial-off-the-shelf (COTS) computing equipment, which includes servers to support the NTCSS application and database, personal computers (PCs) that will interface with the servers for maintenance and supply transactions, and printers to display output. COTS software, which includes the operating system, comes loaded on the servers and PCs.

The Naval Operational Business Logistics Enterprise (NOBLE) family of systems includes Naval Operational Supply System (NOSS), and Naval Maintenance, Repair, and Overhaul (N-MRO). The NOBLE family of systems will provide direct support to warfighter readiness with maintenance, supply, and personnel administration capabilities using an open architecture framework that incorporates business process re-engineering (BPR) allowing for the consolidation of standalone application systems. These capabilities include enterprise-wide automation of supply, inventory, and financial functions to the Naval supply system, aviation maintenance support capability that services aviation maintenance (organizational and intermediate) for over 2,100 Navy and Marine Corps aircraft, standardized operational business processes for afloat maritime maintenance activities to all naval ships, expeditionary forces and Navy-wide personnel and administration data sharing across shipboard and shore-based information systems. NOBLE will meet current and emerging demands for cyber, Financial Improvement and Audit Readiness (FIAR), and Navy logistics and aviation and maritime maintenance mission requirements. NOBLE initial procurements in FY21, FY22 and FY23 to support early adopters reducing cyber and technical debt for operational deployments.

Naval Operational Supply System (NOSS) will deliver a solution with enterprise and field level capability to ensure effective and efficient supply operations. NOSS will enable the planning, procurement and physical/financial accountability of all material and property across all warfare communities.

Naval Maintenance, Repair, and Overhaul (N-MRO) combines the former Naval Aviation Maintenance System (NAMS), Naval Operational Maintenance Environment (NOME) capabilities into one POR that satisfies Organizational and Intermediate levels of maintenance across ashore and afloat Aviation and Maritime domains.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2611 / Naval Tact Cmd Supt Sys (NTCSS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / NTCSS and NOBLE Ship Set Equipment Upgrades	P-5a			- / 333.381	- / 7.617	- / 10.126	- / 9.517	- / 0.000	- / 9.517
P-3a	2 / Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006) (TBD)				- / 354.420	- / 6.822	- / 8.912	- / 5.857	- / 0.000	- / 5.857
P-40	**Total Gross/Weapon System Cost**				**- / 687.801**	**- / 14.439**	**- / 19.038**	**- / 15.374**	**- / 0.000**	**- / 15.374**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / NTCSS and NOBLE Ship Set Equipment Upgrades	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	2 / Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006) (TBD)				- / 7.115	- / 6.534	- / 3.286	- / 1.832	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 17.536**	**- / 17.845**	**- / 18.194**	**- / 18.610**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

Funding for FY 2024 procures: 1) Naval Tactical Command Support System (NTCSS) system upgrades for ships; 2) NTCSS system upgrades for Naval Air Stations (NAS), Squadrons, Shore Support Facilities, Fleet Training Centers, Marine Aviation Logistics Squadrons (MALS), Navy Expeditionary Combat Command sites, Special Warfare units, and Commander Naval Surface Forces; and 3) necessary production engineering and installation support.

The FY24 funding request also supports the Naval Operational Supply System (NOSS) and Naval Maintenance, Repair, and Overhaul (N-MRO) solutions to deploy to the various unit level ships, aviation squadrons and various NOSS ashore sites. The decrease in NTCSS procurements from FY23 to FY24 is directly tied to CNO and Fleet Forces requirements to accelerate fielding of the NOBLE N-MRO solution to provide afloat self-assess and self-sustainment capability within contested operational environments. The changes in NOSS and NMRO procurements from FY23 to FY24 are in alignment with the updated fielding plan.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2611 / Naval Tact Cmd Supt Sys (NTCSS)	**Item Number / Title [DODIC]:** 1 / NTCSS and NOBLE Ship Set Equipment Upgrades
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	333.381	7.617	10.126	9.517	0.000	9.517
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	333.381	7.617	10.126	9.517	0.000	9.517
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**333.381**	**7.617**	**10.126**	**9.517**	**0.000**	**9.517**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Flyaway - NTCSS Ship Set Equipment Upgrades (DY007) Cost																		
Recurring Cost																		
1.1.1) Equipment(†) (1)	158.961	1,044	165.955	1.956	45	0.088	1.086	35	0.038	1.007	19	0.019	-	-	0.000	1.007	19	0.019
Subtotal: Recurring Cost	-	-	*165.955*	-	-	*0.088*	-	-	*0.038*	-	-	*0.019*	-	-	*0.000*	-	-	*0.019*
Subtotal: Flyaway - NTCSS Ship Set Equipment Upgrades (DY007) Cost	**-**	**-**	***165.955***	**-**	**-**	***0.088***	**-**	**-**	***0.038***	**-**	**-**	***0.019***	**-**	**-**	***0.000***	**-**	**-**	***0.019***
Flyaway - NOBLE Equipment Upgrades Cost																		
Recurring Cost																		
2.1.1) N-MRO Early Adopters Procurement(†)	108.000	10	1.080	472.333	3	1.417	28.400	5	0.142	-	-	0.000	-	-	0.000	-	-	0.000
2.1.2) NOSS Early Adopters Procurement(†)	43.125	16	0.690	53.000	18	0.954	10.800	5	0.054	-	-	0.000	-	-	0.000	-	-	0.000
2.1.4) NOSS MALS/ Shore Equipment Upgrades (DY997)(†) (2)	-	-	0.000	-	-	0.000	54.333	6	0.326	63.462	13	0.825	-	-	0.000	63.462	13	0.825
2.1.5) N-MRO Ship Set Equipment Upgrades (DY997)(†) (3)	-	-	0.000	-	-	0.000	28.400	5	0.142	53.909	11	0.593	-	-	0.000	53.909	11	0.593

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2611 / Naval Tact Cmd Supt Sys (NTCSS)	Item Number / Title [DODIC]: 1 / NTCSS and NOBLE Ship Set Equipment Upgrades
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
2.1.6) N-MRO MALS/ Shore Equipment Upgrades (DY997)(†) (4)	-	-	0.000	-	-	0.000	28.400	25	0.710	54.433	19	1.034	-	-	0.000	54.433	19	1.034
2.1.7) Consolidated Prior Year Requirements (5)	-	-	8.898	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*10.668*	-	-	*2.371*	-	-	*1.374*	-	-	*2.452*	-	-	*0.000*	-	-	*2.452*
Subtotal: Flyaway - NOBLE Equipment Upgrades Cost	**-**	**-**	***10.668***	**-**	**-**	***2.371***	**-**	**-**	***1.374***	**-**	**-**	***2.452***	**-**	**-**	***0.000***	**-**	**-**	***2.452***
Flyaway - Installations Cost																		
Recurring Cost																		
3.1.1) N-MRO Ashore Early Adopters Installation	-	-	0.360	-	-	0.267	-	-	0.258	-	-	0.000	-	-	0.000	-	-	0.000
3.1.2) NOSS Ashore Early Adopters Installations	-	-	0.725	-	-	1.219	-	-	0.300	-	-	0.000	-	-	0.000	-	-	0.000
3.1.3) NTCSS Afloat Installation (DY777)	-	-	141.275	-	-	3.236	-	-	2.968	-	-	1.402	-	-	0.000	-	-	1.402
3.1.5) NOSS Ashore Installation (DY776) (6)	-	-	0.000	-	-	0.000	-	-	1.828	-	-	0.824	-	-	0.000	-	-	0.824
3.1.6) N-MRO Afloat Installation (DY777)	-	-	0.000	-	-	0.000	-	-	0.169	-	-	0.594	-	-	0.000	-	-	0.594
3.1.7) N-MRO Ashore Installation (DY776)	-	-	0.000	-	-	0.000	-	-	1.405	-	-	1.080	-	-	0.000	-	-	1.080
3.1.8) NOSS Ashore/ Afloat DSA (DY776/ DY777)	-	-	0.078	-	-	0.088	-	-	0.226	-	-	0.133	-	-	0.000	-	-	0.133
Subtotal: Recurring Cost	-	-	*142.438*	-	-	*4.810*	-	-	*7.154*	-	-	*4.033*	-	-	*0.000*	-	-	*4.033*
Subtotal: Flyaway - Installations Cost	**-**	**-**	***142.438***	**-**	**-**	***4.810***	**-**	**-**	***7.154***	**-**	**-**	***4.033***	**-**	**-**	***0.000***	**-**	**-**	***4.033***
Support - Support Costs (DY555) Cost																		
4.1) NOSS Train-the-Trainer (7)	-	-	0.000	-	-	0.189	-	-	0.750	-	-	1.400	-	-	0.000	-	-	1.400
4.2) N-MRO Train-the-Trainer (8)	-	-	0.000	-	-	0.000	-	-	0.750	-	-	1.400	-	-	0.000	-	-	1.400
4.3) NTCSS Afloat Production Support	-	-	14.211	-	-	0.005	-	-	0.003	-	-	0.003	-	-	0.000	-	-	0.003

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2611 / Naval Tact Cmd Supt Sys (NTCSS)	**Item Number / Title [DODIC]:** 1 / NTCSS and NOBLE Ship Set Equipment Upgrades
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
4.4) NOSS Production Support	-	-	0.043	-	-	0.068	-	-	0.016	-	-	0.093	-	-	0.000	-	-	0.093
4.5) N-MRO Production Support	-	-	0.066	-	-	0.086	-	-	0.041	-	-	0.117	-	-	0.000	-	-	0.117
Subtotal: Support - Support Costs (DY555) Cost	***-***	***-***	***14.320***	***-***	***-***	***0.348***	***-***	***-***	***1.560***	***-***	***-***	***3.013***	***-***	***-***	***0.000***	***-***	***-***	***3.013***
Gross/Weapon System Cost	**-**	**-**	**333.381**	**-**	**-**	**7.617**	**-**	**-**	**10.126**	**-**	**-**	**9.517**	**-**	**-**	**0.000**	**-**	**-**	**9.517**

Remarks:
Provides ADP system upgrades and NTCSS-Optimized software to Battle Group and unit level ships.

Application subsystems include financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship capabilities for displaying and storing Computer-aided Acquisition and Logistics Support (CALS) initiative information (digitized engineering drawings, automated technical manuals, etc.).

[Flyaway] NOBLE, which includes NOSS and N-MRO, will be fielded at program-of-record (POR) afloat and ashore sites. Ship set and US Navy and USMC aviation equipment upgrades continue; hardware and software upgrades required to reduce cybersecurity , technical debt, and obsolescence avoidance.

Revised fielding and deployment plan changed the year-to-year quantity due to operations availability schedules and integrated capability deployment. The variance in unit cost between fiscal years is attributed to the composition of ashore, afloat, and expeditionary configurations that includes NOSS and N-MRO will be procuring and installing in any given fiscal year.

(†) indicates the presence of a P-5a

Footnotes:
(1) Quantity changes from year to year are driven by fact-of-life changes to ship maintenance availability schedules. The average unit cost fluctuation is primarily attributed to variance in system configuration requirements for each NTCSS platform type. NTCSS continues to transition to a CANES hosted environment. The unit cost represents the cost of software licenses, as well as hardware for non-CANES platforms.
(2) FY23 quantities updated from PB23 submission due to more mature estimates. Quantity changes from year to year are driven by fact-of-life changes to ashore site availability schedules. The variance in unit cost between fiscal years is attributed to the composition of ashore site configurations (Non-VE versus large NAS/MALS fielding) that NOSS will be procuring and installing in any given fiscal year.
(3) The average unit cost fluctuation is primarily attributed to variance in system configuration requirements for each N-MRO platform type.
(4) The average unit cost fluctuation is primarily attributed to variance in system configuration requirements for each N-MRO platform type.
(5) This line reflects prior year only costs for the following: NOBLE early adopter ashore equipment upgrades required to reduce cybersecurity , technical debt, and obsolescence avoidance.
(6) The variance in installation cost between fiscal years is attributed to the composition of ashore installation sites supported in any given fiscal year.
(7) Funds are in support of the Training Virtual Environment (TVE) which is a cloud based hosting environment that will support Navy school house Instructor Lead Training (ILT) classes reducing the need to provide hardware to the respective school houses in the future. FY24 increase driven by ramp up of Train-the-Trainer events.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2611 / Naval Tact Cmd Supt Sys (NTCSS)	**Item Number / Title [DODIC]:** 1 / NTCSS and NOBLE Ship Set Equipment Upgrades
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(8) Funds are in support of the Training Virtual Environment (TVE) which is a cloud based hosting environment that will support Navy school house Instructor Lead Training (ILT) classes reducing the need to provide hardware to the respective school houses in the future. FY24 increase driven by ramp up of Train-the-Trainer events.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2611 / Naval Tact Cmd Supt Sys (NTCSS)	Item Number / Title [DODIC]: 1 / NTCSS and NOBLE Ship Set Equipment Upgrades

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Equipment		2022	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2021	Jan 2022	45	1.956	Y		Oct 2021
1.1.1) Equipment		2023	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2022	Jan 2023	35	1.086	Y		Oct 2022
1.1.1) Equipment		2024	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2023	Jan 2024	19	1.007	Y		Oct 2023
2.1.1) N-MRO Early Adopters Procurement		2022	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2021	Jan 2022	3	472.333	Y		Oct 2021
2.1.1) N-MRO Early Adopters Procurement		2023	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2022	Jan 2023	5	28.400	Y		Oct 2022
2.1.2) NOSS Early Adopters Procurement		2022	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2021	Jan 2022	18	53.000	Y		Oct 2021
2.1.2) NOSS Early Adopters Procurement		2023	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2022	Jan 2023	5	10.800	Y		Oct 2022
2.1.4) NOSS MALS/Shore Equipment Upgrades (DY997)		2023	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2022	Jan 2023	6	54.333	Y		Oct 2022
2.1.4) NOSS MALS/Shore Equipment Upgrades (DY997)		2024	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2023	Jan 2024	13	63.462	Y		Oct 2023
2.1.5) N-MRO Ship Set Equipment Upgrades (DY997)		2023	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2022	Jan 2023	5	28.400	Y		Oct 2022
2.1.5) N-MRO Ship Set Equipment Upgrades (DY997)		2024	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2023	Jan 2024	11	53.909	Y		Oct 2023
2.1.6) N-MRO MALS/Shore Equipment Upgrades (DY997)		2023	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2022	Jan 2023	25	28.400	Y		Oct 2022
2.1.6) N-MRO MALS/Shore Equipment Upgrades (DY997)		2024	NIWC LANT / Charleston, SC	WR	Charleston, SC	Nov 2023	Jan 2024	19	54.433	Y		Oct 2023

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2611 / Naval Tact Cmd Supt Sys (NTCSS)	**Modification Number / Title:** 2 / Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	354.420	6.822	8.912	5.857	0.000	5.857	7.115	6.534	3.286	1.832	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	354.420	6.822	8.912	5.857	0.000	5.857	7.115	6.534	3.286	1.832	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**354.420**	**6.822**	**8.912**	**5.857**	**0.000**	**5.857**	**7.115**	**6.534**	**3.286**	**1.832**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:
NTCSS-Optimized software will continue to be fielded at program-of-record (POR) afloat and ashore sites. Ship set and MALS/Shore equipment upgrades continue; hardware and software upgrades required for obsolescence avoidance.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2611 / Naval Tact Cmd Supt Sys (NTCSS)	**Modification Number / Title:** 2 / Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Provides ADP system upgrades and NTCSS-Optimized software to force level and unit level ships.	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006)												
B Kits												
Recurring												
1.1.1) Equipment - NonOrganic [9]	1,656 / 216.424	68 / 2.063	53 / 3.870	36 / 2.397	- / -	36 / 2.397	38 / 3.042	36 / 2.726	13 / 1.705	8 / 0.844	Continuing	Continuing
Subtotal: Recurring	*- / 216.424*	*- / 2.063*	*- / 3.870*	*- / 2.397*	*- / -*	*- / 2.397*	*- / 3.042*	*- / 2.726*	*- / 1.705*	*- / 0.844*	*Continuing*	*Continuing*
Subtotal: Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006)	*1,656 / 216.424*	*68 / 2.063*	*53 / 3.870*	*36 / 2.397*	*- / -*	*36 / 2.397*	*38 / 3.042*	*36 / 2.726*	*13 / 1.705*	*8 / 0.844*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 216.424*	*- / 2.063*	*- / 3.870*	*- / 2.397*	*- / -*	*- / 2.397*	*- / 3.042*	*- / 2.726*	*- / 1.705*	*- / 0.844*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Production Support	- / 14.593	- / 0.124	- / 0.231	- / 0.152	- / 0.000	- / 0.152	- / 0.181	- / 0.161	- / 0.101	- / 0.045	Continuing	Continuing
2.2) DSA	- / 3.526	- / 0.363	- / 0.349	- / 0.306	- / 0.000	- / 0.306	- / 0.321	- / 0.304	- / 0.110	- / 0.068	Continuing	Continuing
Subtotal: Support	*- / 18.119*	*- / 0.487*	*- / 0.580*	*- / 0.458*	*- / -*	*- / 0.458*	*- / 0.502*	*- / 0.465*	*- / 0.211*	*- / 0.113*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006)	- / 119.877	- / 4.272	- / 4.462	- / 3.002	- / 0.000	- / 3.002	- / 3.571	- / 3.343	- / 1.370	- / 0.875	Continuing	Continuing
Subtotal: Installation	*- / 119.877*	*- / 4.272*	*- / 4.462*	*- / 3.002*	*- / -*	*- / 3.002*	*- / 3.571*	*- / 3.343*	*- / 1.370*	*- / 0.875*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**354.420**	**6.822**	**8.912**	**5.857**	**0.000**	**5.857**	**7.115**	**6.534**	**3.286**	**1.832**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2611 / Naval Tact Cmd Supt Sys (NTCSS)	**Modification Number / Title:** 2 / Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006)

Manufacturer Information

Manufacturer Name: NIWC LANT | Manufacturer Location: Charleston, SC

Administrative Leadtime *(in Months)*: 1 | Production Leadtime *(in Months)*: 2

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2021	Nov 2022	Nov 2023				
Delivery Dates	Jan 2022	Jan 2023	Jan 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: Equipment

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	1,656 / 119.877	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1,656 / 119.877
FY 2022	- / -	68 / 4.272	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	68 / 4.272
FY 2023	- / -	- / -	53 / 4.462	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	53 / 4.462
FY 2024	- / -	- / -	- / -	36 / 3.002	0 / 0.000	36 / 3.002	- / -	- / -	- / -	- / -	0 / 0.000	36 / 3.002
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	38 / 3.571	- / -	- / -	- / -	0 / 0.000	38 / 3.571
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	36 / 3.343	- / -	- / -	0 / 0.000	36 / 3.343
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 1.370	- / -	0 / 0.000	13 / 1.370
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.875	0 / 0.000	8 / 0.875
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	1,656 / 119.877	68 / 4.272	53 / 4.462	36 / 3.002	0 / 0.000	36 / 3.002	38 / 3.571	36 / 3.343	13 / 1.370	8 / 0.875	Continuing	Continuing

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	1,656	-	23	23	22	-	17	18	18	-	12	12	12	-	12	13	13	-	12	12	12	-	4	4	5	-	2	3	3	Cont.	Cont.
Out	1,656	-	23	23	22	-	17	18	18	-	12	12	12	-	12	13	13	-	12	12	12	-	4	4	5	-	2	3	3	Cont.	Cont.

Footnotes:

(9) In FY24, unit cost decreases due to the reduced number of NAS Large and MALS site supported. NAS Large and MALS sites cost significantly more than other sites due to the cost of new servers and racks vs a non-VE which costs significantly less. Quantity changes from year to year are driven by fact-of-life changes to ashore site availability schedules. The variance in unit cost between fiscal years is attributed

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2611 / Naval Tact Cmd Supt Sys (NTCSS)	**Modification Number / Title:** 2 / Naval Tactical Command Support System MALS/Shore Equipment Upgrades (DY006)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

to the composition of ashore site configurations (Non-VE versus large NAS/MALS fielding) that NTCSS will be procuring and installing in any given fiscal year. The variance in installation cost between fiscal years is attributed to the composition of ashore installation sites supported in any given fiscal year.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2614 / Adv Tact Data Link Sys (ATDLS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0205604N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	290.761	100.888	73.675	50.148	0.000	50.148	70.171	71.108	66.814	74.316	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	290.761	100.888	73.675	50.148	0.000	50.148	70.171	71.108	66.814	74.316	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**290.761**	**100.888**	**73.675**	**50.148**	**0.000**	**50.148**	**70.171**	**71.108**	**66.814**	**74.316**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	5.740	8.016	6.520	-	6.520	2.202	4.872	3.877	4.032	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Advanced Tactical Data Link Systems (ATDLS) funds the Time Division Multiple Access family of Link 16 terminals including the Multifunctional Information Distribution System - Low Volume Terminal (MIDS-LVT), Multifunctional Information Distribution System - Joint Tactical Radio System (MIDS-JTRS), Joint Tactical Information Distribution System (JTIDS) and the Tactical Digital Information Link - Joint (TADIL-J) message standard databases resident in the Command & Control Processor (C2P)/ Common Data Link Management System (CDLMS). ATDLS also funds the Command and Control Processor (C2P) Technology Refresh (TR), Next Generation (NG) C2P (NGC2P) upgrades to meet LHD combat system upgrades, Link-22 capability upgrades, Link 16 terminal upgrades and replacements, Link 16 antenna replacements, Link 16 Multifunctional Information Distribution System on Ship (MOS) Terminal Controller Central Processing replacements, Link Monitoring Management Tool (LMMT), and other ATDLS integration.

Command and Control Processor (C2P) Terminal Technology Refresh Full Systems Ship/Shore (DR003): C2P computer processing boards are obsolete and have antiquated software code with no industrial base support. Technology Refresh is required to address system hardware obsolescence in order to maintain the C2P system operational availability requirement.

Link 16 Terminal Ship/Shore (DR012): All US Navy ships with legacy MIDS On Ship (MOS) and JTIDS terminals will be modernized with MIDS-JTRS terminals to address Crypto Modernization (CM) and Frequency Remapping (FR) mandates and enable the implementation of future enhancements incorporated into the MIDS-JTRS terminals. For the legacy MOS cabinets to be upgraded with the modernized MIDS-JTRS, a kit named MOS MIDS JTRS ECP is required. The overall product improvement effort will bring the Link 16 terminals in compliance with the Department of Defense/Department of Transportation Memorandum of Agreement (31DEC02) for FR, and the updated National Security Agency approved cryptographic algorithms for CM.

Link 16 Antenna Replacement (DR012): Existing obsolete dedicated Link 16 shipboard antennas, AS-4127A and AS-4400, will be replaced with a AS-4775 and AS-4557 respectively.

Link Monitoring Management Tool (LMMT) Ship/Shore (DR014): LMMT is required to enable Joint Interface Control Officers (JICOs) to effectively monitor and manage the performance of tactical data link networks. Funds procurement and installation of LMMT hardware on ships and shore sites. MIDS will also be procured and installed for Carrier, Aircraft, Nuclear (CVNs).

Advanced Tactical Data Link Systems (ATDLS) Training (DR666): Develop end-to-end ATDLS operator training curriculum and simulator to support new capabilities.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2614 / Adv Tact Data Link Sys (ATDLS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0205604N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Adv Tact Data Link Sys (ATDLS)	P-5a			- / 69.999	- / 10.893	- / 9.093	- / 11.947	- / 0.000	- / 11.947
P-3a	1 / Adv Tact Data Link Sys (ATDLS) (TBD)				- / 220.762	- / 89.995	- / 64.582	- / 38.201	- / 0.000	- / 38.201
P-40	**Total Gross/Weapon System Cost**				**- / 290.761**	**- / 100.888**	**- / 73.675**	**- / 50.148**	**- / 0.000**	**- / 50.148**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Adv Tact Data Link Sys (ATDLS)	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / Adv Tact Data Link Sys (ATDLS) (TBD)				- / 55.381	- / 56.571	- / 54.271	- / 64.575	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 70.171**	**- / 71.108**	**- / 66.814**	**- / 74.316**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
Advanced Tactical Data Link Systems (ATDLS) program procures command and control equipment for both shipboard and shore units including Link 16 Network Program Crypto Modernization (CM) and Frequency Remapping (FR) Upgraded Terminals, Link 16 Network Program Antennas, Command and Control Processor (C2P) hardware and software, and Link Monitoring Management Tool (LMMT) hardware and software to address Air Defense System Integrator (ADSI) obsolescence issues.

FY23 to FY24 decrease of $23.527 million is due to the following:

- Decrease of $15.899 million due to a reduction in planned Link 16 procurement quantities.

- Decrease of $9.093 million due to reductions in Command and Control Processor (C2P) Terminal Technology Refresh procurements. Technology Refresh is required to address system hardware obsolescence in order to maintain the C2P system operational availability requirement.

- Decrease of $1.200 million due to nearing completion of end-to-end ATDLS operator training curriculum development.

- Increase of $2.665 million due to increased Link Monitoring Management Tool (LMMT) Hardware Tech Refresh fielding to address hardware obsolescence issues.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2614 / Adv Tact Data Link Sys (ATDLS)	**Item Number / Title [DODIC]:** 1 / Adv Tact Data Link Sys (ATDLS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	69.999	10.893	9.093	11.947	0.000	11.947
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	69.999	10.893	9.093	11.947	0.000	11.947
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**69.999**	**10.893**	**9.093**	**11.947**	**0.000**	**11.947**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Flyaway - Adv Tact Data Link Sys (ATDLS) - DR003 C2P Cost																		
Recurring Cost																		
1.1.1) C2P - Terminal Shore(†)	982.125	8	7.857	506.000	2	1.012	-	-	0.000	765.000	1	0.765	-	-	0.000	765.000	1	0.765
Subtotal: Recurring Cost	-	-	*7.857*	-	-	*1.012*	-	-	*0.000*	-	-	*0.765*	-	-	*0.000*	-	-	*0.765*
Subtotal: Flyaway - Adv Tact Data Link Sys (ATDLS) - DR003 C2P Cost	**-**	**-**	***7.857***	**-**	**-**	***1.012***	**-**	**-**	***0.000***	**-**	**-**	***0.765***	**-**	**-**	***0.000***	**-**	**-**	***0.765***
Flyaway - Adv Tact Data Link Sys (ATDLS) - DR012 LINK 16 Cost																		
Recurring Cost																		
2.1.1) Link 16 - Antenna(†) (1)	199.333	27	5.382	216.000	15	3.240	222.250	16	3.556	230.200	13	2.993	-	-	0.000	230.200	13	2.993
Subtotal: Recurring Cost	-	-	*5.382*	-	-	*3.240*	-	-	*3.556*	-	-	*2.993*	-	-	*0.000*	-	-	*2.993*
Subtotal: Flyaway - Adv Tact Data Link Sys (ATDLS) - DR012 LINK 16 Cost	**-**	**-**	***5.382***	**-**	**-**	***3.240***	**-**	**-**	***3.556***	**-**	**-**	***2.993***	**-**	**-**	***0.000***	**-**	**-**	***2.993***
Flyaway - Adv Tact Data Link Sys (ATDLS) - DR014 LINK MONITORING MANAGEMENT TOOL (LMMT) Cost																		
Recurring Cost																		
3.1.1) LMMT - Ship(†)	237.222	27	6.405	127.000	6	0.762	125.000	5	0.625	122.286	7	0.856	-	-	0.000	122.286	7	0.856
3.1.2) LMMT - Shore(†) (2)	105.118	51	5.361	44.167	12	0.530	-	-	0.000	122.267	15	1.834	-	-	0.000	122.267	15	1.834
Subtotal: Recurring Cost	-	-	*11.766*	-	-	*1.292*	-	-	*0.625*	-	-	*2.690*	-	-	*0.000*	-	-	*2.690*
Subtotal: Flyaway - Adv Tact Data Link Sys (ATDLS) -	**-**	**-**	***11.766***	**-**	**-**	***1.292***	**-**	**-**	***0.625***	**-**	**-**	***2.690***	**-**	**-**	***0.000***	**-**	**-**	***2.690***

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2614 / Adv Tact Data Link Sys (ATDLS)	Item Number / Title [DODIC]: 1 / Adv Tact Data Link Sys (ATDLS)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
DR014 LINK MONITORING MANAGEMENT TOOL (LMMT) Cost																		
Flyaway - INSTALLATION - DR776 NON-FMP Cost																		
Recurring Cost																		
4.1.1) C2P - Terminal Shore Install	-	-	4.586	-	-	0.000	-	-	0.238	-	-	0.000	-	-	0.000	-	-	0.000
4.1.2) Link 16 - Terminal Shore Install	-	-	0.380	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
4.1.3) LMMT - Shore Install	-	-	4.884	-	-	0.206	-	-	0.000	-	-	0.322	-	-	0.000	-	-	0.322
Subtotal: Recurring Cost	-	-	*9.850*	-	-	*0.206*	-	-	*0.238*	-	-	*0.322*	-	-	*0.000*	-	-	*0.322*
Subtotal: Flyaway - INSTALLATION - DR776 NON-FMP Cost	**-**	**-**	***9.850***	**-**	**-**	***0.206***	**-**	**-**	***0.238***	**-**	**-**	***0.322***	**-**	**-**	***0.000***	**-**	**-**	***0.322***
Flyaway - INSTALLATION - DR777 FMP Cost																		
Recurring Cost																		
5.1.1) Link 16 - Antenna Install (3)	-	-	3.886	-	-	0.552	-	-	2.272	-	-	3.671	-	-	0.000	-	-	3.671
5.1.2) Link 16 - Antenna DSA (4)	-	-	1.132	-	-	0.142	-	-	0.221	-	-	0.327	-	-	0.000	-	-	0.327
5.1.3) LMMT - Ship Install (5)	-	-	5.710	-	-	0.530	-	-	0.421	-	-	0.560	-	-	0.000	-	-	0.560
Subtotal: Recurring Cost	-	-	*10.728*	-	-	*1.224*	-	-	*2.914*	-	-	*4.558*	-	-	*0.000*	-	-	*4.558*
Subtotal: Flyaway - INSTALLATION - DR777 FMP Cost	**-**	**-**	***10.728***	**-**	**-**	***1.224***	**-**	**-**	***2.914***	**-**	**-**	***4.558***	**-**	**-**	***0.000***	**-**	**-**	***4.558***
Flyaway - DSA - DR777/776 Cost																		
Recurring Cost																		
6.1.1) LMMT Terminal Ship / Shore DSA	-	-	2.189	-	-	0.324	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*2.189*	-	-	*0.324*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Flyaway - DSA - DR777/776 Cost	**-**	**-**	***2.189***	**-**	**-**	***0.324***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Flyaway - ATDLS Consolidated Prior Year Requirements Cost																		
Recurring Cost																		
7.1.1) ATDLS - Consolidated Prior Year Requirements	-	-	4.377	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2614 / Adv Tact Data Link Sys (ATDLS)	Item Number / Title [DODIC]: 1 / Adv Tact Data Link Sys (ATDLS)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Subtotal: Recurring Cost	-	-	*4.377*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Flyaway - ATDLS Consolidated Prior Year Requirements Cost	**-**	**-**	***4.377***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Support - DR555 PRODUCTION SUPPORT Cost																		
8.1) Link 16 - Antenna Production Support	-	-	0.702	-	-	0.213	-	-	0.227	-	-	0.147	-	-	0.000	-	-	0.147
8.2) LMMT -Ship / Shore Production Support	-	-	1.909	-	-	0.082	-	-	0.033	-	-	0.172	-	-	0.000	-	-	0.172
Subtotal: Support - DR555 PRODUCTION SUPPORT Cost	**-**	**-**	***2.611***	**-**	**-**	***0.295***	**-**	**-**	***0.260***	**-**	**-**	***0.319***	**-**	**-**	***0.000***	**-**	**-**	***0.319***
Support - DR666 ATDLS Training Cost																		
9.1) ATDLS Training (6)	-	-	15.239	-	-	3.300	-	-	1.500	-	-	0.300	-	-	0.000	-	-	0.300
Subtotal: Support - DR666 ATDLS Training Cost	**-**	**-**	***15.239***	**-**	**-**	***3.300***	**-**	**-**	***1.500***	**-**	**-**	***0.300***	**-**	**-**	***0.000***	**-**	**-**	***0.300***
Gross/Weapon System Cost	**-**	**-**	**69.999**	**-**	**-**	**10.893**	**-**	**-**	**9.093**	**-**	**-**	**11.947**	**-**	**-**	**0.000**	**-**	**-**	**11.947**

Remarks:

BLI 2614 procures data link components (e.g. circuit cards, routers, antennas, shock mounts, etc.) to replace obsolete ones. There is integration and testing of these components lasting 6-9 months, which causes procurements to be installed in the following fiscal year.

Unit cost and installation cost varies by ship/site due to different configurations required for both shore and ship systems.

(†) indicates the presence of a P-5a

Footnotes:

(1) Link 16 Antenna: Unit cost increased due to new inflation indices however reduced procurement quantities resulted in a decrease of $0.563M.

(2) LMMT Shore: Increased procurement quantities resulted in a increase of $1.834M.

(3) Increase in FY24 and out due to new variant being installed.

(4) Increase in FY24 and out due to new variant being installed.

(5) Increase in cost is due to additional HW refresh installs occurring in FY24.

(6) ATDLS Training (DR666): Currently, each program of record (Link 16, C2P and LMMT) are developing new capabilities. This training funding is required to develop an integrated end-to-end training product for all tactical data link (TDL) functionality including the simulation of TDL functions performed by other Programs of Record (shipboard combat systems, external communications, and shipboard networking components). Total ATDLS End-to-End training curriculum and simulator costs align with a multi-year development schedule. This is required to complete training manuals, simulation interconnectivity, and field a simulator required for end-to-end operator training to include: C2P, LMMT, Link 16 family of systems, and other POR that provide TDL functionality. Completion of the training materials coincides with

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2614 / Adv Tact Data Link Sys (ATDLS)	**Item Number / Title [DODIC]:** 1 / Adv Tact Data Link Sys (ATDLS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

initial fielding of these new capabilities and is required in order to conduct end user operator training once systems are operational starting in FY23. FY24 decrease of $1.200M is due ramp down of training development effort as it nears completion.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2614 / Adv Tact Data Link Sys (ATDLS)	Item Number / Title [DODIC]: 1 / Adv Tact Data Link Sys (ATDLS)

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) C2P - Terminal Shore		2022	NIWC PAC / San Diego, CA	C / FFP	NAVWAR	Apr 2022	Apr 2023	2	506.000	Y		
1.1.1) C2P - Terminal Shore		2024	NIWC PAC / San Diego, CA	C / FFP	NAVWAR	Apr 2024	Apr 2025	1	765.000	Y		
2.1.1) Link 16 - Antenna		2022	NIWC Pacific / San Diego	WR	NIWC	Oct 2021	Jul 2022	15	216.000	Y		
2.1.1) Link 16 - Antenna		2023	NIWC Pacific / San Diego	WR	NIWC	Oct 2022	Jul 2023	16	222.250	Y		
2.1.1) Link 16 - Antenna		2024	NIWC Pacific / San Diego	WR	NIWC	Oct 2023	Jul 2024	13	230.200	Y		
3.1.1) LMMT - Ship		2022	Venesco / Chantilly / Virginia	C / FFP	NAVWAR	Nov 2021	Feb 2022	6	127.000	Y		Oct 2017
3.1.1) LMMT - Ship		2023	Venesco / Chantilly / Virginia	C / FFP	NAVWAR	Nov 2022	Feb 2023	5	125.000	Y		Oct 2017
3.1.1) LMMT - Ship		2024	Venesco / Chantilly / Virginia	C / FFP	NAVWAR	Nov 2023	Feb 2024	7	122.286	Y		Oct 2017
3.1.2) LMMT - Shore		2022	Venesco / Chantilly / Virginia	C / FFP	NAVWAR	Nov 2021	Feb 2022	12	44.167	Y		Apr 2017
3.1.2) LMMT - Shore		2024	Venesco / Chantilly / Virginia	C / FFP	NAVWAR	Nov 2023	Feb 2024	15	122.267	Y		

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2614 / Adv Tact Data Link Sys (ATDLS)	**Modification Number / Title:** 1 / Adv Tact Data Link Sys (ATDLS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	220.762	89.995	64.582	38.201	0.000	38.201	55.381	56.571	54.271	64.575	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	220.762	89.995	64.582	38.201	0.000	38.201	55.381	56.571	54.271	64.575	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**220.762**	**89.995**	**64.582**	**38.201**	**0.000**	**38.201**	**55.381**	**56.571**	**54.271**	**64.575**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Command and Control Processor (C2P) Technology Refresh Full Systems Ship: C2P computer processing boards are obsolete and have antiquated software code with no industrial base support. Technology refresh is required for C2P software modernization. Additionally, C2P configuration is not shock qualified. Full Systems upgrades are required to achieve 901D shock certification.

"Unit cost and installation cost varies by ship/site due to different configurations required for both shore and ship systems."

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2614 / Adv Tact Data Link Sys (ATDLS)	**Modification Number / Title:** 1 / Adv Tact Data Link Sys (ATDLS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0205604N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Adv Tact Data Link Sys (ATDLS)												
B Kits												
Recurring												
1.1.1) Link 16 Terminal Ship - NonOrganic (7)	147 / 99.504	29 / 24.504	24 / 20.366	13 / 9.009	- / -	13 / 9.009	46 / 32.649	42 / 30.431	33 / 24.475	44 / 33.188	Continuing	Continuing
1.1.2) C2P Terminal Ship - NonOrganic (8)	50 / 44.536	14 / 10.619	16 / 11.453	6 / 4.591	- / -	6 / 4.591	15 / 12.014	5 / 4.009	18 / 14.431	9 / 7.301	Continuing	Continuing
Subtotal: Recurring	*- / 144.040*	*- / 35.123*	*- / 31.819*	*- / 13.600*	*- / -*	*- / 13.600*	*- / 44.663*	*- / 34.440*	*- / 38.906*	*- / 40.489*	*Continuing*	*Continuing*
Subtotal: Adv Tact Data Link Sys (ATDLS)	*197 / 144.040*	*43 / 35.123*	*40 / 31.819*	*19 / 13.600*	*- / -*	*19 / 13.600*	*61 / 44.663*	*47 / 34.440*	*51 / 38.906*	*53 / 40.489*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 144.040*	*- / 35.123*	*- / 31.819*	*- / 13.600*	*- / -*	*- / 13.600*	*- / 44.663*	*- / 34.440*	*- / 38.906*	*- / 40.489*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Link 16 Terminal Ship / Shore DSA	- / 5.071	- / 3.371	- / 3.390	- / 1.197	- / 0.000	- / 1.197	- / 0.674	- / 0.378	- / 0.377	- / 0.304	Continuing	Continuing
2.2) Link 16 Terminal Ship / Shore Production Support	- / 5.031	- / 1.358	- / 1.266	- / 0.629	- / 0.000	- / 0.629	- / 2.029	- / 1.630	- / 1.713	- / 1.284	Continuing	Continuing
2.3) C2P Terminal Ship / Shore DSA	- / 5.610	- / 4.378	- / 2.772	- / 1.044	- / 0.000	- / 1.044	- / 0.893	- / 1.689	- / 1.659	- / 1.994	Continuing	Continuing
2.4) C2P Terminal Ship / Shore Production Support	- / 3.607	- / 0.742	- / 0.719	- / 0.342	- / 0.000	- / 0.342	- / 0.920	- / 0.302	- / 0.972	- / 0.466	Continuing	Continuing
Subtotal: Support	*- / 19.319*	*- / 9.849*	*- / 8.147*	*- / 3.212*	*- / -*	*- / 3.212*	*- / 4.516*	*- / 3.999*	*- / 4.721*	*- / 4.048*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: Adv Tact Data Link Sys (ATDLS)	- / 57.403	- / 45.023	- / 24.616	- / 21.389	- / 0.000	- / 21.389	- / 6.202	- / 18.132	- / 10.644	- / 20.038	Continuing	Continuing
Subtotal: Installation	*- / 57.403*	*- / 45.023*	*- / 24.616*	*- / 21.389*	*- / -*	*- / 21.389*	*- / 6.202*	*- / 18.132*	*- / 10.644*	*- / 20.038*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**220.762**	**89.995**	**64.582**	**38.201**	**0.000**	**38.201**	**55.381**	**56.571**	**54.271**	**64.575**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2614 / Adv Tact Data Link Sys (ATDLS)	**Modification Number / Title:** 1 / Adv Tact Data Link Sys (ATDLS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Adv Tact Data Link Sys (ATDLS)

Manufacturer Information

Manufacturer Name: DATA LINK SOLUTIONS				Manufacturer Location: CEDAR RAPIDS, IA			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Jan 2023	Jan 2024	Jan 2025				
Manufacturer Name: DRS LAUREL TECHNOLOGIES				Manufacturer Location: JOHNSTOWN, PA			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Jan 2023	Jan 2024	Jan 2025				
Manufacturer Name: DRS LAUREL TECHNOLOGIES				Manufacturer Location: JOHNSTOWN, PA			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Apr 2022	Apr 2023	Apr 2024				
Delivery Dates	Apr 2023	Apr 2024	Apr 2025				
Manufacturer Name: SERCO INC.				Manufacturer Location: HERNDON, VA			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Apr 2022	Apr 2023	Apr 2024				
Delivery Dates	Apr 2023	Apr 2024	Apr 2025				
Manufacturer Name: MICRO USA INC.				Manufacturer Location: POWAY, CA			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Apr 2022	Apr 2023	Apr 2024				
Delivery Dates	Apr 2023	Apr 2024	Apr 2025				

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2614 / Adv Tact Data Link Sys (ATDLS)	**Modification Number / Title:** 1 / Adv Tact Data Link Sys (ATDLS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Adv Tact Data Link Sys (ATDLS)

Installation Information

Method of Implementation: [none specified]:: Installation Name: Link 16 Terminal Ship

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	67 / 26.088	80 / 34.764	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	147 / 60.852
FY 2022	- / -	- / -	29 / 13.097	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	29 / 13.097
FY 2023	- / -	- / -	- / -	24 / 10.523	0 / 0.000	24 / 10.523	- / -	- / -	- / -	- / -	0 / 0.000	24 / 10.523
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	13 / 1.924	- / -	- / -	- / -	Continuing	Continuing
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	46 / 7.080	- / -	- / -	Continuing	Continuing
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	42 / 6.788	- / -	Continuing	Continuing
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	33 / 5.600	Continuing	Continuing
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	67 / 26.088	80 / 34.764	29 / 13.097	24 / 10.523	0 / 0.000	24 / 10.523	13 / 1.924	46 / 7.080	42 / 6.788	33 / 5.600	Continuing	Continuing

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	67	-	20	30	30	-	9	10	10	-	8	8	8	-	4	4	5	-	15	15	16	-	14	14	14	-	11	11	11	44	378
Out	40	27	-	20	30	30	-	9	10	10	-	8	8	8	-	4	4	5	-	15	15	16	-	14	14	14	-	11	11	55	378

Method of Implementation: [none specified]:: Installation Name: C2P Terminal Ship

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	38 / 31.315	12 / 10.259	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	50 / 41.574
FY 2022	- / -	- / -	14 / 11.519	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	14 / 11.519
FY 2023	- / -	- / -	- / -	16 / 10.866	0 / 0.000	16 / 10.866	- / -	- / -	- / -	- / -	0 / 0.000	16 / 10.866
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	6 / 4.278	- / -	- / -	- / -	0 / 0.000	6 / 4.278
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 11.052	- / -	- / -	Continuing	Continuing
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 3.856	- / -	Continuing	Continuing
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	18 / 14.438	Continuing	Continuing
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2614 / Adv Tact Data Link Sys (ATDLS)	**Modification Number / Title:** 1 / Adv Tact Data Link Sys (ATDLS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Adv Tact Data Link Sys (ATDLS)

Installation Information

Method of Implementation: [none specified]:: Installation Name: C2P Terminal Ship

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	38 / 31.315	12 / 10.259	14 / 11.519	16 / 10.866	0 / 0.000	16 / 10.866	6 / 4.278	15 / 11.052	5 / 3.856	18 / 14.438	Continuing	Continuing

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	38	-	-	-	12	-	-	-	14	-	-	8	8	-	-	3	3	-	-	7	8	-	-	2	3	-	-	9	9	9	133
Out	34	4	-	-	-	12	-	-	-	14	-	-	8	8	-	-	3	3	-	-	7	8	-	-	2	3	-	-	9	18	133

Footnotes:

(7) Link 16 Terminal Ship: Unit cost decreased due to a change in system hardware configuration from MOS Modernization cabinet to MOS MIDS JTRS ECP kit and reduced procurement quantities resulted in a decrease of $11.357M

(8) C2P Terminal Ship: Unit cost increased due to new inflation indices and loss of Economic Quantity Order discount however reduced procurement quantities resulted in a decrease of $6.862M.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2618 / Navy Command and Control System (NCCS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	67.965	4.242	3.435	3.918	0.000	3.918	3.715	3.845	3.627	3.703	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	67.965	4.242	3.435	3.918	0.000	3.918	3.715	3.845	3.627	3.703	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**67.965**	**4.242**	**3.435**	**3.918**	**0.000**	**3.918**	**3.715**	**3.845**	**3.627**	**3.703**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.012	0.025	-	-	-	-	-	-	-	-	0.037
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding includes Global Command and Control System-Maritime (GCCS-M), the Navy fielded portions of GCCS-Joint, and Joint Automated Deep Operations Coordination System (JADOCS). GCCS-M is further delineated by Afloat and Ashore.

GCCS-M is the Maritime implementation of the United States (U.S.) Global Command and Control System (GCCS). It provides Maritime Commanders at all echelons of command with a single, integrated, and scalable Command, Control, Communication, Computers and Intelligence (C4I) system that fuses, correlates, filters, maintains and displays location, and attributes information on friendly, hostile, and neutral land, sea, and air forces. It takes this information and integrates it with available intelligence and environmental information to support commander decision making. It operates in near real-time, constantly updating unit positions and other situational awareness data. GCCS-M also records data in appropriate databases and maintains a history of changes to those records. System operators use the data to construct relevant tactical pictures using maps, charts, topography overlays, oceanographic overlays, meteorological overlays, imagery and all-source intelligence information coordinated into a Common Operational Picture (COP) that can be shared locally and with other sites. GCCS-M is not a weapon system, but receives data from, and interfaces with Navy integrated weapons systems. Navy Commanders review and evaluate the general tactical situation, plan actions and operations, direct forces, synchronize tactical movements, and integrate force maneuver with firepower. GCCS-M operates on General Service (GENSER) Secret networks in a variety of environments and supports joint, coalition and allied forces. GCCS-M is implemented Afloat and at Ashore fixed command centers. Increment 1 includes all GCCS-M software versions 4.0 and earlier. Increment 2 is GCCS-M 4.1.

GCCS-Joint (GCCS-J) provides a fused picture of the battlespace within a modern command and control, communications and computer system that meets Joint warfighter needs. GCCS-J incorporates the core planning and assessment tools required by Combatant Commanders and their subordinate Joint Task Force Commanders to make accurate and timely decisions.

[P5 / FA010 GCCS-M Afloat]: GCCS-M Afloat provides Command and Control capability to Force Level Ships (e.g. CVN Carriers, LCC Command Ships, LHA and LHD Amphibious Ships), Unit Level Ships (e.g. CG Cruisers, DDG Destroyers, MCM Mine Countermeasure Ships, LPD and LSD Amphibious Ships, FF/LCS Littoral Combat Ships, PC Coastal Patrol Ships), Submarines (e.g. SSN/SSBN/SSGN Submarines), the Software Support Activity (SSA), and the In-Service Engineering Activity (ISEA).

[P5 / FA020 GCCS-M Ashore]: GCCS-M Ashore provides evolutionary systems and ancillary equipment upgrades to support Fleet Commanders, Force Anti-Submarine Warfare Commanders, Submarine Operating Authorities, Aegis Ashore Missile Defense Systems, and Technical Training Equipment Sites worldwide. GCCS-M Ashore provides systems that receive, process, display, maintain and/or assess unit characteristics, employment scheduling, material condition, combat readiness, war fighting capabilities, and positional information of own, allied, and hostile forces. GCCS-M Ashore provides the tools necessary for fleet and Shore based Commanders to execute plans, transmit tasking, and provide tactical information to subordinate forces.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2618 / Navy Command and Control System (NCCS)	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P5 / FA040 GCCS (Joint) Support Equipment]: Global Command and Control System- Joint (GCCS-J) is a Department of Defense (DoD) Program of Record managed by the Defense Information Systems Agency (DISA) GCCS-J Program Management Office (PMO). The GCCS-J system requirements, software release schedule, and system fielding plan are determined by the DISA GCCS-J PMO in coordination with the Joint Staff. GCCS-J supports the Joint Staff and Combatant Commanders by providing Command, Control, Communication, Computers and Intelligence (C4I) data processing capabilities, including status of forces and support requirements for use in national security decision making, force preparation and operational planning and execution. Global Command and Control System- Joint (GCCS-J) provides support for Fleet Communications Center interfacing with deployed units and other fixed Fleet and Joint Command Centers. There are currently 17 fielded and supported Navy GCCS-J Program of Record sites.

[P5 / FA060 Joint Automated Deep Operations Coordination System (JADOCS)]: Provide funding for the Navy fielding of JADOCS software on new installation hardware. JADOCS is required to provide the capability to coordinate joint targeting and mission assignment for time sensitive targets and other rapid-response missions across Functional Component Commanders, Joint and Combined Force Commanders, Geographic Combatant Commanders, and Special Operations Commanders.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2618 / Navy Command and Control System (NCCS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-5	1 / Navy Command and Control System (NCCS)	P-5a			- / 67.965	- / 4.242	- / 3.435	- / 3.918	- / 0.000	- / 3.918
P-40	**Total Gross/Weapon System Cost**				**- / 67.965**	**- / 4.242**	**- / 3.435**	**- / 3.918**	**- / 0.000**	**- / 3.918**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The FY 2024 budget procures and installs Global Command and Control System - Joint (GCCS-J) Ashore workstations, Local Area Network (LAN) hardware and software, communications equipment, Joint Automated Deep Operations Coordination System (JADOCS), and Global Command and Control System - Maritime (GCCS-M) software. FY 2024 funding increase is a result of a new DISA SW release v6.X with associated hardware that will be installed at 6 Maritime Operation Centers (MOCs) and Joint Staff Critical sites at USINDOPACOM, USFF, CPF, CNO, C6F, C5F, and USFJ locations. The cost of installations vary due to location and existing configuration of starting baseline.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2618 / Navy Command and Control System (NCCS)	**Item Number / Title [DODIC]:** 1 / Navy Command and Control System (NCCS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	67.965	4.242	3.435	3.918	0.000	3.918
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	67.965	4.242	3.435	3.918	0.000	3.918
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**67.965**	**4.242**	**3.435**	**3.918**	**0.000**	**3.918**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	0.012	0.025	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Flyaway - FA010 GCCS-M Afloat Cost																		
Recurring Cost																		
1.1.1) GCCS-M Increment 2 Afloat(†)	10.997	362	3.981	1.118	34	0.038	1.130	23	0.026	1.138	29	0.033	-	-	-	1.138	29	0.033
Subtotal: Recurring Cost	-	-	*3.981*	-	-	*0.038*	-	-	*0.026*	-	-	*0.033*	-	-	-	-	-	*0.033*
Subtotal: Flyaway - FA010 GCCS-M Afloat Cost	**-**	**-**	***3.981***	**-**	**-**	***0.038***	**-**	**-**	***0.026***	**-**	**-**	***0.033***	**-**	**-**	**-**	**-**	**-**	***0.033***
Flyaway - FA020 GCCS-M Ashore Cost																		
Recurring Cost																		
2.1.1) GCCS-M Increment 2 Ashore	289.500	10	2.895	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	*2.895*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Flyaway - FA020 GCCS-M Ashore Cost	**-**	**-**	***2.895***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Flyaway - FA040 GCCS (Joint) Support Equipment Cost																		
Recurring Cost																		
3.1.1) GCCS (Joint) Support Equipment(†) (1)	127.013	77	9.780	86.000	6	0.516	88.000	6	0.528	91.000	6	0.546	-	-	-	91.000	6	0.546
Subtotal: Recurring Cost	-	-	*9.780*	-	-	*0.516*	-	-	*0.528*	-	-	*0.546*	-	-	-	-	-	*0.546*
Subtotal: Flyaway - FA040 GCCS (Joint) Support Equipment Cost	**-**	**-**	***9.780***	**-**	**-**	***0.516***	**-**	**-**	***0.528***	**-**	**-**	***0.546***	**-**	**-**	**-**	**-**	**-**	***0.546***

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2618 / Navy Command and Control System (NCCS)	Item Number / Title [DODIC]: 1 / Navy Command and Control System (NCCS)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Flyaway - FA060 Joint Automated Deep Operations Coordination System (JADOCS) Cost																		
Recurring Cost																		
4.1.1) JADOCS(†) (2)	9.260	50	0.463	1.000	4	0.004	1.000	4	0.004	1.000	4	0.004	-	-	-	1.000	4	0.004
Subtotal: Recurring Cost	-	-	*0.463*	-	-	*0.004*	-	-	*0.004*	-	-	*0.004*	-	-	-	-	-	*0.004*
Subtotal: Flyaway - FA060 Joint Automated Deep Operations Coordination System (JADOCS) Cost	**-**	**-**	***0.463***	**-**	**-**	***0.004***	**-**	**-**	***0.004***	**-**	**-**	***0.004***	**-**	**-**	**-**	**-**	**-**	***0.004***
Flyaway - ASHORE INSTALLATIONS - FA776 Non FMP Cost																		
Recurring Cost																		
5.1.1) GCCS-M Increment 2 Ashore Installation and Pre-Installation Design	-	-	1.819	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.1.2) GCCS (Joint) Support Equipment Installations	-	-	5.989	-	-	0.470	-	-	0.475	-	-	0.517	-	-	-	-	-	0.517
5.1.3) GCCS-J Pre-Installation Design	-	-	1.932	-	-	0.156	-	-	0.170	-	-	0.180	-	-	-	-	-	0.180
Subtotal: Recurring Cost	-	-	*9.740*	-	-	*0.626*	-	-	*0.645*	-	-	*0.697*	-	-	-	-	-	*0.697*
Subtotal: Flyaway - ASHORE INSTALLATIONS - FA776 Non FMP Cost	**-**	**-**	***9.740***	**-**	**-**	***0.626***	**-**	**-**	***0.645***	**-**	**-**	***0.697***	**-**	**-**	**-**	**-**	**-**	***0.697***
Flyaway - AFLOAT INSTALLATIONS - FA777 FMP Cost																		
Recurring Cost																		
6.1.1) GCCS-M Increment 2 Afloat (3)	-	-	25.809	-	-	2.951	-	-	2.111	-	-	2.496	-	-	-	-	-	2.496
6.1.2) JADOCS (4)	-	-	0.670	-	-	0.083	-	-	0.077	-	-	0.091	-	-	-	-	-	0.091
Subtotal: Recurring Cost	-	-	*26.479*	-	-	*3.034*	-	-	*2.188*	-	-	*2.587*	-	-	-	-	-	*2.587*
Subtotal: Flyaway - AFLOAT INSTALLATIONS - FA777 FMP Cost	**-**	**-**	***26.479***	**-**	**-**	***3.034***	**-**	**-**	***2.188***	**-**	**-**	***2.587***	**-**	**-**	**-**	**-**	**-**	***2.587***
Flyaway - Consolidated Prior Year Requirements Cost																		
Recurring Cost																		
7.1.1) Consolidated Prior Year Requirements (5)	-	-	14.338	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	*14.338*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2618 / Navy Command and Control System (NCCS)	Item Number / Title [DODIC]: 1 / Navy Command and Control System (NCCS)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Subtotal: Flyaway - Consolidated Prior Year Requirements Cost	-	-	***14.338***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - FA555 Production Support Cost																		
8.1) GCCS (Joint) Production Engineering Support	-	-	0.289	-	-	0.024	-	-	0.044	-	-	0.051	-	-	-	-	-	0.051
Subtotal: Support - FA555 Production Support Cost	-	-	***0.289***	-	-	***0.024***	-	-	***0.044***	-	-	***0.051***	-	-	-	-	-	***0.051***
Gross/Weapon System Cost	-	-	**67.965**	-	-	**4.242**	-	-	**3.435**	-	-	**3.918**	-	-	**0.000**	-	-	**3.918**

Remarks:
- Global Command and Control System - Maritime (GCCS-M) Afloat install quantities also include tech refresh units.
- For GCCS-M software-only installations, Other Procurement, Navy (OPN) is the appropriate fund source when the GCCS-M installation is an incidental cost to the Common Computing Environment (CCE)/ Consolidated Afloat Networks and Enterprise Services (CANES) hardware installation.
- The unit costs for GCCS-M and Joint Air Deep Operations Command System (JADOCS) vary based on the type of platform being installed on, location of install, existing configuration of starting baseline, and the software version being installed.
- Global Command and Control System - Joint (GCCS-J) quantities represent the number of complete unit upgrades to existing systems. The cost to upgrade each unit varies based on the number of servers, computers, and monitors and the equipment configurations. The different unit sizes and configurations result in varying unit costs.

(†) indicates the presence of a P-5a

Footnotes:
(1) 3.1.1 GCCS (Joint) Support Equipment - Unit cost increase in FY 2024 reflects rate changes.
(2) JADOCS unit cost represents a software-only cost (installed along with new CANES hardware).
(3) GCCS-M installation costs increased in FY 2024 due to an increase in the number of installations and variance in costs associated with each installation.
(4) JADOCS installation costs increased in FY 2024 due to variation in installs contingent on location of install, existing configuration of starting baseline and software version being installed.
(5) Consolidated prior year requirements include GCCS-M Increment 1 Afloat (FA010/FA777), GCCS-M Increment 2 Ashore Training Curriculum (FA666), GCCS-M Increment 2 Ashore Production Support (FA555), JADOCS Ashore Installations (FA776).

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2618 / Navy Command and Control System (NCCS)	Item Number / Title [DODIC]: 1 / Navy Command and Control System (NCCS)

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) GCCS-M Increment 2 Afloat		2022	NIWC Atlantic/Pacific (6) / NAVWAR	WR	NAVWAR	Nov 2021	Jan 2022	34	1.118	Y		
1.1.1) GCCS-M Increment 2 Afloat		2023	NIWC Atlantic/Pacific (6) / NAVWAR	WR	NAVWAR	Nov 2022	Jan 2023	23	1.130	Y		
1.1.1) GCCS-M Increment 2 Afloat		2024	NIWC Atlantic/Pacific (6) / NAVWAR	WR	NAVWAR	Nov 2023	Jan 2024	29	1.138	Y		
3.1.1) GCCS (Joint) Support Equipment		2022	NIWC Atlantic/NAVWAR / NAVWAR	WR	NAVWAR	Jan 2022	Apr 2022	6	86.000	Y		
3.1.1) GCCS (Joint) Support Equipment		2023	NIWC Atlantic/NAVWAR / NAVWAR	WR	NAVWAR	Jan 2023	Apr 2023	6	88.000	Y		
3.1.1) GCCS (Joint) Support Equipment		2024	NIWC Atlantic/NAVWAR / NAVWAR	WR	NAVWAR	Jan 2024	Apr 2024	6	91.000	Y		
4.1.1) JADOCS		2022	NIWC Pacific / San Diego, CA	WR	NAVWAR	Nov 2021	Jan 2022	4	1.000	Y		
4.1.1) JADOCS		2023	NIWC Pacific / San Diego, CA	WR	NAVWAR	Nov 2022	Jan 2023	4	1.000	Y		
4.1.1) JADOCS		2024	NIWC Pacific / San Diego, CA	WR	NAVWAR	Nov 2023	Jan 2024	4	1.000	Y		

Footnotes:

(6) For GCCS-M Increment 1 Afloat, Increment 2 Afloat, and Increment 2 Ashore: Naval Information Warfare Centers (NIWC), Pacific and Atlantic are procuring, integrating and installation agents. There are multiple hardware and software contracts awarded under each of these cost elements.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2622 / Minesweeping System Replacement

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 0204302N	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	153.279	15.640	16.336	16.814	0.000	16.814	16.899	17.225	17.566	17.934	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	153.279	15.640	16.336	16.814	0.000	16.814	16.899	17.225	17.566	17.934	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**153.279**	**15.640**	**16.336**	**16.814**	**0.000**	**16.814**	**16.899**	**17.225**	**17.566**	**17.934**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Magnetic Silencing Facility Upgrades support hardware, auxiliary systems, and support in association with the upgrade of current aging or new installation of CONUS and Outside Continental United States (OCONUS) Magnetic Silencing Facilities in order for the calibration of new Open-Loop Magnetic Systems or Advanced Degaussing System ships and submarines to be accomplished for worldwide operation. Upgrades obsolete high power equipment to provide the necessary magnetic field for ensuring current and future navy ships and submarines meet requirements for Electromagnetic Signature Requirements and reduces susceptibility to Electro-Magnetic threat systems.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2622 / Minesweeping System Replacement	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** 0204302N	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-5	2 / MAGNETIC SILENCING FACILITY UPGRADES				- / 153.279	- / 15.640	- / 16.336	- / 16.814	- / 0.000	- / 16.814
P-40	**Total Gross/Weapon System Cost**				**- / 153.279**	**- / 15.640**	**- / 16.336**	**- / 16.814**	**- / 0.000**	**- / 16.814**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2622 / Minesweeping System Replacement	**Item Number / Title [DODIC]:** 2 / MAGNETIC SILENCING FACILITY UPGRADES
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	153.279	15.640	16.336	16.814	0.000	16.814
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	153.279	15.640	16.336	16.814	0.000	16.814
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**153.279**	**15.640**	**16.336**	**16.814**	**0.000**	**16.814**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - LV085 - MAGNETIC SILENCING FACILITY UPGRADES Cost																		
Recurring Cost																		
1.1.1) MSF MEASUREMENT SYSTEM UPGRADE	153,279.000	1	153.279	-	-	15.640	-	-	16.336	-	-	16.814	-	-	-	-	-	16.814
Subtotal: Recurring Cost	-	-	*153.279*	-	-	*15.640*	-	-	*16.336*	-	-	*16.814*	-	-	-	-	-	*16.814*
Subtotal: Hardware - LV085 - MAGNETIC SILENCING FACILITY UPGRADES Cost	**-**	**-**	***153.279***	**-**	**-**	***15.640***	**-**	**-**	***16.336***	**-**	**-**	***16.814***	**-**	**-**	**-**	**-**	**-**	***16.814***
Gross/Weapon System Cost	**-**	**-**	**153.279**	**-**	**-**	**15.640**	**-**	**-**	**16.336**	**-**	**-**	**16.814**	**-**	**-**	**0.000**	**-**	**-**	**16.814**

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2624 / Shallow Water MCM

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	77.818	5.610	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	83.428
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	77.818	5.610	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	83.428
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**77.818**	**5.610**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**-**	**83.428**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.529	0.554	-	-	-	-	-	-	-	-	1.083
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FY 2023 decrease due to completion of purchasing Coastal Battlefield Reconnaissance and Analysis (COBRA) Block I system and COBRA Block II program termination.

This program provides a combination of US Navy projects planned to counter the threat to amphibious landing forces from known and projected foreign land/sea mines, obstacles in the Beach Zone (BZ) and Surf Zone (SZ) approaches to amphibious assault areas. It is a system of systems (Countermine/Counter Obstacle, Intelligence/Surveillance/Reconnaissance/Targeting (ISR/T), Navigation/Virtual Marking/Integration, C4I/Data Fusion) that provides a full assault breaching capability. This program is an essential element to the Marine Corps Ship To Objective Maneuver Concept of Operations.

[P5 / SW004: COASTAL BATTLEFIELD RECONNAISSANCE AND ANALYSIS (COBRA)]: The mission of the AN/DVS-1 COBRA is to conduct unmanned aerial tactical reconnaissance in the littoral battlespace for detection and localization of minefields and obstacles in the surf zone and beach zone prior to an amphibious assault. The COBRA airborne payload is carried on the MQ-8 Fire Scout Vertical Takeoff and Landing Unmanned Aerial Vehicle
(VTUAV). This allows operators and other personnel to remain at a safe distance from the mine and obstacle belts as well as enemy direct and indirect fire. COBRA will be embarked in the Littoral Combat Ship (LCS) as part of the
Mine Countermeasures (MCM) Mission Package (MP).

COBRA provides the ISR/T part of the Assault Breaching System (ABS) of systems. One system consists of two COBRA Airborne Payload Subsystem (CAPS) and one Post Mission Analysis (PMA) station. Block I introduced a
daytime detection capability for surface laid minefields and obstacles in the Beach Zone. Additional capabilities to include a daytime surf zone, very shallow water and shallow water detection capability will be introduced via
engineering changes through FY24. COBRA has a modular payload architecture, is integrated with the MQ-8 Fire Scout VTUAV and other vessels of opportunity, and in its expeditionary configuration from the shore. COBRA
serves as a Coastal Mine Reconnaissance (CMR) sensor within the LCS MCM MP as part of amphibious assault breaching mission.

The OPN 2624 procurement line supports the COBRA program of record, delivering COBRA systems to Navy helicopter wings to provide initial proficiency training to Navy aircrews. The OPN 1601 procurement line supports the systems that provide the deployable combat capability to LCS mission packages.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2624 / Shallow Water MCM	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-5	1 / Shallow Water Mine CM Ship	P-5a, P-21			- / 77.818	- / 5.610	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40	**Total Gross/Weapon System Cost**				**- / 77.818**	**- / 5.610**	**- / 0.000**	**- / 0.000**	**- / 0.000**	**- / 0.000**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2624 / Shallow Water MCM	**Item Number / Title [DODIC]:** 1 / Shallow Water Mine CM Ship
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	77.818	5.610	0.000	0.000	0.000	0.000
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	77.818	5.610	0.000	0.000	0.000	0.000
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**77.818**	**5.610**	**0.000**	**0.000**	**0.000**	**0.000**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	0.529	0.554	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Hardware - SW004: COASTAL BATTLEFIELD RECONNAISSANCE AND ANALYSIS (COBRA) Cost																		
Recurring Cost																		
1.1.1) SW0041 COBRA BLOCK 1(†)	9,994K	5	49.968	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.2) SW00411 COBRA BLOCK 1 SPARES, TRAINING	-	-	2.164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1.3) SW00411 COBRA BLOCK 1 MOD UPGRADES	-	-	25.686	-	-	5.610	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	*77.818*	-	-	*5.610*	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Hardware - SW004: COASTAL BATTLEFIELD RECONNAISSANCE AND ANALYSIS (COBRA) Cost	**-**	**-**	***77.818***	**-**	**-**	***5.610***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Gross/Weapon System Cost	**-**	**-**	**77.818**	**-**	**-**	**5.610**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2624 / Shallow Water MCM	Item Number / Title [DODIC]: 1 / Shallow Water Mine CM Ship

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) SW0041 COBRA BLOCK 1(†)		2018	ARETE / TUCSON, AZ	C / FFP	NSWC PC	Sep 2018	Sep 2020	1	8,309K	Y		
1.1.1) SW0041 COBRA BLOCK 1(†)		2019	ARETE / TUCSON, AZ	C / FFP	NSWC PC	Dec 2018	Dec 2020	1	8,309K	Y		
1.1.1) SW0041 COBRA BLOCK 1(†)		2020	ARETE / TUCSON, AZ	C / FFP	NSWC PC	Oct 2019	Oct 2021	1	8,542K	Y		

(†) indicates the presence of a P-21

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2624 / Shallow Water MCM	**Item Number / Title [DODIC]:** 1 / Shallow Water Mine CM Ship

Cost Elements (Units in Each)							Fiscal Year 2018												Fiscal Year 2019												BALANCE
							Calendar Year 2018												Calendar Year 2019												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.1.1) SW0041 COBRA BLOCK 1																															
Prior Years Deliveries: 2																															
	1	2018	NAVY	1	0	1												A -	-	-	-	-	-	-	-	-	-	-	-	-	1
	1	2019	NAVY	1	0	1															A -	-	-	-	-	-	-	-	-	-	1
	1	2020	NAVY	1	0	1																									1
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2624 / Shallow Water MCM	**Item Number / Title [DODIC]:** 1 / Shallow Water Mine CM Ship

Cost Elements (Units in Each)							Fiscal Year 2020												Fiscal Year 2021												BALANCE
							Calendar Year 2020												Calendar Year 2021												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.1.1) SW0041 COBRA BLOCK 1																															
Prior Years Deliveries: 2																															
	1	2018	NAVY	1	0	1	-	-	-	-	-	-	-	-	-	-	-	1													0
	1	2019	NAVY	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1										0
	1	2020	NAVY	1	0	1	A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2624 / Shallow Water MCM	**Item Number / Title [DODIC]:** 1 / Shallow Water Mine CM Ship

Cost Elements (Units in Each)							Fiscal Year 2022												Fiscal Year 2023												BALANCE
										Calendar Year 2022												Calendar Year 2023									
COO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.1.1) SW0041 COBRA BLOCK 1																															
Prior Years Deliveries: 2																															
	1	2018	NAVY	1	1	0																									0
	1	2019	NAVY	1	1	0																									0
	1	2020	NAVY	1	0	1	1																								0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2624 / Shallow Water MCM	**Item Number / Title [DODIC]:** 1 / Shallow Water Mine CM Ship

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2024	1-8-5 For 2024	MAX For 2024	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	ARETE - TUCSON, AZ	2	6	11	0	0	24	24	0	0	24	24

"A" in the Delivery Schedule indicates the Contract Award Date.
Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2657 / NAVSTAR GPS Receivers (Space)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	131.045	33.097	30.439	37.319	0.000	37.319	41.867	42.771	43.554	44.539	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	131.045	33.097	30.439	37.319	0.000	37.319	41.867	42.771	43.554	44.539	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**131.045**	**33.097**	**30.439**	**37.319**	**0.000**	**37.319**	**41.867**	**42.771**	**43.554**	**44.539**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.645	1.298	1.570	-	1.570	0.702	0.171	0.001	0.001	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Navigation Signal Timing and Ranging Global Positioning System (NAVSTAR GPS) provides assured and protected navigation solutions to Warfighters through supported, affordable, and integrated systems, and is the primary source of positioning, navigation and timing information for the Department of Defense (DoD).

[P5 / (1R013) Navigation Warfare (NAVWAR)]: NAVWAR ensures that U. S. military forces maintain access to the GPS in an electronically challenging battlespace, delivers the capability to deny adversaries access to and use of GPS during military operations, and serves to preserve the peaceful use of GPS. Navy GPS Enhanced User Equipment (UE) Operational Requirements Document directs that future UE will incorporate an increased anti-jam capability. NAVWAR counters the threat by increasing resistance to intentional or unintentional interference. Sea NAVWAR Strategy is to install Increment 2 Advanced Digital Antenna Production (ADAP) antennas on surface platforms. The second increment also includes a smaller antenna variant for surface platforms with Size, Weight, Power and Cost (SWAP-C) restrictions. The ADAP antenna provides simultaneous dual frequency nulling, and built in testability. Procurement and installation of anti-jam GPS antennas and modernized user equipment is required to ensure the continuation of GPS signals from space in a hostile jamming environment. The Sea NAVWAR program will equip ships with anti-jam GPS antennas to ensure the continued availability of GPS to support surface combat operations and provide reliable GPS and other positioning, navigation and timing data to ship-board Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR), Combat, and Weapons Systems.

[P3A - 2 / (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)]: The GPS-based PNT Service (GPNTS) system is the primary PNT system for the Navy to ensure reliable PNT capability and interoperability insertion in GPS receivers and associated Command, Control, Computers, Communications and Intelligence (C4I) and Combat Systems in a denied environment. GPNTS provides more robust and secure GPS/PNT capabilities than is currently in the Fleet. GPNTS provides precise PNT data required for combat, weapons, command, control, communications, navigation, and other systems, as well as providing the time synchronization critical to the network environments. GPNTS backfits current PNT/GPS systems and forward fit new platforms. GPNTS is an Open Architecture (OA) development, enabling rapid software and hardware based capability improvements to be inserted without a requirement for single-source contracting. GPNTS will host the US Space Force developed Military GPS User Equipment (MGUE) card, allowing access to the new more accurate and secure GPS Military-Code (M-Code) signal. GPNTS also provides the capability to migrate non-real time GPS data toward a Common Computing Environment (CCE) and provide a path for the integration of advanced navigation systems and sensors.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2657 / NAVSTAR GPS Receivers (Space)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / NAVSTAR GPS Receivers (Space)	P-5a			- / 69.964	- / 3.569	- / 1.774	- / 2.128	- / 0.000	- / 2.128
P-3a	2 / (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS) (Ship Alt)				- / 61.081	- / 29.528	- / 28.665	- / 35.191	- / 0.000	- / 35.191
P-40	**Total Gross/Weapon System Cost**				**- / 131.045**	**- / 33.097**	**- / 30.439**	**- / 37.319**	**- / 0.000**	**- / 37.319**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / NAVSTAR GPS Receivers (Space)	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	2 / (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS) (Ship Alt)				- / 39.410	- / 40.268	- / 41.590	- / 42.762	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 41.867**	**- / 42.771**	**- / 43.554**	**- / 44.539**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

Navigation Warfare (NAVWAR) - In FY 2024 Sea NAVWAR will procure and field dual Advanced Digital Antenna Production (ADAP) Fiber Optic Antenna Link (FOAL) antennas. FY 2023 to FY 2024 increase reflects increase in quantity from 3 to 6. 5 of the 6 ADAP FOAL antennas procured in FY 2024 are for the Military Sealift Command (MSC).

Global Positioning System (GPS) - based Positioning, Navigation, & Timing Service (GPNTS) program will continue to procure and field Full Rate Production (FRP) units in FY 2024. FY 2023 to FY 2024 increase reflects an increase in quantities from 17 to 20. 5 of the 20 units procured in FY 2024 are for the MSC.

FY 2024 procurements for NAVWAR and GPNTS will be installed in FY 2025.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2657 / NAVSTAR GPS Receivers (Space)	**Item Number / Title [DODIC]:** 1 / NAVSTAR GPS Receivers (Space)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	69.964	3.569	1.774	2.128	0.000	2.128
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	69.964	3.569	1.774	2.128	0.000	2.128
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**69.964**	**3.569**	**1.774**	**2.128**	**0.000**	**2.128**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - (1R013) Navigation Warfare (NAVWAR) Cost																		
Recurring Cost																		
1.1.1) NAVWAR (ADAP)(†) (1)	97.137	430	41.769	460.000	6	2.760	465.000	1	0.465	473.000	1	0.473	-	-	0.000	473.000	1	0.473
1.1.2) NAVWAR MSC (ADAP)(†) (2)	151.000	2	0.302	-	-	0.000	157.000	2	0.314	160.000	5	0.800	-	-	0.000	160.000	5	0.800
1.1.3) NAVWAR MSC (ADAP) Engineering Change Proposal	-	-	0.147	-	-	0.027	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*42.218*	-	-	*2.787*	-	-	*0.779*	-	-	*1.273*	-	-	*0.000*	-	-	*1.273*
Subtotal: Hardware - (1R013) Navigation Warfare (NAVWAR) Cost	**-**	**-**	***42.218***	**-**	**-**	***2.787***	**-**	**-**	***0.779***	**-**	**-**	***1.273***	**-**	**-**	***0.000***	**-**	**-**	***1.273***
Support - 1R013 DSA Cost																		
2.1) NAVWAR (ADAP) DSA (3)	-	-	7.495	-	-	0.057	-	-	0.076	-	-	0.086	-	-	0.000	-	-	0.086
2.2) NAVWAR MSC (ADAP) DSA	-	-	0.061	-	-	0.020	-	-	0.070	-	-	0.230	-	-	0.000	-	-	0.230
Subtotal: Support - 1R013 DSA Cost	**-**	**-**	***7.556***	**-**	**-**	***0.077***	**-**	**-**	***0.146***	**-**	**-**	***0.316***	**-**	**-**	***0.000***	**-**	**-**	***0.316***
Support - 1R013 - Installations Cost																		
3.1) NAVWAR (ADAP) Installations	-	-	16.637	-	-	0.405	-	-	0.810	-	-	0.200	-	-	0.000	-	-	0.200
3.2) NAVWAR MSC (ADAP) Installations	-	-	0.000	-	-	0.270	-	-	0.000	-	-	0.270	-	-	0.000	-	-	0.270

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2657 / NAVSTAR GPS Receivers (Space)	Item Number / Title [DODIC]: 1 / NAVSTAR GPS Receivers (Space)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Subtotal: Support - 1R013 - Installations Cost	-	-	***16.637***	-	-	***0.675***	-	-	***0.810***	-	-	***0.470***	-	-	***0.000***	-	-	***0.470***
Support - 1R013 - Production Support Cost																		
4.1) NAVWAR Production Support	-	-	3.538	-	-	0.030	-	-	0.023	-	-	0.028	-	-	0.000	-	-	0.028
4.2) MSC Production Support	-	-	0.015	-	-	0.000	-	-	0.016	-	-	0.041	-	-	0.000	-	-	0.041
Subtotal: Support - 1R013 - Production Support Cost	-	-	***3.553***	-	-	***0.030***	-	-	***0.039***	-	-	***0.069***	-	-	***0.000***	-	-	***0.069***
Gross/Weapon System Cost	-	-	**69.964**	-	-	**3.569**	-	-	**1.774**	-	-	**2.128**	-	-	**0.000**	-	-	**2.128**

Remarks:
[Hardware] Procurement and installation of Anti-Jam (AJ) Global Positioning System (GPS) user equipment and prevention equipment is required to ensure the continued utility of GPS signals from space in a hostile jamming environment. Sea NAVWAR will procure and field dual Advanced Digital Antenna Production (ADAP) Fiber Optic Antenna Link (FOAL) antennas. The Sea Navigation Warfare (NAVWAR) program will equip ships with AJ GPS antennas to ensure the continued availability of GPS to support surface combat operations and provide reliable GPS and other navigation sensor data to ship-board Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR), Combat, and Weapons Systems.

(†) indicates the presence of a P-5a

Footnotes:
(1) 1)Advanced Digital Antenna Production (ADAP) consists of two hardware configurations; single ADAP and Dual ADAP Fiber Optic Antenna Link (FOAL), which drives the variation in average unit price each fiscal year. 2)A single ADAP shipset consists of one ADAP antenna and is installed on smaller surface platforms. A single ADAP may range in cost from $135K to $145K depending on the Economic Order Quantity Pricing and International exchange rates relevant at time of contract award. 3)A Dual ADAP FOAL shipset consists of two ADAP antennas, two FOAL drawers, & two component kits and are installed on large surface platforms. A Dual ADAP FOAL may range in cost from $407K to $473K depending on Economic Order Quantity Pricing and International exchange rates relevant at time of contract award. The components kits are procured via the DLA Troop Support Contract. 4)1-2 months of integration upon receipt of ADAP Antennas.
(2) Funding for Military Sealift Command (MSC) procurements and installations to correspond with concurrent Global Positioning System (GPS) based Position Navigation and Timing System (GPNTS) procurements and installations.
(3) 1)Pre-Installation Design Services Allocation (DSA) are required in order to complete ship check and installation drawings for installation planning and is performed 6-12 months prior to installation start. Post Installation DSA support requirements include drawings closeout. DSA costs will fluctuate each FY as it is a factor of the number of installations in any given fiscal year.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2657 / NAVSTAR GPS Receivers (Space)	Item Number / Title [DODIC]: 1 / NAVSTAR GPS Receivers (Space)

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) NAVWAR (ADAP)		2022	RAYTHEON SYSTEMS LTD / HARLOW-UNITED KINGDOM	C / FFP	NAVWAR	Feb 2022	Nov 2022	6	460.000	Y		Nov 2021
1.1.1) NAVWAR (ADAP)		2023	RAYTHEON SYSTEMS LTD / HARLOW-UNITED KINGDOM	C / FFP	NAVWAR	Feb 2023	Nov 2023	1	465.000	Y		Nov 2022
1.1.1) NAVWAR (ADAP)		2024	RAYTHEON SYSTEMS LTD / HARLOW-UNITED KINGDOM	C / FFP	NAVWAR	Feb 2024	Nov 2024	1	473.000	Y		Nov 2023
1.1.2) NAVWAR MSC (ADAP)		2023	RAYTHEON SYSTEMS LTD / HARLOW-UNITED KINGDOM	C / FFP	NAVWAR	Feb 2023	Nov 2023	2	157.000	Y		Nov 2021
1.1.2) NAVWAR MSC (ADAP)		2024	RAYTHEON SYSTEMS LTD / HARLOW-UNITED KINGDOM	C / FFP	NAVWAR	Feb 2024	Nov 2024	5	160.000	Y		Nov 2022

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2657 / NAVSTAR GPS Receivers (Space)	**Modification Number / Title:** 2 / (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	61.081	29.528	28.665	35.191	0.000	35.191	39.410	40.268	41.590	42.762	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	61.081	29.528	28.665	35.191	0.000	35.191	39.410	40.268	41.590	42.762	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**61.081**	**29.528**	**28.665**	**35.191**	**0.000**	**35.191**	**39.410**	**40.268**	**41.590**	**42.762**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Global Positioning System (GPS)-based Position, Navigation, & Timing (PNT) Service (GPNTS) system is the primary PNT system for the Navy to ensure reliable PNT capability and interoperability insertion in GPS receivers and associated Command, Control, Computers, Communications and Intelligence (C4I) and Combat Systems in a denied environment. GPNTS provides more robust and secure GPS/PNT capabilities than is currently in the Fleet. GPNTS provides precise PNT data required for many combat, weapons, command, control, communications, navigation, and other systems, as well as providing the time synchronization critical to the network environments. GPNTS backfits current PNT/GPS systems as well as serve as a forward fit for new platforms. GPNTS is an Open Architecture (OA) development, enabling rapid software and hardware based capability improvements to be inserted without a requirement for single-source contracting. GPNTS will host the US Space Force developed Military GPS User Equipment (MGUE) card, allowing access to the new more accurate and secure GPS Military-Code (M-Code) signal. GPNTS also provides the capability to migrate non-real time GPS data toward a Common Computing Environment (CCE) and provide a path for the integration of advanced navigation systems and sensors.

GPNTS program has procured Full Rate Production (FRP) units in FY 2021 and continues to field system to the fleet.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2657 / NAVSTAR GPS Receivers (Space)	**Modification Number / Title:** 2 / (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Models of Systems Affected: Shore Stations, Ships **Modification Type:** Ship Alt **Related RDT&E PEs:** 0604280N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)												
B Kits												
Recurring												
1.1.1) GPNTS (Configuration B) - Ship - NonOrganic [4]	35 / 28.551	10 / 9.440	15 / 14.445	15 / 14.730	- / -	15 / 14.730	17 / 17.034	16 / 16.352	17 / 17.714	17 / 18.071	Continuing	Continuing
1.1.2) GPNTS (Shore) - NonOrganic	9 / 5.931	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 5.931
1.1.3) GPNTS (MSC) - NonOrganic [5]	2 / 1.426	- / -	2 / 1.484	5 / 3.785	- / -	5 / 3.785	5 / 3.860	5 / 3.935	5 / 4.015	5 / 4.095	- / -	29 / 22.600
1.1.4) GPNTS (MSC) Engineering Change Proposal - Organic	- / 0.653	- / 0.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.953
Subtotal: Recurring	*- / 36.561*	*- / 9.740*	*- / 15.929*	*- / 18.515*	*- / -*	*- / 18.515*	*- / 20.894*	*- / 20.287*	*- / 21.729*	*- / 22.166*	*Continuing*	*Continuing*
Subtotal: (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)	*46 / 36.561*	*10 / 9.740*	*17 / 15.929*	*20 / 18.515*	*- / -*	*20 / 18.515*	*22 / 20.894*	*21 / 20.287*	*22 / 21.729*	*22 / 22.166*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 36.561*	*- / 9.740*	*- / 15.929*	*- / 18.515*	*- / -*	*- / 18.515*	*- / 20.894*	*- / 20.287*	*- / 21.729*	*- / 22.166*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) GPNTS Production Support	- / 2.413	- / 0.618	- / 0.867	- / 0.884	- / 0.000	- / 0.884	- / 1.022	- / 0.995	- / 1.078	- / 1.099	Continuing	Continuing
2.2) GPNTS (MSC) Production Support	- / 0.086	- / 0.000	- / 0.074	- / 0.191	- / 0.000	- / 0.191	- / 0.193	- / 0.202	- / 0.236	- / 0.253	Continuing	Continuing
2.3) GPNTS DSA - FMP [6]	- / 10.126	- / 2.870	- / 3.840	- / 2.959	- / 0.000	- / 2.959	- / 3.592	- / 3.608	- / 4.046	- / 3.965	Continuing	Continuing
2.4) GPNTS (MSC) DSA - FMP	- / 0.270	- / 0.090	- / 0.205	- / 0.717	- / 0.000	- / 0.717	- / 0.709	- / 0.776	- / 0.801	- / 0.879	Continuing	Continuing
Subtotal: Support	*- / 12.895*	*- / 3.578*	*- / 4.986*	*- / 4.751*	*- / -*	*- / 4.751*	*- / 5.516*	*- / 5.581*	*- / 6.161*	*- / 6.196*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)	- / 11.625	- / 16.210	- / 7.750	- / 11.925	- / 0.000	- / 11.925	- / 13.000	- / 14.400	- / 13.700	- / 14.400	- / 12.700	- / 115.710
Subtotal: Installation	*- / 11.625*	*- / 16.210*	*- / 7.750*	*- / 11.925*	*- / -*	*- / 11.925*	*- / 13.000*	*- / 14.400*	*- / 13.700*	*- / 14.400*	*- / 12.700*	*- / 115.710*
Total												
Total Cost (Procurement + Support + Installation)	**61.081**	**29.528**	**28.665**	**35.191**	**0.000**	**35.191**	**39.410**	**40.268**	**41.590**	**42.762**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2657 / NAVSTAR GPS Receivers (Space)	**Modification Number / Title:** 2 / (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)

Manufacturer Information

Manufacturer Name: Sechan Electronics, Inc. (7) | Manufacturer Location: Lititz, PA

Administrative Leadtime *(in Months)*: 4 | Production Leadtime *(in Months)*: 9

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Feb 2022	Feb 2023	Feb 2024				
Delivery Dates	Nov 2022	Nov 2023	Nov 2024				

Manufacturer Name: SESCo Inc | Manufacturer Location: San Diego, CA

Administrative Leadtime *(in Months)*: 4 | Production Leadtime *(in Months)*: 9

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Feb 2022	Feb 2023	Feb 2024				
Delivery Dates	Nov 2022	Nov 2023	Nov 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: GPNTS (Configuration B) - Ship

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	16 / 9.600	19 / 15.010	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	35 / 24.610
FY 2022	- / -	- / -	10 / 7.750	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 7.750
FY 2023	- / -	- / -	- / -	15 / 10.875	0 / 0.000	15 / 10.875	- / -	- / -	- / -	- / -	0 / 0.000	15 / 10.875
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	15 / 10.500	- / -	- / -	- / -	0 / 0.000	15 / 10.500
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 11.900	- / -	- / -	0 / 0.000	17 / 11.900
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 11.200	- / -	0 / 0.000	16 / 11.200
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 11.900	0 / 0.000	17 / 11.900
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 10.200	17 / 10.200
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
Total	16 / 9.600	19 / 15.010	10 / 7.750	15 / 10.875	0 / 0.000	15 / 10.875	15 / 10.500	17 / 11.900	16 / 11.200	17 / 11.900	17 / 10.200	142 / 98.935

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2657 / NAVSTAR GPS Receivers (Space)	**Modification Number / Title:** 2 / (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)

Installation Information

Method of Implementation: [none specified]:: Installation Name: GPNTS (Configuration B) - Ship

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	16	2	4	2	11	-	4	2	4	3	1	5	6	6	1	5	3	4	3	2	8	2	4	6	4	3	4	4	6	17	142
Out	12	4	2	4	2	11	-	4	2	4	3	1	5	6	6	1	5	3	4	3	2	8	2	4	6	4	3	4	4	23	142

Method of Implementation: [none specified]:: Installation Name: GPNTS (Shore)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	9 / 2.025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 2.025
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	9 / 2.025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 2.025

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Out	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2657 / NAVSTAR GPS Receivers (Space)	**Modification Number / Title:** 2 / (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: (1R019) Global Positioning System (GPS)-based Positioning, Navigation, & Timing Service (GPNTS)

Installation Information

Method of Implementation: [none specified]:: Installation Name: GPNTS (MSC)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	2 / 1.200	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 1.200
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	2 / 1.050	0 / 0.000	2 / 1.050	- / -	- / -	- / -	- / -	0 / 0.000	2 / 1.050
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.500	- / -	- / -	- / -	0 / 0.000	5 / 2.500
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.500	- / -	- / -	0 / 0.000	5 / 2.500
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.500	- / -	0 / 0.000	5 / 2.500
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.500	0 / 0.000	5 / 2.500
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.500	5 / 2.500
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	2 / 1.200	- / -	2 / 1.050	0 / 0.000	2 / 1.050	5 / 2.500	5 / 2.500	5 / 2.500	5 / 2.500	5 / 2.500	29 / 14.750

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	1	1	-	-	-	-	1	-	1	-	1	-	1	3	1	-	1	3	1	-	1	3	1	-	1	3	5	29
Out	-	-	-	-	1	1	-	-	-	-	1	-	1	-	1	-	1	3	1	-	1	3	1	-	1	3	1	-	1	8	29

Footnotes:

(4) 1) Unit cost for each procured Ship set is a Dual Redundant System consisting of two Racks and two GPS Receivers. GPNTS has awarded two (2) IDIQ type production contracts; procured units are competed between two (2) prime vendors on an annual basis and per delivery order to promote continuous competitive pricing through the life of the contract. 2) GPNTS unit cost increase due to updated Technical Data Package (TDP) to include upgraded Cesium clock associated with integrating NoGAPSS capabilities, and higher than expected cost of production for required subcomponents. This increase has caused adjustments to be made in unit quantities from FY22 through the FYDP. 3) Adjusted install costs across the FYDP due to actual costs of installs starting in FY22. Initial install costs were estimated based off a similar system (NAVSSI), updated costs are based on actuals. This increase has caused adjustments to be made in unit quantities from FY22 through the FYDP.

(5) 1) Funding for Military Sealift Command (MSC) procurements and installations to correspond with concurrent MSC NAVWAR Advance Digital Antenna Production (ADAP) procurements and installations. 2) Adjusted install costs across the FYDP due to actual costs of "First-of" installs. Initial install costs were estimated based off a similar system, updated costs are based on actuals.

(6) 1)Pre-Installation Design Services Allocation (DSA) are required in order to complete ship check and installation drawings for installation planning and is performed 6-12 months prior to installation start. Post Installation DSA support requirements include drawings closeout. DSA costs will fluctuate each FY as it is a factor of the number of installations in any given fiscal year.

(7) Procured units are competed between the two Prime Vendors listed here. However, the quantities and dollars awarded to each prime vendor is unknown until contract award.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2666 / American Forces Radio and TV Service (AFRTS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	47.867	2.513	2.724	2.750	0.000	2.750	2.802	2.891	2.948	3.017	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	47.867	2.513	2.724	2.750	0.000	2.750	2.802	2.891	2.948	3.017	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**47.867**	**2.513**	**2.724**	**2.750**	**0.000**	**2.750**	**2.802**	**2.891**	**2.948**	**3.017**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

K0001: American Forces Radio and Television Service (AFRTS) Program - AFRTS shipboard systems provide command information to deployed Sailors and Marines and allow for the distribution of AFRTS programming in order to provide situational awareness for forward deployed commanders with real-time news and information. The systems also provide programming to Sailors and Marines at sea worldwide as a Navy Quality of Life (QOL) initiative, staying in compliance with the Chief of Naval Operations (CNO) Shipboard Habitability Program. These systems contribute significantly to the habitability of Navy ships by providing and distributing news, command information, training, and entertainment programming using the latest technology available. These systems improve morale, combat effectiveness and retention rates of deployed personnel. All AFRTS systems use Commercial-Off-the-Shelf (COTS) equipment. Fleet Support Detachments (FSDs) are the installing agents for these systems. Each component replacement is made based on ship availability, condition of system, and is coordinated through the Type Commanders (TYCOMs).

[P5 / Site CCTV - Digital/300]: K0001 - Shipboard Information, Training and Entertainment (SITE) Closed Circuit Television (CCTV) - Digital/300 - Digital/300 is the next generation of the SITE 2000/300. This system is a digitally-based replacement for the 2000/300 playback. Each system is comprised of Commercial Off-The-Shelf (COTS) components that take three to twelve months to procure. Each component upgrade/replacement is made based on ship availability, by the Fleet Support Detachments (FSDs) as the installing/replacement agents and condition of the system.

[P5 / Site CCTV - Digital/400]: Shipboard Information, Training and Entertainment (SITE) Closed Circuit Television (CCTV) - Digital/400 - is the next generation of the SITE 2000/400. This system is a digitally-based replacement for the 2000/400 playback. Requires manpower of one dedicated technician and operator. Each system is comprised of Commercial Off-The-Shelf (COTS) components that take three to twelve months to procure. Each component upgrade/replacement is made based on ship availability, by the Fleet Support Detachments (FSDs) as the installing/replacement agents and condition of the system.

[P5 / Site CCTV - Digital/501]: Digital/500 - is the next generation of the Shipboard Information, Training and Entertainment (SITE) 2000/500. This system is a digitally-based replacement for the 2000/500 playback. Requires manpower of two dedicated technicians and three operators. Each system is comprised of Commercial Off-The-Shelf (COTS) components that take three to twelve months to procure. Each component upgrade/replacement is made based on ship availability, by the Fleet Support Detachments (FSDs) as the installing/repair agents and condition of the system.

[P5 / Shipboard Broadcast System (SBS)]: K0001-Shipboard Broadcast System (SBS): The SBS system replaces the Shipboard Information, Training and Entertainment (SITE) 300/400/501 systems with an Internet Protocol (IP) video system. It collects and converts video content from several sources: Navy Motion Picture Services (NMPS) programming via encrypted DVDs (nDVD), Video Server, and shipboard surveillance cameras; and distributes the signals via Circuit 30 in Standard or High Definition. Each system is comprised of Commercial Off-The-Shelf (COTS) equipment that takes six to twelve months to procure. Each system upgrade is done based on ship availability by the Fleet Support Detachments (FSDs) as the installing/replacing agent and condition of the system.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2666 / American Forces Radio and TV Service (AFRTS)	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P5 / K0830 - Production Engineering]: Supports review and approval of any production contract technical documentation or the separate development of this documentation to include: signal flow diagrams, Preventive Maintenance Services (PMS), production drawings, provisioning technical documentation (PTD), Integrated Logistic Support (ILS), Program Support Data (PSD), Allowance Parts List (APL's), and engineering in support of final design reviews.

[P5 / K0INS - Non-FMP Installation]: Supports the installation of Shipboard Information, Training and Entertainment (SITE), TV-DTS (TV-Direct to Sailor) system onboard Navy ships. Installations are performed by Defense Media Activity Agency (DMAA) Fleet Support Detachments (FSDs) and are based on Type Commander (TYCOM) nominations.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2666 / American Forces Radio and TV Service (AFRTS)

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-5	1 / American Forces Radio and TV Service (AFRTS)	P-5a			- / 47.867	- / 2.513	- / 2.724	- / 2.750	- / 0.000	- / 2.750
P-40	**Total Gross/Weapon System Cost**				**- / 47.867**	**- / 2.513**	**- / 2.724**	**- / 2.750**	**- / 0.000**	**- / 2.750**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
Slight increase from FY23 to FY24 in production engineering is due to inflation.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2666 / American Forces Radio and TV Service (AFRTS)	**Item Number / Title [DODIC]:** 1 / American Forces Radio and TV Service (AFRTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	47.867	2.513	2.724	2.750	0.000	2.750
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	47.867	2.513	2.724	2.750	0.000	2.750
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**47.867**	**2.513**	**2.724**	**2.750**	**0.000**	**2.750**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Hardware Cost																		
Recurring Cost																		
1.1.1) Site CCTV - Digital/300(†)	72,804.88	41	2.985	10,000.00	1	0.010	10,000.00	5	0.050	10,000.00	5	0.050	-	-	-	10,000.00	5	0.050
1.1.2) Site CCTV - Digital/400(†)	54,861.11	36	1.975	10,000.00	1	0.010	10,000.00	5	0.050	10,000.00	5	0.050	-	-	-	10,000.00	5	0.050
1.1.3) Site CCTV - Digital/501(†)	75,272.73	11	0.828	10,000.00	1	0.010	10,000.00	5	0.050	10,000.00	6	0.060	-	-	-	10,000.00	6	0.060
1.1.4) Shipboard Broadcast System (SBS)(†)	303,000.00	3	0.909	302,666.00	1	0.303	302,666.00	1	0.303	302,666.00	1	0.303	-	-	-	302,666.00	1	0.303
Subtotal: Recurring Cost	-	-	*6.697*	-	-	*0.333*	-	-	*0.453*	-	-	*0.463*	-	-	-	-	-	*0.463*
Subtotal: Hardware Cost	**-**	**-**	***6.697***	**-**	**-**	***0.333***	**-**	**-**	***0.453***	**-**	**-**	***0.463***	**-**	**-**	**-**	**-**	**-**	***0.463***
Support Cost																		
2.1) K0830 - Production Engineering	-	-	36.693	-	-	1.985	-	-	2.062	-	-	2.073	-	-	-	-	-	2.073
2.2) K0INS - Non-FMP Installation	-	-	4.477	-	-	0.195	-	-	0.209	-	-	0.214	-	-	-	-	-	0.214
Subtotal: Support Cost	**-**	**-**	***41.170***	**-**	**-**	***2.180***	**-**	**-**	***2.271***	**-**	**-**	***2.287***	**-**	**-**	**-**	**-**	**-**	***2.287***
Gross/Weapon System Cost	**-**	**-**	**47.867**	**-**	**-**	**2.513**	**-**	**-**	**2.724**	**-**	**-**	**2.750**	**-**	**-**	**0.000**	**-**	**-**	**2.750**

Remarks:

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2666 / American Forces Radio and TV Service (AFRTS)	**Item Number / Title [DODIC]:** 1 / American Forces Radio and TV Service (AFRTS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

[Hardware] FY19 and out-year procurements for CE 1.1.1 -SITE 300(U); 1.1.2 - SITE 400(U) and 1.1.3 - SITE 501(U) are in support of hardware components to maintain the fielded digital SITE systems due to known obsolescence issued.

CE 1.1.4 shows the follow-on system to SITE CCTV, called SBS (Shipboard Broadcasting System). It uses IP technology, the new industry standard, and was introduced in FY18 as aging SITE systems reach end of life.

[Hardware/Recurring]

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	P-1 Line Item Number / Title: 2666 / American Forces Radio and TV Service (AFRTS)	Item Number / Title [DODIC]: 1 / American Forces Radio and TV Service (AFRTS)

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Site CCTV - Digital/300		2022	Various / Various	WR	NWIC ATL	Mar 2022	Sep 2022	1	10,000.00	Y		
1.1.1) Site CCTV - Digital/300		2023	Various / Various	WR	NIWC ATL	Dec 2022	Jun 2023	5	10,000.00	Y		
1.1.1) Site CCTV - Digital/300		2024	Various / Various	WR	NIWC ATL	Dec 2023	Jun 2024	5	10,000.00	Y		
1.1.2) Site CCTV - Digital/400		2022	Various / Various	WR	NWIC ATL	Dec 2021	Jun 2022	1	10,000.00	Y		
1.1.2) Site CCTV - Digital/400		2023	Various / Various	WR	NIWC ATL	Dec 2022	Jun 2023	5	10,000.00	Y		
1.1.2) Site CCTV - Digital/400		2024	Various / Various	WR	NIWC ATL	Dec 2023	Jun 2024	5	10,000.00	Y		
1.1.3) Site CCTV - Digital/501		2022	Various / Various	WR	NWIC ATL	Mar 2022	Sep 2022	1	10,000.00	Y		
1.1.3) Site CCTV - Digital/501		2023	Various / Various	WR	NIWC ATL	Dec 2022	Jun 2023	5	10,000.00	Y		
1.1.3) Site CCTV - Digital/501		2024	Various / Various	WR	NIWC ATL	Dec 2023	Jun 2024	6	10,000.00	Y		
1.1.4) Shipboard Broadcast System (SBS)		2022	VARIOIUS / VARIOUS	WR	NWIC ATL	Mar 2022	Sep 2022	1	302,666.00	Y		
1.1.4) Shipboard Broadcast System (SBS)		2023	VARIOIUS / VARIOUS	WR	NWIC ATL	Dec 2022	Jun 2023	1	302,666.00	Y		
1.1.4) Shipboard Broadcast System (SBS)		2024	VARIOIUS / VARIOUS	WR	NIWC	Dec 2023	Jun 2024	1	302,666.00	Y		

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2676 / Strategic Platform Support Equip

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	78.969	4.823	6.266	6.437	0.000	6.437	6.447	6.583	6.711	6.868	-	123.104
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	78.969	4.823	6.266	6.437	0.000	6.437	6.447	6.583	6.711	6.868	-	123.104
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**78.969**	**4.823**	**6.266**	**6.437**	**0.000**	**6.437**	**6.447**	**6.583**	**6.711**	**6.868**	**-**	**123.104**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.965	1.006	0.724	-	0.724	0.685	0.796	0.715	0.728	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding in this P-1 line provides Non-Propulsion Electronics equipment that will be installed aboard TRIDENT Class submarines as part of the Obsolete Equipment Replacement (OER) Program.

OER Program is the replacement of existing hardware/software that, though functional, has become operationally obsolete, is no longer in production or supportable with spare parts, or has a high failure rate making them no longer cost effective to maintain. OER hardware/software changes are expected to provide significant cost savings via reduced maintenance costs and use Commercial-Off-The-Shelf (COTS) technology wherever possible as long as all technical requirements are met.

This funding line includes performance of the required fully integrated system level testing and certification of changes to the TRIDENT Combat systems prior to installation of the changes on the ship. Integrated testing and certification provides assurance that when the changes are installed in the ship, the TRIDENT Combat system will operate as designed, allowing the ships to maintain their operational schedules and mission capabilities.

[P40A / Combat Control System (CCS) Revision Engineering Cert/Test]: This program develops upgrades to legacy systems to maintain required interface connectivity to other Program Acquisition Resource Manager (PARM)- managed subsystems in response to PARMs modernizations, or to address obsolescence, or where mandated requirement changes (example Cyber security) drive changes to hardware or software.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 7: Other Ship Electronic Equipment	**P-1 Line Item Number / Title:** 2676 / Strategic Platform Support Equip

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Strategic Platform Support Equip				- / 78.969	- / 4.823	- / 6.266	- / 6.437	- / -	- / 6.437
P-40	**Total Gross/Weapon System Cost**				**- / 78.969**	**- / 4.823**	**- / 6.266**	**- / 6.437**	**- / 0.000**	**- / 6.437**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY 2024 funding supports continued efforts for common platform and Combat Control System (CCS) engineering and SSBN legacy modernization.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 7	**P-1 Line Item Number / Title:** 2676 / Strategic Platform Support Equip	**Aggregated Items Title:** Strategic Platform Support Equip

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) P1221 Strategic Platform Support Equip NPES																				
1.1) Common Platform Engineering	A		-	-	13.604	-	-	1.027	-	-	1.048	-	-	1.069	-	-	-	-	-	1.069
1.2) Combat Control System (CCS) Revision Engineering Cert/Test [1]	A		-	-	26.040	-	-	2.399	-	-	2.620	-	-	2.718	-	-	-	-	-	2.718
1.3) SSBN Legacy CCS Modernization [2]	A		-	-	39.325	-	-	1.397	-	-	2.598	-	-	2.650	-	-	-	-	-	2.650
Subtotal: 1) P1221 Strategic Platform Support Equip NPES			**-**	**-**	***78.969***	**-**	**-**	***4.823***	**-**	**-**	***6.266***	**-**	**-**	***6.437***	**-**	**-**	**-**	**-**	**-**	***6.437***
Total			**-**	**-**	**78.969**	**-**	**-**	**4.823**	**-**	**-**	**6.266**	**-**	**-**	**6.437**	**-**	**-**	**-**	**-**	**-**	**6.437**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

[1] This funding is required for software upgrades to the SSBN Ship Control System to meet data stream (heading/speed/depth) redundancy requirements driven by the Non-Propulsion Electrical Systems (NPES) network architecture changes being fielded by SSBN modernization (Submarine Warfare Federated Tactical System (SWFTS) Technical Insertion (TI) sonar/fire control modernization).

[2] This program is critical to maintaining OHIO Class SSBN operational to the end of service life and delivery of COLUMBIA Class SSBN replacements. The program resolves Data Processing Subsystem (DPS) obsolescence issues and conjunctively supports the upgrade of the SSBN legacy CCS to the Submarine Warfare Federated Tactical Systems (SWFTS) architecture common with the SSN/SSGN classes. Collectively, the DPS and SWFTS upgrades modify Fire Control, SONAR, Voyage Management System (VMS), RADAR, Tactical Navigation, and Periscopes, and collaterally impact Ship Control, Monitoring Subsystem, and interfaces to ship sensors such as speed, depth, and Extremely High Frequency Satellite Communication navigation data. The DPS upgrade includes replacing all UYK-43 computers, DPS workstation, TRIDENT Signal Data Converters (TSDC), and the UGC-143 with a modified Electronic Control Display Unit (ECDU). The ECDU is common equipment on VA Class and planned for the COLUMBIA Class. The ECDU requires hardware and software development to interface to the Strategic Weapon System (SWS) Navigation and maintain critical Ship to SWS interface requirements. The ECDU and all the associated CCS architecture modifications are required to be installed conjunctively with SWFTS. Continued operation of the SSBN strategic mission will require the implementation of the ECDU upgrade along with the SWFTS upgrade.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment

ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	388.091	82.510	89.396	89.237	0.000	89.237	89.828	86.665	84.876	87.793	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	388.091	82.510	89.396	89.237	0.000	89.237	89.828	86.665	84.876	87.793	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**388.091**	**82.510**	**89.396**	**89.237**	**0.000**	**89.237**	**89.828**	**86.665**	**84.876**	**87.793**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	1.264	0.660	0.981	-	0.981	0.669	0.612	0.218	0.004	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

MATCALS

Marine Air Traffic Control and Landing Systems (MATCALS) provides for continuous, all-weather, radar/non-radar approach, departure, en-route, and tower air traffic control services to aircraft. Marine ATC provides initial, transition and sustained air traffic support for the Joint and Marine Air Ground Task Force air operations in any environment. MATCALS satisfies the operational requirements set forth by Specific Operational Requirements 34-22 of 12 Jul 1973; Remote Landing Site Tower (RLST) Operational Requirements Document (ORD) 341-88-93 of 25 Jul 1997; and Air Traffic Navigation Integration and Coordination System ORD 05-002 of 03 Dec 1992. MATCALS, with other Marine Air Command and Control Systems (MACCS) and federal agencies, provides the ability to project air combat power without regard to weather. Air Traffic Control (ATC) automation reduces air traffic controllers' traffic handling and management time, allowing more time for mission response and task accomplishment. It supports a required increase in aircraft sortie rates and contributes to extended time on target. The system provides for integration of ATC into the total MACCS. To provide this capability, MATCALS consists of 7 primary subsystems: (1) Air Traffic Navigation integration and Coordination system (ATNAVICS) AN/TPX-31(V); (2) Tactical Terminal Communication System (TTCS) AN/TSQ-263; (3) Expeditionary Control Tower AN/TSQ-120C; (4) RLST AN/TSQ-216; (5)Tactical Air Navigation (TACAN) AN/TRN-44; (6) the Man-Portable TACAN AN/TRN-47(V)1, (7) Transportable AN/TRN-47(V)2 and various ancillary equipment. The gaps identified require sustainment of legacy sensor capability until such time as ATNAVICS Pre-Planned Product Improvement initiatives enhance system capability to support main air base traffic density and airspace. Additionally, the positive control enabled by increased ASR range reduces separation enabling increased sortie rates. This program works with the Marine ATC Working Group identifying the requirements to implement the P3I and evolutionary product improvements as required for G/ATOR system, ATNAVICS, Expeditionary ATC Towers, and Navigational Aids that support Marine Air Traffic Control Detachments. G/ATOR is multi-role, ground-based, expeditionary radar that replaces five legacy radar systems for the Marine Air Ground Task Force. It satisfies the Marine Air Command and Control System and the Ground Counter Fire/ Counter Battery capabilities. Integrate the ATNAVICS with the Common Aviation Command and Control System (CAC2S) to provide a coordinated and integrated modernization effort for the equipment of the Marine Air Command and Control System and provide enhanced Command and Control (AC2) capability for the Tactical Air Command Center, Tactical Air Operations Center, and Direct Air Support Center to support aviation employment in Joint, combined, and coalition operations. Increased MATCALS component obsolescence of aging systems is resulting in additional Maintainability, Reliability, Improvement (MRI) costs.

NASMOD

The Joint DoD/Federal Aviation Administration (FAA) National Airspace System (NAS) Modernization (MOD) program upgrades the DoD ATC systems at approach control facilities in concert with the FAA's upgrade of the National ATC System. These funds will procure ATC systems for the Navy/Marine ATC facilities. The Air Force is the DoD lead activity for the Joint Acquisition Program. The Joint Program Office is located at Hanscom AFB, MA. The NAS Mod program received a full rate production decision on 7 June 2005.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

FLEET ATC SYSTEMS
NAVAIR provides shore based ATC terminal facilities with equipment that is required in joint efforts to efficiently and safely monitor and direct military and commercial air traffic in national and international air space. Many of these systems are required to interface through automated means with the FAA. Additionally, NAVAIR has material support responsibility for Special Instrumentation Systems, and Ancillary Equipment used at Navy and Marine Corps Aviation Shore activities in the continental United States and overseas.

Engineering Change Proposal (ECP)/Operational Capability Improvement Request (OCIR) modernization (MR069) - The ECP/OCIR program provides for the procurement and/or modification of critically needed communications, radar, displays, data processors, and other electronic systems/equipment at Navy/Marine Corps ATC facilities worldwide. ECP/OCIR procurements replace and modernize costly-to-maintain systems and equipment in order to increase ATC efficiency and safety, and reduce total ownership costs.

UHF/VHF Antenna Upgrade (MR404) - This program procures and installs antenna, antenna towers, and antenna cables.

Communications Systems Upgrade Program (MR408) - This program procures and installs advanced commercial state-of-the-art ATC voice switching equipment and was completed in FY19. Future upgrades and replacement systems will be performed under the NASMOD NAS Voice System budget line.

UHF/VHF Transceiver Replacement Program (MR440) - This program modernizes aging Navy and Marine Corps UHF/VHF Transceivers that are the central core of all ATC emergency and Fleet Area Control & Surveillance Facility (FACSFAC) communications and was completed in FY19. Future upgrades and replacement systems will be performed under the NASMOD NAS Voice System budget line.

Emergency Communication System (ECS) Upgrade Program (MR445) - This program modernizes obsolete and unsupportable ECS equipment. Voice Switches, Recorders, Reproducers, Uninterruptable Power Supplies, and Built-In Test Equipment will be replaced with modern, supportable components and procurements were completed in FY20 and installations completed in FY22. Future upgrades and replacement systems will be performed under the NASMOD NAS Voice System budget line.

Air Field Lighting Control System (AFLCS) (MR510) - This program modernizes obsolete and unsupportable AFLCS equipment which will be replaced with modern, supportable components. Funding for this effort was realigned to the Terminal Automation System (TAS) CB070 beginning in FY18. The TAS provides the functionality and meets the requirements of the airfield lighting control as prescribed in the NASMOD ORD III Airfield Automation Annex A dated 16MAR05. The AFLCS circuitry will be incorporated into the Visual Information Display System (VIDS) as part of the VIDS Tech Refresh Program under the NASMOD budget line.

Operational Communication System (OCS)/Emergency Communication System (ECS) Air Traffic Control (ATC) Recorder replacement program (MR520), through participation in the FAA ATC recorder replacement program will replace aging and obsolete ATC OCS and ECS ATC recorders with state of the art ATC recording/reproducing technology.

Fiber Optic Communications Intersite System (FOCIS) Upgrade Program (MR530) - FOCIS is required for Precision Approach Radar (PAR) operations and for ATC voice communications at Naval and Marine Corps ATC facilities. This program modernizes obsolete and unsupportable FOCIS equipment with modern supportable components.

LANDING SYSTEMS
Landing Systems budget provides funding to modernize and ensure the reliability of Precision Approach Radars (PAR), Tactical Air Navigation (TACAN) systems, Instrument Landing Systems (ILS), and other air navigation aids used by the Navy and Marine Corps.

The PAR Commercial-off-the-shelf (AN/FPN-68A) Upgrade replaces obsolete PAR systems (AN/FPN-63), continuing fleet shore-based Precision Approach capability. PAR (AN/FPN-63) safety-related ECPs are required to sustain the existing systems until replacement with the AN/FPN-68A. Installation costs will be site specific due to state and EPA regulations that will be adhered to for each install. Those ECPs include,

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

but are not limited to, the Maintenance Walkway, the Modulator Board Upgrade, the Antenna Upgrade, the Configuration Upgrade, the Turntable Upgrade, the Fiber Optic Inter-site System (FOIS), and the Angle Voltage Generator (AVG) Upgrade

TACAN Ship/Shore Upgrade ECPs update old technology and extend the service life of the TACAN. The TACAN sustainment consists of the Antenna Upgrade ECP for the OE-273 antenna which will make the antenna OE-4691(V)1 and the Beacon/RSCU Upgrade ECP of the AN/URN-25 which will make the upgraded Beacon an AN/URN-32 and the Shore Antenna Replacement for the OE-258A, nomenclature TBD. Multiple Engineering Change Proposal (ECP) will address obsolescence with the system.

Instrument Landing Systems AN/GRN-33(V) will provide the Navy and Marine Corps with a self-contained Precision Landing capability at selected Air Stations, to meet fleet requirements for safe aircraft recovery of aircraft equipped with ILS capability.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-5	1 / MATCALS				- / 18.109	- / 4.929	- / 2.729	- / 3.049	- / 0.000	- / 3.049
P-5	2 / Fleet Air Traffic Control Systems				- / 40.949	- / 9.182	- / 10.845	- / 11.265	- / 0.000	- / 11.265
P-5	3 / Landing Systems				- / 20.453	- / 7.903	- / 8.084	- / 8.130	- / 0.000	- / 8.130
P-3a	1 / ATNAVICS Precision Approach Radar Replacement (TBD)				- / 0.000	- / 2.413	- / 4.520	- / 4.295	- / 0.000	- / 4.295
P-3a	2 / AN/TSQ-216 Communications Upgrade (TBD)				- / 0.000	- / 2.309	- / 2.574	- / 0.000	- / 0.000	- / 0.000
P-3a	3 / AN/TPN-31(V)7 ATNAVICS ASR Technical Refresh (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	4 / MJ667 Expeditionary TACAN Obsolescence (Modernization)				- / 0.000	- / 0.000	- / 0.000	- / 6.586	- / 0.000	- / 6.586
P-3a	5 / CB010 - DoD Advanced Automation System (DAAS) (Added Capability)				- / 13.365	- / 0.234	- / 0.424	- / 0.432	- / 0.000	- / 0.432
P-3a	6 / CB030 Digital Airport Surveillance Radar (DASR) (Added Capability)				- / 2.588	- / 0.444	- / 0.453	- / 0.649	- / 0.000	- / 0.649
P-3a	7 / CB040 Tower Automation System (TAS) (Added Capability)				- / 4.557	- / 0.319	- / 0.325	- / 0.332	- / 0.000	- / 0.332
P-3a	8 / CB080 NAS Voice System (NVS) (Added Capability)				- / 39.087	- / 10.558	- / 7.503	- / 7.440	- / 0.000	- / 7.440
P-3a	9 / CB090 - DAAS Tech Refresh Upgrade II (TBD)				- / 0.652	- / 3.567	- / 4.660	- / 4.801	- / 0.000	- / 4.801
P-3a	10 / CB100 TAS Tech Refresh Upgrade II (TBD)				- / 21.665	- / 11.890	- / 11.176	- / 9.195	- / 0.000	- / 9.195
P-3a	11 / CB110 DASR Tech Refresh Upgrade III (TBD)				- / 0.000	- / 3.022	- / 4.853	- / 5.085	- / 0.000	- / 5.085
P-3a	12 / CB120 TAS Tech Refresh Upgrade III (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	13 / CB130 DASR Tech Refresh Upgrade IV (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	14 / X1036 AN/FPN-63 PAR TECH REFRESH (Reliability)				- / 57.288	- / 12.668	- / 15.822	- / 10.166	- / 0.000	- / 10.166
P-3a	15 / X1037 Instrument Landing System Upgrade (TBD)				- / 22.681	- / 5.574	- / 5.645	- / 6.814	- / 0.000	- / 6.814
P-3a	16 / X1044 Landing Systems Tech Refresh (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.709	- / 0.000	- / 0.709
P-3a	17 / X1043 TACAN Antenna Upgrade (Modernization)				- / 57.479	- / 7.498	- / 9.783	- / 10.289	- / 0.000	- / 10.289
P-3a	18 / INACTIVE PROJECTS (TBD)				- / 89.218	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40	**Total Gross/Weapon System Cost**				**- / 388.091**	**- / 82.510**	**- / 89.396**	**- / 89.237**	**- / 0.000**	**- / 89.237**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-5	1 / MATCALS				- / -	- / -	- / -	- / -	- / -	- / -
P-5	2 / Fleet Air Traffic Control Systems				- / -	- / -	- / -	- / -	- / -	- / -
P-5	3 / Landing Systems				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / ATNAVICS Precision Approach Radar Replacement (TBD)				- / 4.720	- / 3.586	- / 2.873	- / 2.873	- / 6.555	- / 31.835
P-3a	2 / AN/TSQ-216 Communications Upgrade (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 4.883
P-3a	3 / AN/TPN-31(V)7 ATNAVICS ASR Technical Refresh (TBD)				- / 0.000	- / 2.402	- / 2.967	- / 2.908	Continuing	Continuing
P-3a	4 / MJ667 Expeditionary TACAN Obsolescence (Modernization)				- / 0.000	- / 0.192	- / 0.000	- / 0.000	- / 0.000	- / 6.778

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment

ID Code (A=Service Ready, B=Not Service Ready): B | **Program Elements for Code B Items:** N/A | **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-3a	5 / CB010 - DoD Advanced Automation System (DAAS) (Added Capability)				- / 0.440	- / 0.448	- / 0.456	- / 0.464	Continuing	Continuing
P-3a	6 / CB030 Digital Airport Surveillance Radar (DASR) (Added Capability)				- / 0.666	- / 0.680	- / 0.692	- / 0.704	Continuing	Continuing
P-3a	7 / CB040 Tower Automation System (TAS) (Added Capability)				- / 0.339	- / 0.345	- / 0.352	- / 0.370	Continuing	Continuing
P-3a	8 / CB080 NAS Voice System (NVS) (Added Capability)				- / 12.886	- / 14.071	- / 15.557	- / 19.230	Continuing	Continuing
P-3a	9 / CB090 - DAAS Tech Refresh Upgrade II (TBD)				- / 11.186	- / 11.383	- / 11.288	- / 14.669	Continuing	Continuing
P-3a	10 / CB100 TAS Tech Refresh Upgrade II (TBD)				- / 4.809	- / 0.580	- / 0.000	- / 0.000	- / 0.000	- / 59.315
P-3a	11 / CB110 DASR Tech Refresh Upgrade III (TBD)				- / 6.958	- / 4.176	- / 0.567	- / 0.000	- / 0.000	- / 24.661
P-3a	12 / CB120 TAS Tech Refresh Upgrade III (TBD)				- / 2.112	- / 9.840	- / 9.660	- / 6.129	Continuing	Continuing
P-3a	13 / CB130 DASR Tech Refresh Upgrade IV (TBD)				- / 0.000	- / 3.270	- / 5.838	- / 5.523	Continuing	Continuing
P-3a	14 / X1036 AN/FPN-63 PAR TECH REFRESH (Reliability)				- / 6.049	- / 1.561	- / 0.000	- / 0.000	- / 3.971	- / 107.525
P-3a	15 / X1037 Instrument Landing System Upgrade (TBD)				- / 4.308	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 45.022
P-3a	16 / X1044 Landing Systems Tech Refresh (TBD)				- / 0.717	- / 0.733	- / 0.748	- / 0.763	Continuing	Continuing
P-3a	17 / X1043 TACAN Antenna Upgrade (Modernization)				- / 10.659	- / 13.189	- / 13.527	- / 13.797	Continuing	Continuing
P-3a	18 / INACTIVE PROJECTS (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 89.218
P-40	**Total Gross/Weapon System Cost**				**- / 89.828**	**- / 86.665**	**- / 84.876**	**- / 87.793**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The FY 2024 Budget Request includes funding for the following ($89.237M)

MATCALS ($13.930M)
FY2024 provides funding to procure Maintainability/Reliability Improvements (MRI) for deployable Air Traffic Equipment, which supports safe and orderly Marine, Joint, and Coalition aviation control in permissive areas and non-permissive combat zones into and out of expeditionary airfields, forward operating bases, and forward arming / refueling points. FY2024 funding will procure 2 ATNAVICS Precision Approach Radar Replacement Systems, 16 Expeditionary TACAN kits and various MRI efforts.

NASMOD ($27.934M)
The Federal Aviation Administration (FAA) began the Next Generation Air Transportation System initiative in FY2008. A major component of this capability is Automatic Dependent Surveillance Broadcast, which will provide aircraft position information to augment ground-based radar. Existing DoD Air Traffic Control (ATC) facilities interface with FAA's facilities, therefore the military must maintain interoperability and retain vital special-use airspace for combat readiness training. The DoD Advanced Automation System (DAAS) must be upgraded to meet this requirement.
FY2024 provides funding to procure 193 NAS Voice System Radios, 2 DAAS Tech Refresh II Upgrades, 8 TAS Tech Refresh II Upgrades, 6 DASR Tech Refresh III Upgrades, and various Engineering Change Proposals (ECPs) and associated Support.

FLEET ATC SYSTEMS ($11.265M)

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

The basis for the FY2024 budget request is to continue modernizing aging Navy and Marine Corps ATC facilities and equipment in order to safely monitor and direct military and commercial air traffic in national and international air space. This equipment must continue to interface through automated means with the FAA.
FY2024 provides funding to procure 2 UHF/VHF Antenna Upgrades, 14 OCS/ECS ATC Recorder upgrades, 5 FOCIS Upgrades, various ECPs/OCIRs and associated support.

LANDING SYSTEMS ($36.108M)
FY2024 provides funding to procure: 2 PAR Tech Refresh COTs, 4 ILS Upgrades, 19 TACAN Antenna Upgrades, and 24 TACAN Beacon Upgrades.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Item Number / Title [DODIC]:** 1 / MATCALS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	18.109	4.929	2.729	3.049	0.000	3.049
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	18.109	4.929	2.729	3.049	0.000	3.049
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**18.109**	**4.929**	**2.729**	**3.049**	**0.000**	**3.049**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Hardware - ECP / ECO Cost																		
Recurring Cost																		
1.1.1) MAINT / RELIABILITY IMPROVEMENT (MJ427) (1)	-	-	14.881	-	-	3.897	-	-	1.679	-	-	1.887	-	-	0.000	-	-	1.887
Subtotal: Recurring Cost	-	-	*14.881*	-	-	*3.897*	-	-	*1.679*	-	-	*1.887*	-	-	*0.000*	-	-	*1.887*
Subtotal: Hardware - ECP / ECO Cost	**-**	**-**	***14.881***	**-**	**-**	***3.897***	**-**	**-**	***1.679***	**-**	**-**	***1.887***	**-**	**-**	***0.000***	**-**	**-**	***1.887***
Support - MISCELLANEOUS SUPPORT Cost																		
5.2) Install (MJ900)	-	-	3.228	-	-	1.032	-	-	1.050	-	-	1.162	-	-	0.000	-	-	1.162
Subtotal: Support - MISCELLANEOUS SUPPORT Cost	**-**	**-**	***3.228***	**-**	**-**	***1.032***	**-**	**-**	***1.050***	**-**	**-**	***1.162***	**-**	**-**	***0.000***	**-**	**-**	***1.162***
Gross/Weapon System Cost	**-**	**-**	**18.109**	**-**	**-**	**4.929**	**-**	**-**	**2.729**	**-**	**-**	**3.049**	**-**	**-**	**0.000**	**-**	**-**	**3.049**

Footnotes:

(1) FY24 increase for additional MRI funding for increased TACAN system component obsolescence.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	P-1 Line Item Number / Title: 2820 / Ashore ATC Equipment	Item Number / Title [DODIC]: 2 / Fleet Air Traffic Control Systems
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	40.949	9.182	10.845	11.265	0.000	11.265
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	40.949	9.182	10.845	11.265	0.000	11.265
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**40.949**	**9.182**	**10.845**	**11.265**	**0.000**	**11.265**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Hardware - Fleet ATC - Hardware Cost																		
Recurring Cost																		
1.1.1) MR069 ECP/ OCIR (2)	321,222.22	9	2.891	174,000.00	2	0.348	232,000.00	5	1.160	56,692.31	13	0.737	-	-	0.000	56,692.31	13	0.737
1.1.2) MR404 UHF/ VHF Antenna Upgrade (3)	816,666.67	6	4.900	925,000.00	2	1.850	975,000.00	2	1.950	1,050K	2	2.100	-	-	0.000	1,050K	2	2.100
1.1.3) MR408 COMM System Upgrade	500,000.00	2	1.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.4) MR440 UHF/ VHF Transceiver Replacement (4)	44,037.04	81	3.567	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.5) MR445 Emergency Communication System (ECS) Upgrade (5)	456,294.12	17	7.757	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.7) MR520 OCS/ ECS ATC Recorder Upgrade (6)	83,909.09	22	1.846	87,857.14	14	1.230	103,600.00	15	1.554	97,857.14	14	1.370	-	-	0.000	97,857.14	14	1.370
1.1.8) MR530 FOCIS Upgrade (7)	107,750.00	8	0.862	111,000.00	4	0.444	113,000.00	5	0.565	115,000.00	5	0.575	-	-	0.000	115,000.00	5	0.575
Subtotal: Recurring Cost	-	-	*22.823*	-	-	*3.872*	-	-	*5.229*	-	-	*4.782*	-	-	*0.000*	-	-	*4.782*
Subtotal: Hardware - Fleet ATC - Hardware Cost	**-**	**-**	***22.823***	**-**	**-**	***3.872***	**-**	**-**	***5.229***	**-**	**-**	***4.782***	**-**	**-**	***0.000***	**-**	**-**	***4.782***

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	P-1 Line Item Number / Title: 2820 / Ashore ATC Equipment	Item Number / Title [DODIC]: 2 / Fleet Air Traffic Control Systems
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Support - Other Cost																		
2.1) Fleet ATC Integrated Logistics Support (MR800)	-	-	1.160	-	-	0.280	-	-	0.285	-	-	0.374	-	-	0.000	-	-	0.374
2.2) Fleet ATC Production Engineering (MR830)	-	-	3.530	-	-	0.929	-	-	0.937	-	-	1.354	-	-	0.000	-	-	1.354
2.3) Fleet ATC Installs	-	-	13.436	-	-	4.101	-	-	4.394	-	-	4.755	-	-	0.000	-	-	4.755
Subtotal: Support - Other Cost	***-***	***-***	***18.126***	***-***	***-***	***5.310***	***-***	***-***	***5.616***	***-***	***-***	***6.483***	***-***	***-***	***0.000***	***-***	***-***	***6.483***
Gross/Weapon System Cost	**-**	**-**	**40.949**	**-**	**-**	**9.182**	**-**	**-**	**10.845**	**-**	**-**	**11.265**	**-**	**-**	**0.000**	**-**	**-**	**11.265**

Footnotes:

(2) MR069: This program provides for the procurement and or modification of critically needed communications, radar, displays, data processors and other electronic systems / equipment at Navy / Marine Corps Air Traffic Control facilities worldwide. Due to the variety of the Air Traffic Control systems involved and the scope of these validated requirements, costs can vary significantly between fiscal years. The unit cost for an individual OCIR can range from $1,500 to $500,000 so the unit cost is and average of all OCIRs procured in that year and as such will fluctuate from year to year.

(3) MR404: UHF/VHF Antenna Upgrade - UHF/VHF antennas enable ground to air communications between air traffic controllers and aircraft pilots. New antenna and antenna cables are required to replace existing aged and deteriorated antennas and cables. For dependable ground to air communications, replacement of the antennas and cables is imperative. Inventory objective is 62.

(4) MR440: Inventory objective is 330. 249 units procured prior to FY17 under BLI 2845.

(5) MR445: Inventory objective is 45. 28 Units procured prior to FY17 under BLI 2845.

(6) MR520: The Operational Communication System (OCS) and Emergency Communication System (ECS) Air Traffic Control (ATC) recorder upgrade through participation in the Federal Aviation Administration (FAA) ATC recorder replacement program will replace aging and obsolete ATC OCS and ECS ATC recorders with state of the art ATC recording/reproducing technology.

(7) MR530: Fiber Optic Communications Intersite System (FOCIS) Upgrade Program- This program modernizes obsolete and unsupportable FOCIS equipment with modern supportable components. Inventory objective is 44.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	P-1 Line Item Number / Title: 2820 / Ashore ATC Equipment	Item Number / Title [DODIC]: 3 / Landing Systems
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	20.453	7.903	8.084	8.130	0.000	8.130
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	20.453	7.903	8.084	8.130	0.000	8.130
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**20.453**	**7.903**	**8.084**	**8.130**	**0.000**	**8.130**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Hardware - Landing Systems - TACAN Beacon Cost																		
Recurring Cost																		
1.1.1) X1042 - TACAN BEACON UPGRADE (8)	213,181.82	66	14.070	217,208.33	24	5.213	219,166.67	24	5.260	220,208.33	24	5.285	-	-	0.000	220,208.33	24	5.285
Subtotal: Recurring Cost	-	-	*14.070*	-	-	*5.213*	-	-	*5.260*	-	-	*5.285*	-	-	*0.000*	-	-	*5.285*
Subtotal: Hardware - Landing Systems - TACAN Beacon Cost	**-**	**-**	***14.070***	**-**	**-**	***5.213***	**-**	**-**	***5.260***	**-**	**-**	***5.285***	**-**	**-**	***0.000***	**-**	**-**	***5.285***
Support - Other Cost																		
2.1) X1800 - Landing Systems Integrated Logistics Support	-	-	0.149	-	-	0.041	-	-	0.041	-	-	0.042	-	-	0.000	-	-	0.042
2.2) X1830 - Landing Systems Production Engineering	-	-	1.599	-	-	0.612	-	-	0.624	-	-	0.636	-	-	0.000	-	-	0.636
2.3) X1840 - Landing Systems Quality Assurance	-	-	0.113	-	-	0.040	-	-	0.041	-	-	0.042	-	-	0.000	-	-	0.042
2.4) X1900 - Landing System Installs	-	-	4.522	-	-	1.997	-	-	2.118	-	-	2.125	-	-	0.000	-	-	2.125
Subtotal: Support - Other Cost	**-**	**-**	***6.383***	**-**	**-**	***2.690***	**-**	**-**	***2.824***	**-**	**-**	***2.845***	**-**	**-**	***0.000***	**-**	**-**	***2.845***
Gross/Weapon System Cost	**-**	**-**	**20.453**	**-**	**-**	**7.903**	**-**	**-**	**8.084**	**-**	**-**	**8.130**	**-**	**-**	**0.000**	**-**	**-**	**8.130**

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Item Number / Title [DODIC]:** 3 / Landing Systems
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Footnotes:

(8) X1042: Inventory objective is 234. Procurement quantities align with TACAN Antennas qty of 24 per year. This effort will reduce the overall cost of the TACAN system by gaining economies of scale savings and also reducing program installation costs by allowing all TACAN systems to be installed simultaneously. Additionally, the combined installation meets fleet demands, allowing greater operational readiness.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 1 / ATNAVICS Precision Approach Radar Replacement
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	2.413	4.520	4.295	0.000	4.295	4.720	3.586	2.873	2.873	6.555	31.835
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	2.413	4.520	4.295	0.000	4.295	4.720	3.586	2.873	2.873	6.555	31.835
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**2.413**	**4.520**	**4.295**	**0.000**	**4.295**	**4.720**	**3.586**	**2.873**	**2.873**	**6.555**	**31.835**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Air Traffic Navigation Integration and Coordination System (ATNAVICS) current PAR system is plagued with obsolescence issues and increasing sustainment costs. This system will alleviate the obsolescence issues, reduce sustainment costs and satisfy the requirement to provide for a multiple runway PAR coverage as stated in the Marine Corps Operational and Organizational (O&O) Concept for the Air Traffic Navigation Integration and Coordination System (ATNAVICS), change 1 dated 8 Sep 05 PAR. The current ATNAVICS PAR has significant ongoing obsolescence issues and does not meet the requirement of a multiple touchdown capable system. This effort will capitalizes on emerging technology and provides a small form factor precision recovery system that supports the Marine Corps' Expeditionary Advanced Base Operations Concept. This system will need to meet all current requirements and will be a one for one replacement.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 1 / ATNAVICS Precision Approach Radar Replacement
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: ATNAVICS Precision Approach Radar Replacement												
B Kits												
Non-Recurring												
1.1.1) Equipment - Non Organic - NonOrganic	- / -	1 / 0.602	4 / 2.225	2 / 2.268	- / -	2 / 2.268	2 / 2.268	1 / 1.134	1 / 1.134	1 / 1.134	3 / 3.600	15 / 14.365
Subtotal: Non-Recurring	*- / 0.000*	*- / 0.602*	*- / 2.225*	*- / 2.268*	*- / -*	*- / 2.268*	*- / 2.268*	*- / 1.134*	*- / 1.134*	*- / 1.134*	*- / 3.600*	*- / 14.365*
Subtotal: ATNAVICS Precision Approach Radar Replacement	*- / -*	*1 / 0.602*	*4 / 2.225*	*2 / 2.268*	*- / -*	*2 / 2.268*	*2 / 2.268*	*1 / 1.134*	*1 / 1.134*	*1 / 1.134*	*3 / 3.600*	*15 / 14.365*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / 0.602*	*- / 2.225*	*- / 2.268*	*- / -*	*- / 2.268*	*- / 2.268*	*- / 1.134*	*- / 1.134*	*- / 1.134*	*- / 3.600*	*- / 14.365*
Support *(All Modification Items)*												
2.1) Integrated Logistics Support	- / 0.000	- / 0.238	- / 0.242	- / 0.242	- / 0.000	- / 0.242	- / 0.242	- / 0.242	- / 0.242	- / 0.242	- / 0.060	- / 1.750
2.2) Production Engineering	- / 0.000	- / 1.573	- / 1.828	- / 0.785	- / 0.000	- / 0.785	- / 0.785	- / 0.785	- / 0.785	- / 0.785	- / -	- / 7.326
Subtotal: Support	*- / 0.000*	*- / 1.811*	*- / 2.070*	*- / 1.027*	*- / -*	*- / 1.027*	*- / 1.027*	*- / 1.027*	*- / 1.027*	*- / 1.027*	*- / 0.060*	*- / 9.076*
Installation												
Modification Item 1 of 1: ATNAVICS Precision Approach Radar Replacement	- / 0.000	- / 0.000	- / 0.225	- / 1.000	- / 0.000	- / 1.000	- / 1.425	- / 1.425	- / 0.712	- / 0.712	- / 2.895	- / 8.394
Subtotal: Installation	*- / 0.000*	*- / -*	*- / 0.225*	*- / 1.000*	*- / -*	*- / 1.000*	*- / 1.425*	*- / 1.425*	*- / 0.712*	*- / 0.712*	*- / 2.895*	*- / 8.394*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**2.413**	**4.520**	**4.295**	**0.000**	**4.295**	**4.720**	**3.586**	**2.873**	**2.873**	**6.555**	**31.835**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 1 / ATNAVICS Precision Approach Radar Replacement

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: ATNAVICS Precision Approach Radar Replacement

Manufacturer Information

Manufacturer Name: RAYTHEON | Manufacturer Location: Marlborough, MA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 16

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027
Delivery Dates	Apr 2023	Apr 2024	Apr 2025	Apr 2026	Apr 2027	Apr 2028	Apr 2029

Installation Information

Method of Implementation: [none specified]:: Installation Name: Equipment - Non Organic

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	1 / 0.225	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.225
FY 2023	- / -	- / -	- / -	4 / 1.000	0 / 0.000	4 / 1.000	- / -	- / -	- / -	- / -	0 / 0.000	4 / 1.000
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.425	- / -	- / -	- / -	0 / 0.000	2 / 1.425
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.425	- / -	- / -	0 / 0.000	2 / 1.425
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.712	- / -	0 / 0.000	1 / 0.712
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.712	0 / 0.000	1 / 0.712
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.715	1 / 0.715
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.180	3 / 2.180
Total	- / -	- / -	1 / 0.225	4 / 1.000	0 / 0.000	4 / 1.000	2 / 1.425	2 / 1.425	1 / 0.712	1 / 0.712	4 / 2.895	15 / 8.394

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	1	-	-	-	2	2	-	-	1	1	-	-	1	1	-	-	-	1	-	-	-	1	4	15
Out	-	-	-	-	-	-	-	1	-	-	-	2	2	-	-	1	1	-	-	1	1	-	-	-	1	-	-	-	1	4	15

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 2 / AN/TSQ-216 Communications Upgrade
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	2.309	2.574	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.883
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	2.309	2.574	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.883
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**2.309**	**2.574**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**4.883**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Remote Landing System Tower (RLST) is used in expeditionary operations to communicate with all aircraft in the assigned airspace, enabling safe and efficient operations during critical flight regimes. This effort will replace the current communications capabilities of the Marine Expeditionary RLST resolving various obsolescence and supportability issues affecting system availability and negatively impacting Fleet readiness and mission capability. This upgrade will ensure continued adherence to the Marine Corps Operational and Organizational (O&O) Concept for the Air Traffic Navigation Integration and Coordination System (ATNAVICS), change 1 dated 8 September 2005. Delay or interruption of this upgrade will degrade safety of flight and render RLST systems Non-Mission Capable.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 2 / AN/TSQ-216 Communications Upgrade
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/TSQ-216 Communications Upgrade												
B Kits												
Recurring												
2.1.1) Equipment - NonOrganic [9]	- / -	7 / 1.154	8 / 1.319	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 2.473
Subtotal: Recurring	*- / 0.000*	*- / 1.154*	*- / 1.319*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 2.473*
Subtotal: AN/TSQ-216 Communications Upgrade	*- / -*	*7 / 1.154*	*8 / 1.319*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*15 / 2.473*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / 1.154*	*- / 1.319*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 2.473*
Support *(All Modification Items)*												
3.1) Integrated Logistics Support	- / -	- / 0.162	- / 0.185	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.347
3.2) Production Engineering	- / -	- / 0.531	- / 0.542	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.073
Subtotal: Support	*- / 0.000*	*- / 0.693*	*- / 0.727*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 1.420*
Installation												
Modification Item 1 of 1: AN/TSQ-216 Communications Upgrade	- / 0.000	- / 0.462	- / 0.528	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.990
Subtotal: Installation	*- / 0.000*	*- / 0.462*	*- / 0.528*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 0.990*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**2.309**	**2.574**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**4.883**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 2 / AN/TSQ-216 Communications Upgrade

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: AN/TSQ-216 Communications Upgrade

Manufacturer Information

Manufacturer Name: L3Harris | Manufacturer Location: TBD

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022					
Delivery Dates	Jun 2022	Jun 2023					

Installation Information

Method of Implementation: [none specified]:: Installation Name: Equipment

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	7 / 0.462	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 0.462
FY 2023	- / -	- / -	8 / 0.528	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	8 / 0.528
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	7 / 0.462	8 / 0.528	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	15 / 0.990

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	3	4	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
Out	-	-	-	3	4	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15

Footnotes:

(9) The Remote Landing System Tower (RLST) is used in expeditionary operations to communicate with all aircraft in the assigned airspace, enabling safe and efficient operations during critical flight regimes. This effort will replace the current communications capabilities of the Marine Expeditionary RLST resolving various obsolescence and supportability issues affecting system availability and negatively impacting

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 2 / AN/TSQ-216 Communications Upgrade
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Fleet readiness and mission capability. This upgrade will ensure continued adherence to the Marine Corps Operational and Organizational (O&O) Concept for the Air Traffic Navigation Integration and Coordination System (ATNAVICS), change 1 dated 8 September 2005.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 3 / AN/TPN-31(V)7 ATNAVICS ASR Technical Refresh
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.402	2.967	2.908	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.402	2.967	2.908	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**2.402**	**2.967**	**2.908**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Air Traffic Navigation Integration and Coordination System (ATNAVICS) current ASR system is an aging system that is plagued with obsolescence issues and increasing sustainment costs. This refresh will alleviate the obsolescence issues, reduce sustainment costs and will capitalize on emerging technology that supports the Marine Corps' Expeditionary Advanced Base Operations Concept. This system will need to meet all current requirements and will be a one for one replacement.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 3 / AN/TPN-31(V)7 ATNAVICS ASR Technical Refresh
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/TPN-31(V)7 ATNAVICS ASR Technical Refresh												
B Kits												
Recurring												
1.1.1) Equipment - Non Organic - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.470	1 / 1.500	1 / 1.530	11 / 22.000	14 / 26.500
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 1.470*	*- / 1.500*	*- / 1.530*	*- / 22.000*	*- / 26.500*
Subtotal: AN/TPN-31(V)7 ATNAVICS ASR Technical Refresh	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*1 / 1.470*	*1 / 1.500*	*1 / 1.530*	*11 / 22.000*	*14 / 26.500*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 1.470*	*- / 1.500*	*- / 1.530*	*- / 22.000*	*- / 26.500*
Support *(All Modification Items)*												
2.1) ILS	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.330	- / 0.368	- / 0.342	Continuing	Continuing
2.2) PE	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.602	- / 0.699	- / 0.626	Continuing	Continuing
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.932*	*- / 1.067*	*- / 0.968*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: AN/TPN-31(V)7 ATNAVICS ASR Technical Refresh	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.400	- / 0.410	- / 5.095	- / 5.905
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.400*	*- / 0.410*	*- / 5.095*	*- / 5.905*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**2.402**	**2.967**	**2.908**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 3 / AN/TPN-31(V)7 ATNAVICS ASR Technical Refresh

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: AN/TPN-31(V)7 ATNAVICS ASR Technical Refresh

Manufacturer Information

Manufacturer Name: Raytheon | Manufacturer Location: Marlborough, MA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 8

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates					Dec 2024	Dec 2025	Dec 2026
Delivery Dates					Aug 2025	Aug 2026	Aug 2027

Installation Information

Method of Implementation: [none specified]:: Installation Name: Equipment - Non Organic

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.400	- / -	0 / 0.000	1 / 0.400
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.410	0 / 0.000	1 / 0.410
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.415	1 / 0.415
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 4.680	11 / 4.680
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.400	1 / 0.410	12 / 5.095	14 / 5.905

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	12	14
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	12	14

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 4 / MJ667 Expeditionary TACAN Obsolescence
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	6.586	0.000	6.586	0.000	0.192	0.000	0.000	0.000	6.778
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	6.586	0.000	6.586	0.000	0.192	0.000	0.000	0.000	6.778
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**6.586**	**0.000**	**6.586**	**0.000**	**0.192**	**0.000**	**0.000**	**0.000**	**6.778**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding will replace obsolete the Marine Corps Expeditionary Tactical Air Navigation (TACAN - AN/TRN-47 (V)1 & AN/TRN-47 (V)2) provides FAA flight certifiable NAVAID for the safe recovery of aircraft during periods of reduced visibility in all theaters.
This budget provides funding for the procurement, integration, and testing for obsolete components and delivery of modernized TACAN systems to the fleet Marine Corps. The manufacturer is no longer producing the AN/TRN-47 and repair support for fielded systems is limited to availability of component parts, and/or cannibalization of excess Marine Corps owned assets
System components are becoming obsolete. This Engineering Change Proposal line is required to maintain Marine Corps navigational guidance capabilities.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 4 / MJ667 Expeditionary TACAN Obsolescence
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Expeditionary TACAN	**Modification Type:** Modernization	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: MJ667 Expeditionary TACAN Obsolescence												
B Kits												
Recurring												
1.1.1) Expeditionary TACAN - NonOrganic	- / -	- / -	- / -	16 / 5.651	- / -	16 / 5.651	- / -	- / -	- / -	- / -	- / -	16 / 5.651
Subtotal: Recurring	- / 0.000	- / -	- / -	- / 5.651	- / -	- / 5.651	- / -	- / -	- / -	- / -	- / 0.000	- / 5.651
Subtotal: MJ667 Expeditionary TACAN Obsolescence	- / -	- / -	- / -	16 / 5.651	- / -	16 / 5.651	- / -	- / -	- / -	- / -	- / -	16 / 5.651
Subtotal: Procurement, All Modification Items	- / 0.000	- / -	- / -	- / 5.651	- / -	- / 5.651	- / -	- / -	- / -	- / -	- / 0.000	- / 5.651
Support *(All Modification Items)*												
2.1) Integrated Logistics Support	- / -	- / -	- / -	- / 0.233	- / -	- / 0.233	- / -	- / -	- / -	- / -	- / -	- / 0.233
2.2) Production Engineering	- / -	- / -	- / -	- / 0.702	- / -	- / 0.702	- / -	- / -	- / -	- / -	- / -	- / 0.702
Subtotal: Support	- / 0.000	- / -	- / -	- / 0.935	- / -	- / 0.935	- / -	- / -	- / -	- / -	- / 0.000	- / 0.935
Installation												
Modification Item 1 of 1: MJ667 Expeditionary TACAN Obsolescence	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.192	- / 0.000	- / 0.000	- / 0.000	- / 0.192
Subtotal: Installation	- / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.192	- / -	- / -	- / 0.000	- / 0.192
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**6.586**	**0.000**	**6.586**	**0.000**	**0.192**	**0.000**	**0.000**	**0.000**	**6.778**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 4 / MJ667 Expeditionary TACAN Obsolescence

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: MJ667 Expeditionary TACAN Obsolescence

Manufacturer Information

Manufacturer Name: Thales | Manufacturer Location: Salt Lake City, UT

Administrative Leadtime *(in Months)*: 5 | Production Leadtime *(in Months)*: 21

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Feb 2024				
Delivery Dates			Nov 2025				

Installation Information

Method of Implementation: AIT:: Installation Name: Expeditionary TACAN

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 0.192	- / -	- / -	0 / 0.000	16 / 0.192
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 0.192	- / -	- / -	0 / 0.000	16 / 0.192

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	4	-	-	-	-	-	-	-	-	-	16
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	4	-	-	-	-	-	-	-	-	-	16

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 5 / CB010 - DoD Advanced Automation System (DAAS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	13.365	0.234	0.424	0.432	0.000	0.432	0.440	0.448	0.456	0.464	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	13.365	0.234	0.424	0.432	0.000	0.432	0.440	0.448	0.456	0.464	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**13.365**	**0.234**	**0.424**	**0.432**	**0.000**	**0.432**	**0.440**	**0.448**	**0.456**	**0.464**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The DoD Advanced Automation System (DAAS) is being developed as part of a joint DoD/Federal Aviation Administration (FAA) program to modernize and standardize Air Traffic Control (ATC) equipment in the National Airspace System. The systems are installed in Navy ATC facilities to replace aging, obsolete equipment and comply with joint DoD/FAA modernization program agreements. DAAS provides for processors and displays for tower and approach controls. Inventory objective of 47.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 5 / CB010 - DoD Advanced Automation System (DAAS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: NAS	**Modification Type:** Added Capability	**Related RDT&E PEs:** 0604504N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CB010 - DoD Advanced Automation System (DAAS)												
B Kits												
Recurring												
2.1.1) End Item - NonOrganic	4 / 2.751	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.751
2.1.2) ECP/OCIR - Organic (10)	- / 3.902	- / 0.234	- / 0.424	- / 0.432	- / -	- / 0.432	- / 0.440	- / 0.448	- / 0.456	- / 0.464	Continuing	Continuing
Subtotal: Recurring	*- / 6.653*	*- / 0.234*	*- / 0.424*	*- / 0.432*	*- / -*	*- / 0.432*	*- / 0.440*	*- / 0.448*	*- / 0.456*	*- / 0.464*	*Continuing*	*Continuing*
Subtotal: CB010 - DoD Advanced Automation System (DAAS)	*4 / 6.653*	*- / 0.234*	*- / 0.424*	*- / 0.432*	*- / -*	*- / 0.432*	*- / 0.440*	*- / 0.448*	*- / 0.456*	*- / 0.464*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 6.653*	*- / 0.234*	*- / 0.424*	*- / 0.432*	*- / -*	*- / 0.432*	*- / 0.440*	*- / 0.448*	*- / 0.456*	*- / 0.464*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
3.1) Integrated Logistics Support	- / 0.298	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.298
3.2) Production Engineering	- / 1.667	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.667
Subtotal: Support	*- / 1.965*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 1.965*
Installation												
Modification Item 1 of 1: CB010 - DoD Advanced Automation System (DAAS)	- / 4.747	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 4.747
Subtotal: Installation	*- / 4.747*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 4.747*
Total												
Total Cost (Procurement + Support + Installation)	**13.365**	**0.234**	**0.424**	**0.432**	**0.000**	**0.432**	**0.440**	**0.448**	**0.456**	**0.464**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 5 / CB010 - DoD Advanced Automation System (DAAS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: CB010 - DoD Advanced Automation System (DAAS)

Manufacturer Information

Manufacturer Name: Raytheon | Manufacturer Location: Marlborough, MA

Administrative Leadtime *(in Months)*: 6 | Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: End Item

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	4 / 4.747	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	4 / 4.747
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	4 / 4.747	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	4 / 4.747

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Out	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4

Footnotes:

(10) ECP costs are based on site unique software configurations through the rest of the FYDP. Upgrades are driven by the FAA's Surveillance Interface Modernization (SIM) program. These upgrades are required to maintain radar connectivity with the FAA in order to preserve Fleet capability to sequence and separate aircraft in assigned airspace within the National Airspace System.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 6 / CB030 Digital Airport Surveillance Radar (DASR)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	2.588	0.444	0.453	0.649	0.000	0.649	0.666	0.680	0.692	0.704	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	2.588	0.444	0.453	0.649	0.000	0.649	0.666	0.680	0.692	0.704	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**2.588**	**0.444**	**0.453**	**0.649**	**0.000**	**0.649**	**0.666**	**0.680**	**0.692**	**0.704**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The DASR was developed as part of a joint DoD/ FAA program to modernize and standardize ATC equipment in the National Airspace System. The DASR has enabled Navy ATC facilities to replace aging, obsolete approach control radars and comply with joint DoD/FAA modernization program agreements. Inventory objective of 29 DASR. 29 were procured and installed prior to FY2017 were funded under BLI 2840.

The FAA DASR technical refreshment has not progressed as planned and has been reorganized into multiple Engineering Change Proposals (ECPs) to mitigate obsolescence effective FY2017.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 6 / CB030 Digital Airport Surveillance Radar (DASR)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: NAS	**Modification Type:** Added Capability	**Related RDT&E PEs:** 0604504N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CB030 Digital Airport Surveillance Radar (DASR)												
B Kits												
Recurring												
1.1.2) ECP/OCIR - Organic (11)	- / 2.588	- / 0.444	- / 0.453	- / 0.649	- / -	- / 0.649	- / 0.666	- / 0.680	- / 0.692	- / 0.704	Continuing	Continuing
Subtotal: Recurring	*- / 2.588*	*- / 0.444*	*- / 0.453*	*- / 0.649*	*- / -*	*- / 0.649*	*- / 0.666*	*- / 0.680*	*- / 0.692*	*- / 0.704*	*Continuing*	*Continuing*
Subtotal: CB030 Digital Airport Surveillance Radar (DASR)	*- / 2.588*	*- / 0.444*	*- / 0.453*	*- / 0.649*	*- / -*	*- / 0.649*	*- / 0.666*	*- / 0.680*	*- / 0.692*	*- / 0.704*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 2.588*	*- / 0.444*	*- / 0.453*	*- / 0.649*	*- / -*	*- / 0.649*	*- / 0.666*	*- / 0.680*	*- / 0.692*	*- / 0.704*	*Continuing*	*Continuing*
Installation												
Subtotal: Installation	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*
Total												
Total Cost (Procurement + Support + Installation)	**2.588**	**0.444**	**0.453**	**0.649**	**0.000**	**0.649**	**0.666**	**0.680**	**0.692**	**0.704**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 6 / CB030 Digital Airport Surveillance Radar (DASR)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Modification Item 1 of 1: CB030 Digital Airport Surveillance Radar (DASR)		

Manufacturer Information

Manufacturer Name: Raytheon	Manufacturer Location: Marlborough, MA
Administrative Leadtime *(in Months)*: 6	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Footnotes:

(11) The Digital Airport Surveillance Radar (DASR) ECP/OCIR upgrades are required to maintain radar connectivity with the FAA in order to preserve Fleet capability to sequence and separate aircraft in assigned airspace within the National Airspace System. The Digital Airport Surveillance Radar (DASR) will be upgraded from legacy point to point analog interface capability to flexible Internet Protocol (IP) addressable interfaces.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 7 / CB040 Tower Automation System (TAS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	4.557	0.319	0.325	0.332	0.000	0.332	0.339	0.345	0.352	0.370	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	4.557	0.319	0.325	0.332	0.000	0.332	0.339	0.345	0.352	0.370	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**4.557**	**0.319**	**0.325**	**0.332**	**0.000**	**0.332**	**0.339**	**0.345**	**0.352**	**0.370**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The TAS was developed as part of a joint DoD)/ FAA program to modernize and standardize ATC equipment in the National Airspace System. The TAS has enabled Navy ATC facilities to replace aging, obsolete equipment and comply with joint DoD/FAA modernization program agreements.

This effort includes Engineering Change Proposal (ECP) efforts directly related to the TAS Tech Refresh efforts detailed in cost element CB070 of this budget. The ECP introduces new capability into a common workstation that eliminates a separate visual communications alert indicator. The nature of that consolidation creates an interdependency with CB070; which addresses severe obsolescence issues that render the current workstation configuration unsupportable. Both software and hardware for these two cost elements overlap and require concurrent efforts. Delay or interruption to either CB040 and/or CB070 causes a break in fleet capability and negatively impacts both flight safety and operator workload. All Windows based operating systems in Air Traffic Control Towers are being upgraded to Windows 10 in order to meet DoD's Information Assurance / Cyber security requirements.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 7 / CB040 Tower Automation System (TAS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: NAS	**Modification Type:** Added Capability	**Related RDT&E PEs:** 0604504N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CB040 Tower Automation System (TAS)												
B Kits												
Recurring												
1.1.1) ECP/OCIR - Organic (12)	- / 4.557	- / 0.319	- / 0.325	- / 0.332	- / -	- / 0.332	- / 0.339	- / 0.345	- / 0.352	- / 0.370	Continuing	Continuing
Subtotal: Recurring	*- / 4.557*	*- / 0.319*	*- / 0.325*	*- / 0.332*	*- / -*	*- / 0.332*	*- / 0.339*	*- / 0.345*	*- / 0.352*	*- / 0.370*	*Continuing*	*Continuing*
Subtotal: CB040 Tower Automation System (TAS)	*- / 4.557*	*- / 0.319*	*- / 0.325*	*- / 0.332*	*- / -*	*- / 0.332*	*- / 0.339*	*- / 0.345*	*- / 0.352*	*- / 0.370*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 4.557*	*- / 0.319*	*- / 0.325*	*- / 0.332*	*- / -*	*- / 0.332*	*- / 0.339*	*- / 0.345*	*- / 0.352*	*- / 0.370*	*Continuing*	*Continuing*
Installation												
Subtotal: Installation	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*
Total												
Total Cost (Procurement + Support + Installation)	**4.557**	**0.319**	**0.325**	**0.332**	**0.000**	**0.332**	**0.339**	**0.345**	**0.352**	**0.370**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 7 / CB040 Tower Automation System (TAS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Modification Item 1 of 1: CB040 Tower Automation System (TAS)		

Manufacturer Information

Manufacturer Name: Naval Information Warfare Center Atlantic	Manufacturer Location: Charleston, SC
Administrative Leadtime *(in Months)*: 6	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Footnotes:

(12) Support costs are included in the ECP/OCIR lines.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 8 / CB080 NAS Voice System (NVS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	39.087	10.558	7.503	7.440	0.000	7.440	12.886	14.071	15.557	19.230	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	39.087	10.558	7.503	7.440	0.000	7.440	12.886	14.071	15.557	19.230	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**39.087**	**10.558**	**7.503**	**7.440**	**0.000**	**7.440**	**12.886**	**14.071**	**15.557**	**19.230**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

FAA NAS Voice System (NVS) is a forward-looking program to replace national airspace system (NAS) voice switches with a new technology system capable of supporting future requirements for the NextGen. Many of these switches are experiencing increasing obsolescence and failures and are in need of replacement. They are not capable of supporting flexible reallocation of access to communications resources, and lack security needed for a network-based communications infrastructure, which is a key concept in modernization of the NAS. The NVS program will provide a key transitional element in the air traffic control voice communications infrastructure as it moves toward realizing the FAAs NextGen vision and a more operationally efficient and economic NAS.

Radios: There are Seventy-five sites, which will receive a total of 4,144 radios and 141 Emergency Radios Transceivers. The sites to receive radios include FACSFACs remote sites at Naval and Marine Corps Air Stations. The number of radios per site varies due to operational requirements and the number of aircraft serviced.

Voice Switches: There are two specific types of Voice Switches being procured: Operational Communication System (OCS) and Emergency Control System (ECS): 56 OCS Voice Switches, 42 ECS Voice Switches.

Forty-two sites will receive both an OCS Voice Switch and an ECS Voice Switch, Fourteen sites will receive only an OCS voice switch. While FACSFAC remote sites are equipped with radios, they are not equipped with Voice Switches.

NOTE - The FAA has initiated an Emergency Radio Transceiver Replacement Program. The Navy will procure 141 Transceivers under this FAA program to replace our AN/GRC-258 Emergency Transceivers, which have become obsolete and are no longer supported by the Manufacturer. The Radio Inventory Objective has been reduced due to Non-ATC radio requirements being removed from the program.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 8 / CB080 NAS Voice System (NVS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: NAS	**Modification Type:** Added Capability	**Related RDT&E PEs:** 0604504N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CB080 NAS Voice System (NVS)												
B Kits												
Recurring												
2.1.2) Radios - NonOrganic [13]	3,284 / 27.058	650 / 6.500	100 / 1.101	122 / 1.308	- / -	122 / 1.308	- / -	- / -	- / -	- / -	360 / 5.040	4,516 / 41.007
2.1.3) Transceivers - NonOrganic [14]	- / -	- / -	70 / 2.100	71 / 2.343	- / -	71 / 2.343	- / -	- / -	- / -	- / -	- / -	141 / 4.443
2.1.4) OCS Voice Switch - NonOrganic [15]	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.500	55 / 98.300	56 / 99.800
2.1.5) ECS Voice Switch - NonOrganic [16]	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.400	41 / 18.100	42 / 18.500
2.1.6) Voice Switch Tech Refresh - NonOrganic [17]	- / -	- / -	- / -	- / -	- / -	- / -	24 / 10.500	23 / 10.465	25 / 11.830	26 / 12.792	- / -	98 / 45.587
Subtotal: Recurring	*- / 27.058*	*- / 6.500*	*- / 3.201*	*- / 3.651*	*- / -*	*- / 3.651*	*- / 10.500*	*- / 10.465*	*- / 11.830*	*- / 14.692*	*- / 121.440*	*- / 209.337*
Subtotal: CB080 NAS Voice System (NVS)	*3,284 / 27.058*	*650 / 6.500*	*170 / 3.201*	*193 / 3.651*	*- / -*	*193 / 3.651*	*24 / 10.500*	*23 / 10.465*	*25 / 11.830*	*28 / 14.692*	*456 / 121.440*	*4,853 / 209.337*
Subtotal: Procurement, All Modification Items	*- / 27.058*	*- / 6.500*	*- / 3.201*	*- / 3.651*	*- / -*	*- / 3.651*	*- / 10.500*	*- / 10.465*	*- / 11.830*	*- / 14.692*	*- / 121.440*	*- / 209.337*
Support *(All Modification Items)*												
3.1) Integrated Logistics Support	- / 1.060	- / 0.220	- / 0.220	- / 0.280	- / -	- / 0.280	- / 0.320	- / 0.450	- / 0.475	- / 0.768	Continuing	Continuing
3.2) Production Engineering	- / 2.548	- / 0.777	- / 0.855	- / 1.080	- / -	- / 1.080	- / 1.102	- / 2.000	- / 2.100	- / 2.468	Continuing	Continuing
Subtotal: Support	*- / 3.608*	*- / 0.997*	*- / 1.075*	*- / 1.360*	*- / -*	*- / 1.360*	*- / 1.422*	*- / 2.450*	*- / 2.575*	*- / 3.236*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: CB080 NAS Voice System (NVS)	- / 8.421	- / 3.061	- / 3.227	- / 2.429	- / 0.000	- / 2.429	- / 0.964	- / 1.156	- / 1.152	- / 1.302	- / 39.979	- / 61.691
Subtotal: Installation	*- / 8.421*	*- / 3.061*	*- / 3.227*	*- / 2.429*	*- / -*	*- / 2.429*	*- / 0.964*	*- / 1.156*	*- / 1.152*	*- / 1.302*	*- / 39.979*	*- / 61.691*
Total												
Total Cost (Procurement + Support + Installation)	**39.087**	**10.558**	**7.503**	**7.440**	**0.000**	**7.440**	**12.886**	**14.071**	**15.557**	**19.230**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 8 / CB080 NAS Voice System (NVS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CB080 NAS Voice System (NVS)

Manufacturer Information

Manufacturer Name: General Dynamics				Manufacturer Location: Scottsdale, Arizona			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Mar 2022	Mar 2023	Mar 2024				
Delivery Dates	Mar 2023	Mar 2024	Mar 2025				
Manufacturer Name: TBD - FAA Contract 1				Manufacturer Location: TBD			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates							Mar 2028
Delivery Dates							Mar 2029
Manufacturer Name: TBD - FAA Contract 2				Manufacturer Location: TBD			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates							Mar 2028
Delivery Dates							Mar 2029
Manufacturer Name: TBD - FAA Contract 3				Manufacturer Location: TBD			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates				Mar 2025	Mar 2026	Mar 2027	Mar 2028
Delivery Dates				Mar 2026	Mar 2027	Mar 2028	Mar 2029
Manufacturer Name: General Dynamics (via FAA contract)				Manufacturer Location: Scottsdale, AZ			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 12			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates		Mar 2023	Mar 2024				
Delivery Dates		Mar 2024	Mar 2025				

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 8 / CB080 NAS Voice System (NVS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CB080 NAS Voice System (NVS)

Installation Information

Method of Implementation: AIT:: Installation Name: Radios

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	2,615 / 8.421	669 / 1.606	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3,284 / 10.027
FY 2022	- / -	0 / 1.455	650 / 1.606	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	650 / 3.061
FY 2023	- / -	- / -	0 / 1.621	100 / 0.447	0 / 0.000	100 / 0.447	- / -	- / -	- / -	- / -	0 / 0.000	100 / 2.068
FY 2024	- / -	- / -	- / -	0 / 1.702	0 / 0.000	0 / 1.702	122 / 0.686	- / -	- / -	- / -	0 / 0.000	122 / 2.388
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	360 / 1.288	360 / 1.288
Total	2,615 / 8.421	669 / 3.061	650 / 3.227	100 / 2.149	0 / 0.000	100 / 2.149	122 / 0.686	- / -	- / -	- / -	360 / 1.288	4,516 / 18.832

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	2,615	-	223	223	223	-	222	223	205	-	50	50	-	-	60	62	-	-	-	-	-	-	-	-	-	-	-	-	-	360	4,516
Out	2,615	-	-	334	335	-	-	334	316	-	-	50	50	-	-	60	62	-	-	-	-	-	-	-	-	-	-	-	-	360	4,516

Method of Implementation: AIT:: Installation Name: Transceivers

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	70 / 0.280	0 / 0.000	70 / 0.280	- / -	- / -	- / -	- / -	0 / 0.000	70 / 0.280
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	71 / 0.278	- / -	- / -	- / -	0 / 0.000	71 / 0.278
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 8 / CB080 NAS Voice System (NVS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CB080 NAS Voice System (NVS)

Installation Information

Method of Implementation: AIT:: Installation Name: Transceivers

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	- / -	- / -	- / -	70 / 0.280	0 / 0.000	70 / 0.280	71 / 0.278	- / -	- / -	- / -	0 / 0.000	141 / 0.558

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	35	35	-	-	35	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141
Out	-	-	-	-	-	-	-	-	-	-	35	35	-	-	35	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141

Method of Implementation: Alteration Installation Team (AIT):: Installation Name: OCS Voice Switch

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.550	1 / 0.550
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	55 / 31.450	55 / 31.450
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	56 / 32.000	56 / 32.000

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56	56
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56	56

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 8 / CB080 NAS Voice System (NVS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CB080 NAS Voice System (NVS)

Installation Information

Method of Implementation: Alteration Installation Team (AIT):: Installation Name: ECS Voice Switch

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.120	1 / 0.120
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	41 / 5.165	41 / 5.165
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	42 / 5.285	42 / 5.285

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	42
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	42

Method of Implementation: AIT:: Installation Name: Voice Switch Tech Refresh

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	24 / 1.156	- / -	- / -	0 / 0.000	24 / 1.156
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	23 / 1.152	- / -	0 / 0.000	23 / 1.152
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	25 / 1.302	0 / 0.000	25 / 1.302
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	26 / 1.406	26 / 1.406
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 8 / CB080 NAS Voice System (NVS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CB080 NAS Voice System (NVS)

Installation Information

Method of Implementation: AIT:: Installation Name: Voice Switch Tech Refresh

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	24 / 1.156	23 / 1.152	25 / 1.302	26 / 1.406	98 / 5.016

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	8	-	8	8	7	-	8	8	9	-	26	98
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	8	-	8	8	7	-	8	8	9	26	98

Footnotes:

(13) End Item costs are based on current FAA contract pricing. Inventory objective is 4,516. Advanced Planning (AP) costs for installation occur 1 year prior to actual install and show as quantity zero

(14) The FAA has initiated an Emergency Radio Transceiver Replacement Program. The Navy will procure 141 Transceivers under this FAA program to replace our AN/GRC-258 Emergency Transceivers, which have become obsolete and are no longer supported by the Manufacturer. Inventory Objective is 141.

(15) OCS Voice Switch End Item costs are based on current estimated FAA contract pricing. Inventory objective is 56. The Next Generation Voice System will be acquired under the FAA's Voice over Internet Protocol (IP) Communication Enterprise (VoICE) program. The FAA's projection would be 2028 for an In Service Decision (ISD) which will delay the start of the Navy procurements until FY28.

(16) ECS Voice Switch End Item costs are based on current estimated FAA contract pricing. Inventory objective is 42. The Next Generation Voice System will be acquired under the FAA's Voice over Internet Protocol (IP) Communication Enterprise (VoICE) program. The FAA's projection would be 2028 for an In Service Decision (ISD) which will delay the start of the Navy procurements until FY28.

(17) The FAA (as a result of the delay of their Voice Switch replacement program) is initiating a Voice Switch Tech Refresh program to maintain the Enhanced Terminal Voice Switch (ETVS) and Emergency Voice Switch (EVS) capability. End Item costs are based on FAA projected costs.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 9 / CB090 - DAAS Tech Refresh Upgrade II
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.652	3.567	4.660	4.801	0.000	4.801	11.186	11.383	11.288	14.669	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.652	3.567	4.660	4.801	0.000	4.801	11.186	11.383	11.288	14.669	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.652**	**3.567**	**4.660**	**4.801**	**0.000**	**4.801**	**11.186**	**11.383**	**11.288**	**14.669**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Standard Terminal Automation Replacement System (STARS) is a joint (DoD) and Department of Transportation Federal Aviation Administration (FAA) program to modernize terminal air traffic control systems. The DoD version of STARS, DoD Advanced Automation System (DAAS), must be upgraded to ensure continued compliance with FAA NextGen requirements in order to continue participation in the National Airspace System (NAS). Currently fielded STARS COTS equipment/software are experiencing obsolescence and information assurance (IA) issues. The DAAS Tech Refresh Upgrades will address these obsolescence and IA issues as well as maintain compatibility with the FAA's Next Generation (NextGen) Air Transportation System initiatives. Inventory objective is 40.

The DAAS Tech Refresh Upgrade II efforts will implement Engineering Change Proposals (ECPs) defined under cost element CB010 (DoD Advanced Automation System (DAAS)) of this budget. The nature of this consolidation creates an interdependency between CB010 and CB090 that addresses obsolescence and IA issues that render the current hardware and software unsupportable. Both hardware and software for these two cost elements overlap requiring concurrent efforts. Delay or interruption to either CB010 and /or CB090 causes a break in fleet capability and negatively impacts both safety of flight and Air Traffic Controller workload. CB090 is a follow-on to CB050 (STARS Tech Refresh Upgrade) which will complete procurements in FY20.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 9 / CB090 - DAAS Tech Refresh Upgrade II
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CB090 - DAAS Tech Refresh Upgrade II												
B Kits												
Recurring												
2.1.1) DAAS Tech Refresh Upgrade II - NonOrganic	- / -	2 / 2.723	2 / 2.722	2 / 2.754	- / -	2 / 2.754	6 / 8.427	5 / 7.163	5 / 7.307	7 / 10.510	11 / 13.800	40 / 55.406
Subtotal: Recurring	*- / 0.000*	*- / 2.723*	*- / 2.722*	*- / 2.754*	*- / -*	*- / 2.754*	*- / 8.427*	*- / 7.163*	*- / 7.307*	*- / 10.510*	*- / 13.800*	*- / 55.406*
Subtotal: CB090 - DAAS Tech Refresh Upgrade II	*- / -*	*2 / 2.723*	*2 / 2.722*	*2 / 2.754*	*- / -*	*2 / 2.754*	*6 / 8.427*	*5 / 7.163*	*5 / 7.307*	*7 / 10.510*	*11 / 13.800*	*40 / 55.406*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / 2.723*	*- / 2.722*	*- / 2.754*	*- / -*	*- / 2.754*	*- / 8.427*	*- / 7.163*	*- / 7.307*	*- / 10.510*	*- / 13.800*	*- / 55.406*
Support *(All Modification Items)*												
3.1) Integrated Logistics Support	- / -	- / 0.163	- / 0.166	- / 0.170	- / -	- / 0.170	- / 0.175	- / 0.180	- / 0.185	- / 0.190	Continuing	Continuing
3.2) Production Engineering [18]	- / 0.652	- / 0.681	- / 0.702	- / 0.787	- / -	- / 0.787	- / 1.479	- / 0.620	- / 0.889	- / 0.968	Continuing	Continuing
Subtotal: Support	*- / 0.652*	*- / 0.844*	*- / 0.868*	*- / 0.957*	*- / -*	*- / 0.957*	*- / 1.654*	*- / 0.800*	*- / 1.074*	*- / 1.158*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: CB090 - DAAS Tech Refresh Upgrade II	- / 0.000	- / 0.000	- / 1.070	- / 1.090	- / 0.000	- / 1.090	- / 1.105	- / 3.420	- / 2.907	- / 3.001	- / 10.966	- / 23.559
Subtotal: Installation	*- / 0.000*	*- / -*	*- / 1.070*	*- / 1.090*	*- / -*	*- / 1.090*	*- / 1.105*	*- / 3.420*	*- / 2.907*	*- / 3.001*	*- / 10.966*	*- / 23.559*
Total												
Total Cost (Procurement + Support + Installation)	**0.652**	**3.567**	**4.660**	**4.801**	**0.000**	**4.801**	**11.186**	**11.383**	**11.288**	**14.669**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 9 / CB090 - DAAS Tech Refresh Upgrade II

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: CB090 - DAAS Tech Refresh Upgrade II

Manufacturer Information

Manufacturer Name: Raytheon — Manufacturer Location: Marlborough, MA

Administrative Leadtime *(in Months)*: 6 — Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023	Mar 2024	Mar 2025	Mar 2026	Mar 2027	Mar 2028
Delivery Dates	Mar 2023	Mar 2024	Mar 2025	Mar 2026	Mar 2027	Mar 2028	Mar 2029

Manufacturer Name: Raytheon — Manufacturer Location: Fullerton, CA

Administrative Leadtime *(in Months)*: 6 — Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023	Mar 2024	Mar 2025	Mar 2026		
Delivery Dates	Mar 2023	Mar 2024	Mar 2025	Mar 2026	Mar 2027		

Installation Information

Method of Implementation: Alteration Installation Team (AIT):: Installation Name: DAAS Tech Refresh Upgrade II

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	2 / 1.070	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 1.070
FY 2023	- / -	- / -	- / -	2 / 1.090	0 / 0.000	2 / 1.090	- / -	- / -	- / -	- / -	0 / 0.000	2 / 1.090
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.105	- / -	- / -	- / -	0 / 0.000	2 / 1.105
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 3.420	- / -	- / -	0 / 0.000	6 / 3.420
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.907	- / -	0 / 0.000	5 / 2.907
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 3.001	0 / 0.000	5 / 3.001
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 4.234	7 / 4.234
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 6.732	11 / 6.732
Total	- / -	- / -	2 / 1.070	2 / 1.090	0 / 0.000	2 / 1.090	2 / 1.105	6 / 3.420	5 / 2.907	5 / 3.001	18 / 10.966	40 / 23.559

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 9 / CB090 - DAAS Tech Refresh Upgrade II

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: CB090 - DAAS Tech Refresh Upgrade II

Installation Information

Method of Implementation: Alteration Installation Team (AIT):: Installation Name: DAAS Tech Refresh Upgrade II

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	1	1	-	-	1	1	-	-	1	1	-	-	2	2	2	-	1	2	2	-	2	1	2	18	40
Out	-	-	-	-	-	-	1	1	-	-	1	1	-	-	1	1	-	-	2	2	2	-	1	2	2	-	2	1	2	18	40

Footnotes:

(18) Production Engineering costs include identifying projected system requirements, modifications adjustments, preparation for integrating planning, and drawing support efforts. Preparing for the receipt, integration, and installation of future, identified equipment often requires significant planning.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 10 / CB100 TAS Tech Refresh Upgrade II
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	21.665	11.890	11.176	9.195	0.000	9.195	4.809	0.580	0.000	0.000	0.000	59.315
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	21.665	11.890	11.176	9.195	0.000	9.195	4.809	0.580	0.000	0.000	0.000	59.315
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**21.665**	**11.890**	**11.176**	**9.195**	**0.000**	**9.195**	**4.809**	**0.580**	**0.000**	**0.000**	**0.000**	**59.315**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/FYC-22 Visual Information Display System (VIDS) is the Navy developed/owned system that meets the NAS Mod Tower Automation System (TAS) requirements. The Tower Automation System (TAS) COTS equipment is suffering from obsolescence and Information Assurance (IA) issues. The TAS Tech Refresh Upgrades will address these obsolescence and IA issues as well as maintain compatibility with the FAAs Next Generation (NextGen) Air Transportation System initiatives. The TAS will be upgraded to maintain interoperability and compliance with the FAA ATC systems. The inventory objective is 56.

The TAS Tech Refresh Upgrade II efforts will implement Engineering Change Proposals (ECPs) defined under cost element CB040 (Tower Automation System (TAS)) of this budget. The nature of this consolidation creates an interdependency between CB040 and CB100 that addresses obsolescence and IA issues that render the current hardware and software unsupportable. Both hardware and software for these two cost elements overlap requiring concurrent efforts. Delay or interruption to either CB040 and /or CB100 causes a break in fleet capability and negatively impacts both safety of flight and Air Traffic Controller workload. CB100 is a follow-on to CB070 (TAS Tech Refresh) which completed procurements in FY20.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 10 / CB100 TAS Tech Refresh Upgrade II
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CB100 TAS Tech Refresh Upgrade II												
B Kits												
Recurring												
2.1.1) TAS Tech Refresh Upgrade II - NonOrganic	25 / 16.067	10 / 6.520	11 / 7.260	8 / 5.000	- / -	8 / 5.000	2 / 1.380	- / -	- / -	- / -	- / -	56 / 36.227
Subtotal: Recurring	*- / 16.067*	*- / 6.520*	*- / 7.260*	*- / 5.000*	*- / -*	*- / 5.000*	*- / 1.380*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 36.227*
Subtotal: CB100 TAS Tech Refresh Upgrade II	*25 / 16.067*	*10 / 6.520*	*11 / 7.260*	*8 / 5.000*	*- / -*	*8 / 5.000*	*2 / 1.380*	*- / -*	*- / -*	*- / -*	*- / -*	*56 / 36.227*
Subtotal: Procurement, All Modification Items	*- / 16.067*	*- / 6.520*	*- / 7.260*	*- / 5.000*	*- / -*	*- / 5.000*	*- / 1.380*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 36.227*
Support *(All Modification Items)*												
3.1) Integrated Logistics Support	- / 0.680	- / 0.301	- / 0.307	- / 0.215	- / -	- / 0.215	- / 0.205	- / -	- / -	- / -	- / -	- / 1.708
3.2) Production Engineering	- / 2.668	- / 0.989	- / 1.008	- / 1.010	- / -	- / 1.010	- / 0.984	- / -	- / -	- / -	- / -	- / 6.659
Subtotal: Support	*- / 3.348*	*- / 1.290*	*- / 1.315*	*- / 1.225*	*- / -*	*- / 1.225*	*- / 1.189*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 8.367*
Installation												
Modification Item 1 of 1: CB100 TAS Tech Refresh Upgrade II	- / 2.250	- / 4.080	- / 2.601	- / 2.970	- / 0.000	- / 2.970	- / 2.240	- / 0.580	- / 0.000	- / 0.000	- / 0.000	- / 14.721
Subtotal: Installation	*- / 2.250*	*- / 4.080*	*- / 2.601*	*- / 2.970*	*- / -*	*- / 2.970*	*- / 2.240*	*- / 0.580*	*- / -*	*- / -*	*- / 0.000*	*- / 14.721*
Total												
Total Cost (Procurement + Support + Installation)	**21.665**	**11.890**	**11.176**	**9.195**	**0.000**	**9.195**	**4.809**	**0.580**	**0.000**	**0.000**	**0.000**	**59.315**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 10 / CB100 TAS Tech Refresh Upgrade II

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: CB100 TAS Tech Refresh Upgrade II

Manufacturer Information

Manufacturer Name: NIWC Atlantic | Manufacturer Location: Charleston, SC

Administrative Leadtime *(in Months)*: 6 | Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023	Mar 2024	Mar 2025			
Delivery Dates	Mar 2023	Mar 2024	Mar 2025	Mar 2026			

Installation Information

Method of Implementation: Alteration Installation Team (AIT):: Installation Name: TAS Tech Refresh Upgrade II

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	9 / 2.250	16 / 4.080	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	25 / 6.330
FY 2022	- / -	- / -	10 / 2.601	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 2.601
FY 2023	- / -	- / -	- / -	11 / 2.970	0 / 0.000	11 / 2.970	- / -	- / -	- / -	- / -	0 / 0.000	11 / 2.970
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	8 / 2.240	- / -	- / -	- / -	0 / 0.000	8 / 2.240
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.580	- / -	- / -	0 / 0.000	2 / 0.580
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	9 / 2.250	16 / 4.080	10 / 2.601	11 / 2.970	0 / 0.000	11 / 2.970	8 / 2.240	2 / 0.580	- / -	- / -	0 / 0.000	56 / 14.721

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	9	-	-	8	8	-	-	5	5	-	-	6	5	-	-	4	4	-	-	1	1	-	-	-	-	-	-	-	-	-	56
Out	9	-	-	8	8	-	-	5	5	-	-	6	5	-	-	4	4	-	-	1	1	-	-	-	-	-	-	-	-	-	56

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 11 / CB110 DASR Tech Refresh Upgrade III
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	3.022	4.853	5.085	0.000	5.085	6.958	4.176	0.567	0.000	0.000	24.661
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	3.022	4.853	5.085	0.000	5.085	6.958	4.176	0.567	0.000	0.000	24.661
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**3.022**	**4.853**	**5.085**	**0.000**	**5.085**	**6.958**	**4.176**	**0.567**	**0.000**	**0.000**	**24.661**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/GPN-30 DASR was developed by the Air Force as part of a joint DoD/ FAA program to modernize and standardize ATC equipment in the National Airspace System. The DASR replaced aging, obsolete approach control radars and complies with joint DoD/FAA modernization program agreements.

The DASR Tech Refresh Upgrade III efforts will implement Engineering Change Proposals (ECPs) developed by the Air Force /FAA that address urgent and critical obsolescence issues associated with DASR subassemblies (including Commercial Off-The-Shelf (COTS) interface and control assemblies) and closure of discrepancy items from DASR Tech Refresh Segment 2.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 11 / CB110 DASR Tech Refresh Upgrade III
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CB110 DASR Tech Refresh Upgrade III												
B Kits												
Recurring												
2.1.1) DASR Tech Refresh Upgrade III - NonOrganic	- / -	5 / 2.375	6 / 2.910	6 / 2.968	- / -	6 / 2.968	9 / 4.788	2 / 1.078	- / -	- / -	- / -	28 / 14.119
Subtotal: Recurring	*- / 0.000*	*- / 2.375*	*- / 2.910*	*- / 2.968*	*- / -*	*- / 2.968*	*- / 4.788*	*- / 1.078*	*- / -*	*- / -*	*- / 0.000*	*- / 14.119*
Subtotal: CB110 DASR Tech Refresh Upgrade III	*- / -*	*5 / 2.375*	*6 / 2.910*	*6 / 2.968*	*- / -*	*6 / 2.968*	*9 / 4.788*	*2 / 1.078*	*- / -*	*- / -*	*- / -*	*28 / 14.119*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / 2.375*	*- / 2.910*	*- / 2.968*	*- / -*	*- / 2.968*	*- / 4.788*	*- / 1.078*	*- / -*	*- / -*	*- / 0.000*	*- / 14.119*
Support *(All Modification Items)*												
3.1) Integrated Logistics Support	- / -	- / 0.247	- / 0.245	- / 0.250	- / -	- / 0.250	- / 0.255	- / 0.260	- / -	- / -	- / -	- / 1.257
3.2) Production Engineering	- / -	- / 0.400	- / 0.448	- / 0.457	- / -	- / 0.457	- / 0.465	- / 0.475	- / -	- / -	- / -	- / 2.245
Subtotal: Support	*- / 0.000*	*- / 0.647*	*- / 0.693*	*- / 0.707*	*- / -*	*- / 0.707*	*- / 0.720*	*- / 0.735*	*- / -*	*- / -*	*- / 0.000*	*- / 3.502*
Installation												
Modification Item 1 of 1: CB110 DASR Tech Refresh Upgrade III	- / 0.000	- / 0.000	- / 1.250	- / 1.410	- / 0.000	- / 1.410	- / 1.450	- / 2.363	- / 0.567	- / 0.000	- / 0.000	- / 7.040
Subtotal: Installation	*- / 0.000*	*- / -*	*- / 1.250*	*- / 1.410*	*- / -*	*- / 1.410*	*- / 1.450*	*- / 2.363*	*- / 0.567*	*- / -*	*- / 0.000*	*- / 7.040*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**3.022**	**4.853**	**5.085**	**0.000**	**5.085**	**6.958**	**4.176**	**0.567**	**0.000**	**0.000**	**24.661**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 11 / CB110 DASR Tech Refresh Upgrade III

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: CB110 DASR Tech Refresh Upgrade III

Manufacturer Information

Manufacturer Name: RAYTHEON | Manufacturer Location: Marlborough, MA

Administrative Leadtime *(in Months)*: 6 | Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023	Mar 2024	Mar 2025	Mar 2026		
Delivery Dates	Mar 2023	Mar 2024	Mar 2025	Mar 2026	Mar 2027		

Installation Information

Method of Implementation: Alteration Installation Team AIT:: Installation Name: DASR Tech Refresh Upgrade III

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	5 / 1.250	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	5 / 1.250
FY 2023	- / -	- / -	- / -	6 / 1.410	0 / 0.000	6 / 1.410	- / -	- / -	- / -	- / -	0 / 0.000	6 / 1.410
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	6 / 1.450	- / -	- / -	- / -	0 / 0.000	6 / 1.450
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 2.363	- / -	- / -	0 / 0.000	9 / 2.363
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.567	- / -	0 / 0.000	2 / 0.567
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	5 / 1.250	6 / 1.410	0 / 0.000	6 / 1.410	6 / 1.450	9 / 2.363	2 / 0.567	- / -	0 / 0.000	28 / 7.040

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	3	2	-	-	3	3	-	3	2	1	-	3	3	3	-	2	-	-	-	-	-	-	-	28
Out	-	-	-	-	-	-	-	3	2	-	-	3	3	-	3	2	1	-	3	3	3	-	2	-	-	-	-	-	-	-	28

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 12 / CB120 TAS Tech Refresh Upgrade III
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	2.112	9.840	9.660	6.129	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	2.112	9.840	9.660	6.129	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**2.112**	**9.840**	**9.660**	**6.129**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/FYC-22 Visual Information Display System (VIDS) is the Navy developed/owned system that meets the NAS Mod Tower Automation System (TAS) requirements. The Tower Automation System (TAS) COTS equipment is suffering from obsolescence and Information Assurance (IA) issues. The TAS Tech Refresh Upgrades will address these obsolescence and IA issues as well as maintain compatibility with the FAAs Next Generation (NextGen) Air Transportation System initiatives. The TAS will be upgraded to maintain interoperability and compliance with the FAA ATC systems. The inventory objective is 56. The TAS Tech Refresh Upgrade III efforts will implement Engineering Change Proposals (ECPs) defined under cost element CB040 (Tower Automation System (TAS)) of this budget. The nature of this consolidation creates an interdependency between CB040 and CB120 that addresses obsolescence and IA issues that render the current hardware and software unsupportable. Both hardware and software for these two cost elements overlap requiring concurrent efforts. Delay or interruption to either CB040 and /or CB120 causes a break in fleet capability and negatively impacts both safety of flight and Air Traffic Controller workload. CB120 is a follow-on to CB100 (TAS Tech Refresh II) which will complete procurements in FY24.

[TAS Tech Refresh Upgrade III] The AN/FYC-22 Visual Information Display System (VIDS) is the Navy developed/owned system that meets the Joint FAA/DoD NAS Mod Tower Automation System (TAS) requirements. The TAS Tech Refresh Upgrades address known technical issues, maintain compatibility with the FAAs Next Generation (NextGen) Air Transportation System initiatives, and incorporate new capabilities included in the VIDS Pre-Planned Product Improvement (P3I) Program. The inventory objective is 56. The TAS Tech Refresh Upgrade III effort will implement Engineering Change Proposals (ECPs) defined under cost element CB040 (Tower Automation System (TAS) of this budget. The P3I ECPs included in CB120 address CAC Login, Remote Maintenance, FDIO Phase II, and Multiple ASOS Weather Sites. The nature of this consolidation creates an interdependency between CB040 and CB120. Both hardware and software for these two cost elements overlap requiring concurrent efforts. Delay or interruption to either CB040 and/or CB120 causes a break in fleet capability and negatively impacts both safety of flight and Air Traffic Controller workload. CB120 is a follow-on to CB100 (TAS Tech Refresh II) which will complete procurements in FY24.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 12 / CB120 TAS Tech Refresh Upgrade III
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CB120 TAS Tech Refresh Upgrade III												
B Kits												
Recurring												
2.1.1) TAS Tech Refresh Upgrade III - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.903	11 / 8.250	7 / 5.320	4 / 3.101	29 / 25.180	54 / 43.754
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 1.903*	*- / 8.250*	*- / 5.320*	*- / 3.101*	*- / 25.180*	*- / 43.754*
Subtotal: CB120 TAS Tech Refresh Upgrade III	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*3 / 1.903*	*11 / 8.250*	*7 / 5.320*	*4 / 3.101*	*29 / 25.180*	*54 / 43.754*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 1.903*	*- / 8.250*	*- / 5.320*	*- / 3.101*	*- / 25.180*	*- / 43.754*
Support *(All Modification Items)*												
3.1) Integrated Logistics Support	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.059	- / 0.200	- / 0.200	- / 0.200	Continuing	Continuing
3.2) Production Engineering	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.150	- / 0.400	- / 0.400	- / 0.400	Continuing	Continuing
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.209*	*- / 0.600*	*- / 0.600*	*- / 0.600*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: CB120 TAS Tech Refresh Upgrade III	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.990	- / 3.740	- / 2.428	- / 13.330	- / 20.488
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.990*	*- / 3.740*	*- / 2.428*	*- / 13.330*	*- / 20.488*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**2.112**	**9.840**	**9.660**	**6.129**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 12 / CB120 TAS Tech Refresh Upgrade III

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: CB120 TAS Tech Refresh Upgrade III

Installation Information

Method of Implementation: Alteration Installation Team (AIT):: Installation Name: TAS Tech Refresh Upgrade III

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.990	- / -	- / -	0 / 0.000	3 / 0.990
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 3.740	- / -	0 / 0.000	11 / 3.740
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.428	0 / 0.000	7 / 2.428
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.323	4 / 1.323
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	29 / 12.007	29 / 12.007
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.990	11 / 3.740	7 / 2.428	33 / 13.330	54 / 20.488

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	3	4	4	-	-	3	4	33	54
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	3	4	4	-	-	3	4	33	54

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 13 / CB130 DASR Tech Refresh Upgrade IV
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.270	5.838	5.523	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.270	5.838	5.523	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**3.270**	**5.838**	**5.523**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/GPN-30 DASR was developed by the Air Force as part of a joint DoD / FAA program to modernize and standardize ATC equipment in the National Airspace System. The DASR replaced aging, obsolete approach control radars and complied with joint DoD/FAA modernization program agreements. The inventory objective is 28. The DASR Tech Refresh Upgrade efforts implement Engineering Change Proposals (ECPs) developed by the Air Force / FAA that address urgent and critical issues associated with DASR subassemblies (including Commercial Off-The-Shelf (COTS) interface and control assemblies). The DASR Tech Refresh Upgrade IV effort will implement Engineering Change Proposals (ECPs) defined under cost element CB030 (Digital Airport Surveillance Radar (DASR)) of this budget. The ECPs included in CB130 will address issues identified during the transition to the DASR Replacement being developed under the FAA Airport Surveillance Radar - Replacement (ASR-R) Program which is currently scheduled for FY23 through FY30. The nature of this consolidation creates an interdependency between CB030 and CB130. Both hardware and software for these two cost elements overlap requiring concurrent efforts. Delay or interruption to either CB030 and/or CB130 causes a break in fleet capability and negatively impacts both safety of flight and Air Traffic Controller workload. CB130 is a follow-on to CB110 (DASR Tech Refresh III) which will complete procurements in FY26.

[DASR Tech Refresh Upgrade IV] The AN/GPN-30 DASR was developed by the Air Force as part of a joint DoD / FAA program to modernize and standardize ATC equipment in the National Airspace System. The DASR replaced aging, obsolete approach control radars and complied with joint DoD/FAA modernization program agreements. The inventory objective is 28. The DASR Tech Refresh Upgrade efforts implement Engineering Change Proposals (ECPs) developed by the Air Force / FAA that address urgent and critical issues associated with DASR subassemblies (including Commercial Off-The-Shelf (COTS) interface and control assemblies). The DASR Tech Refresh Upgrade IV effort will implement Engineering Change Proposals (ECPs) defined under cost element CB030 (Digital Airport Surveillance Radar (DASR)) of this budget. The ECPs included in CB130 will address issues identified during the transition to the DASR Replacement being developed under the FAA Airport Surveillance Radar - Replacement (ASR-R) Program which is currently scheduled for FY23 through FY30. The nature of this consolidation creates an interdependency between CB030 and CB130. Both hardware and software for these two cost elements overlap requiring concurrent efforts. Delay or interruption to either CB030 and/or CB130 causes a break in fleet capability and negatively impacts both safety of flight and Air Traffic Controller workload. CB130 is a follow-on to CB110 (DASR Tech Refresh III) which will complete procurements in FY26.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 13 / CB130 DASR Tech Refresh Upgrade IV
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CB130 DASR Tech Refresh Upgrade IV												
B Kits												
Recurring												
2.1.1) DASR Tech Refresh Upgrade IV - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.843	4 / 2.920	3 / 2.234	17 / 14.178	28 / 22.175
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.843*	*- / 2.920*	*- / 2.234*	*- / 14.178*	*- / 22.175*
Subtotal: CB130 DASR Tech Refresh Upgrade IV	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*4 / 2.843*	*4 / 2.920*	*3 / 2.234*	*17 / 14.178*	*28 / 22.175*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.843*	*- / 2.920*	*- / 2.234*	*- / 14.178*	*- / 22.175*
Support *(All Modification Items)*												
3.1) Logistics	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.127	- / 0.300	- / 0.306	Continuing	Continuing
3.2) Production Engineering	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.300	- / 0.518	- / 0.530	Continuing	Continuing
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.427*	*- / 0.818*	*- / 0.836*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: CB130 DASR Tech Refresh Upgrade IV	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 2.100	- / 2.453	- / 13.880	- / 18.433
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.100*	*- / 2.453*	*- / 13.880*	*- / 18.433*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**3.270**	**5.838**	**5.523**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 13 / CB130 DASR Tech Refresh Upgrade IV

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: CB130 DASR Tech Refresh Upgrade IV

Installation Information

Method of Implementation: Alteration Installation Team (AIT):: Installation Name: DASR Tech Refresh Upgrade IV

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.100	- / -	0 / 0.000	4 / 2.100
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.453	0 / 0.000	4 / 2.453
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.880	3 / 1.880
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 12.000	17 / 12.000
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.100	4 / 2.453	20 / 13.880	28 / 18.433

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	4	-	20	28
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	4	20	28

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 14 / X1036 AN/FPN-63 PAR TECH REFRESH
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	57.288	12.668	15.822	10.166	0.000	10.166	6.049	1.561	0.000	0.000	3.971	107.525
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	57.288	12.668	15.822	10.166	0.000	10.166	6.049	1.561	0.000	0.000	3.971	107.525
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**57.288**	**12.668**	**15.822**	**10.166**	**0.000**	**10.166**	**6.049**	**1.561**	**0.000**	**0.000**	**3.971**	**107.525**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The PAR Commercial-off-the-shelf (AN/FPN-68A) Upgrade replaces obsolete PAR systems (AN/FPN-63), continuing fleet shore-based Precision Approach capability. PAR (AN/FPN-63) safety-related ECPs are required to sustain the existing systems until replacement with the AN/FPN-68A. Installation costs will be site specific due to state and EPA regulations that will be adhered to for each install. Those ECPs include, but are not limited to, the Maintenance Walkway, the Modulator Board Upgrade, the Antenna Upgrade, the Configuration Upgrade, the Turntable Upgrade, the Fiber Optic Inter-site System (FOIS), and the Angle Voltage Generator (AVG) Upgrade.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 14 / X1036 AN/FPN-63 PAR TECH REFRESH
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Shore Sites	**Modification Type:** Reliability	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: X1036 AN/FPN-63 PAR TECH REFRESH												
B Kits												
Recurring												
1.1.1) X1036 - PAR Tech Refresh - NonOrganic	18 / 33.962	3 / 8.468	4 / 11.433	2 / 5.746	- / -	2 / 5.746	1 / 3.000	2 / 0.000	- / -	- / -	- / -	30 / 62.609
Subtotal: Recurring	*- / 33.962*	*- / 8.468*	*- / 11.433*	*- / 5.746*	*- / - /*	*- / 5.746*	*- / 3.000*	*- / - /*	*- / - /*	*- / - /*	*- / 0.000*	*- / 62.609*
Subtotal: X1036 AN/FPN-63 PAR TECH REFRESH	*18 / 33.962*	*3 / 8.468*	*4 / 11.433*	*2 / 5.746*	*- / - /*	*2 / 5.746*	*1 / 3.000*	*2 / 0.000*	*- / - /*	*- / - /*	*- / - /*	*30 / 62.609*
Subtotal: Procurement, All Modification Items	*- / 33.962*	*- / 8.468*	*- / 11.433*	*- / 5.746*	*- / - /*	*- / 5.746*	*- / 3.000*	*- / - /*	*- / - /*	*- / - /*	*- / 0.000*	*- / 62.609*
Support *(All Modification Items)*												
2.1) Integrated Logistics Support	- / 1.311	- / 0.160	- / 0.163	- / 0.137	- / -	- / 0.137	- / 0.110	- / 0.114	- / -	- / -	- / -	- / 1.995
2.2) Production Engineering	- / 5.124	- / 0.574	- / 0.589	- / 0.519	- / -	- / 0.519	- / 0.480	- / 0.598	- / -	- / -	- / -	- / 7.884
2.3) Quality Assurance	- / 0.194	- / 0.045	- / 0.046	- / 0.047	- / -	- / 0.047	- / 0.047	- / 0.049	- / -	- / -	- / -	- / 0.428
Subtotal: Support	*- / 6.629*	*- / 0.779*	*- / 0.798*	*- / 0.703*	*- / - /*	*- / 0.703*	*- / 0.637*	*- / 0.761*	*- / - /*	*- / - /*	*- / 0.000*	*- / 10.307*
Installation												
Modification Item 1 of 1: X1036 AN/FPN-63 PAR TECH REFRESH	- / 16.697	- / 3.421	- / 3.591	- / 3.717	- / 0.000	- / 3.717	- / 2.412	- / 0.800	- / 0.000	- / 0.000	- / 3.971	- / 34.609
Subtotal: Installation	*- / 16.697*	*- / 3.421*	*- / 3.591*	*- / 3.717*	*- / - /*	*- / 3.717*	*- / 2.412*	*- / 0.800*	*- / - /*	*- / - /*	*- / 3.971*	*- / 34.609*
Total												
Total Cost (Procurement + Support + Installation)	**57.288**	**12.668**	**15.822**	**10.166**	**0.000**	**10.166**	**6.049**	**1.561**	**0.000**	**0.000**	**3.971**	**107.525**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 14 / X1036 AN/FPN-63 PAR TECH REFRESH

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: X1036 AN/FPN-63 PAR TECH REFRESH

Manufacturer Information

Manufacturer Name: MOOG | Manufacturer Location: Salt Lake City, UT

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 13

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025		
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027		

Installation Information

Method of Implementation: Alteration Installation Team:: Installation Name: X1036 - PAR Tech Refresh

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	15 / 16.697	3 / 3.421	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	18 / 20.118
FY 2022	- / -	- / -	3 / 3.591	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 3.591
FY 2023	- / -	- / -	- / -	4 / 3.717	0 / 0.000	4 / 3.717	- / -	- / -	- / -	- / -	0 / 0.000	4 / 3.717
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.412	- / -	- / -	- / -	0 / 0.000	2 / 2.412
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.800	- / -	- / -	0 / 0.000	1 / 0.800
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 3.971	2 / 3.971
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	15 / 16.697	3 / 3.421	3 / 3.591	4 / 3.717	0 / 0.000	4 / 3.717	2 / 2.412	1 / 0.800	- / -	- / -	2 / 3.971	30 / 34.609

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	15	-	1	1	1	-	1	1	1	-	2	1	1	-	-	1	1	-	1	-	-	-	-	-	-	-	-	-	-	2	30
Out	15	-	1	1	1	-	1	1	1	-	2	1	1	-	-	1	1	-	1	-	-	-	-	-	-	-	-	-	-	2	30

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 15 / X1037 Instrument Landing System Upgrade
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	22.681	5.574	5.645	6.814	0.000	6.814	4.308	0.000	0.000	0.000	0.000	45.022
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	22.681	5.574	5.645	6.814	0.000	6.814	4.308	0.000	0.000	0.000	0.000	45.022
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**22.681**	**5.574**	**5.645**	**6.814**	**0.000**	**6.814**	**4.308**	**0.000**	**0.000**	**0.000**	**0.000**	**45.022**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Instrument Landing System AN/GRN-33(V) is an automated self-contained system providing precision approach to the air station runways for ILS equipped aircraft reducing manpower required for ground personnel. The First Article unit will have a higher installation cost because of the additional infrastructure to maintain a test bed for NAWCAD Patuxent River. Site surveys are required to be conducted at least three years ahead of system installation to allow for infrastructure upgrades required to install the systems at the air stations.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 15 / X1037 Instrument Landing System Upgrade
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: X1037 Instrument Landing System Upgrade												
B Kits												
Recurring												
1.1.1) Instrument Landing System Upgrades - NonOrganic (19)	10 / 3.707	3 / 1.143	3 / 1.145	4 / 1.666	- / -	4 / 1.666	- / -	- / -	- / -	- / -	- / -	20 / 7.661
Subtotal: Recurring	*- / 3.707*	*- / 1.143*	*- / 1.145*	*- / 1.666*	*- / -*	*- / 1.666*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 7.661*
Subtotal: X1037 Instrument Landing System Upgrade	*10 / 3.707*	*3 / 1.143*	*3 / 1.145*	*4 / 1.666*	*- / -*	*4 / 1.666*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*20 / 7.661*
Subtotal: Procurement, All Modification Items	*- / 3.707*	*- / 1.143*	*- / 1.145*	*- / 1.666*	*- / -*	*- / 1.666*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 7.661*
Support *(All Modification Items)*												
2.1) Logistics	- / 2.232	- / 0.480	- / 0.490	- / 0.550	- / -	- / 0.550	- / 0.396	- / -	- / -	- / -	- / -	- / 4.148
2.2) Production Engineering	- / 5.071	- / 1.086	- / 1.108	- / 1.507	- / -	- / 1.507	- / 0.685	- / -	- / -	- / -	- / -	- / 9.457
2.4) Quality Assurance	- / 0.206	- / 0.045	- / 0.026	- / 0.047	- / -	- / 0.047	- / 0.047	- / -	- / -	- / -	- / -	- / 0.371
Subtotal: Support	*- / 7.509*	*- / 1.611*	*- / 1.624*	*- / 2.104*	*- / -*	*- / 2.104*	*- / 1.128*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 13.976*
Installation												
Modification Item 1 of 1: X1037 Instrument Landing System Upgrade	- / 11.465	- / 2.820	- / 2.876	- / 3.044	- / 0.000	- / 3.044	- / 3.180	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 23.385
Subtotal: Installation	*- / 11.465*	*- / 2.820*	*- / 2.876*	*- / 3.044*	*- / -*	*- / 3.044*	*- / 3.180*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 23.385*
Total												
Total Cost (Procurement + Support + Installation)	**22.681**	**5.574**	**5.645**	**6.814**	**0.000**	**6.814**	**4.308**	**0.000**	**0.000**	**0.000**	**0.000**	**45.022**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 15 / X1037 Instrument Landing System Upgrade

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: X1037 Instrument Landing System Upgrade

Manufacturer Information

Manufacturer Name: Selex ES | Manufacturer Location: Overland Park, KS

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 13

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024			
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026			

Installation Information

Method of Implementation: Alteration Installation Team (AIT):: Installation Name: Instrument Landing System Upgrades

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	7 / 11.465	3 / 2.820	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 14.285
FY 2022	- / -	- / -	3 / 2.876	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 2.876
FY 2023	- / -	- / -	- / -	3 / 3.044	0 / 0.000	3 / 3.044	- / -	- / -	- / -	- / -	0 / 0.000	3 / 3.044
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	4 / 3.180	- / -	- / -	- / -	0 / 0.000	4 / 3.180
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	7 / 11.465	3 / 2.820	3 / 2.876	3 / 3.044	0 / 0.000	3 / 3.044	4 / 3.180	- / -	- / -	- / -	0 / 0.000	20 / 23.385

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	7	-	1	1	1	1	1	1	-	1	1	1	-	-	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	20
Out	7	-	1	1	1	1	1	1	-	1	1	1	-	-	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	20

Footnotes:

(19) Inventory objective is 31. Each site (airfield, air station, etc.) will have an independent installation cost base on existing site configurations.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 16 / X1044 Landing Systems Tech Refresh
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.709	0.000	0.709	0.717	0.733	0.748	0.763	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.709	0.000	0.709	0.717	0.733	0.748	0.763	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.709**	**0.000**	**0.709**	**0.717**	**0.733**	**0.748**	**0.763**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Landing Systems Tech Refresh will maintain the Navy and Marine Corps self-contained Precision Landing capability at selected Air Stations, to meet fleet requirements for safe aircraft recovery. The AN/FPN-68 Precision Approach Radar (PAR) and AN/GRN-33 Instrument Landing System (ILS) were developed to modernize and standardize Shore Landing Systems equipment which has enabled Navy/Marine Corps Air Stations to replace aging, obsolete equipment. This Tech Refresh effort includes Engineering Change Proposal (ECP) efforts that are directly related to the PAR and ILS. The ECPs will introduce new capabilities into the PAR and ILS. Those ECPs include, but are not limited to, replacing obsolete servers for the PAR, updating the width/height indicator for PAR, updating decimination rate for PAR, updating the Maintenance Personal Computer (MPC) and Radar Display System (RDS) for the PAR. PAR inventory objective is 30. ILS inventory objective is 22. The original procurements, installations and associated support costs for PAR were funded under X1036 and ILS were funded under X1037. Operational Capability Improvement Requests (OCIRs) are submitted under OPNAV Instruction 3721.5M NAVAL AIR TRAFFIC CONTROL AIR NAVIGATION AIDS AND LANDING SYSTEMS PROGRAM by Fleet Activities to establish a new requirement/capability. OCIRs provide for the procurement and / or modification of critically needed electronic systems / equipment at Navy / Marine Corps Air Traffic Control facilities worldwide. This program will address the 2022 OPNAV ATC Naval Aviation Requirements Group (NARG) Shore Priority #1 (PAR Capability) and Priority #2 (ILS Capability).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 16 / X1044 Landing Systems Tech Refresh
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: X1044 Landing Systems Tech Refresh												
B Kits												
Recurring												
1.1.1) ECP/OCIR - Organic [20]	- / -	- / -	- / -	- / 0.709	- / -	- / 0.709	- / 0.717	- / 0.733	- / 0.748	- / 0.763	Continuing	Continuing
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / 0.709*	*- / -*	*- / 0.709*	*- / 0.717*	*- / 0.733*	*- / 0.748*	*- / 0.763*	*Continuing*	*Continuing*
Subtotal: X1044 Landing Systems Tech Refresh	*- / -*	*- / -*	*- / -*	*- / 0.709*	*- / -*	*- / 0.709*	*- / 0.717*	*- / 0.733*	*- / 0.748*	*- / 0.763*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / 0.709*	*- / -*	*- / 0.709*	*- / 0.717*	*- / 0.733*	*- / 0.748*	*- / 0.763*	*Continuing*	*Continuing*
Installation												
Subtotal: Installation	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**0.709**	**0.000**	**0.709**	**0.717**	**0.733**	**0.748**	**0.763**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 16 / X1044 Landing Systems Tech Refresh
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: X1044 Landing Systems Tech Refresh

Manufacturer Information

Manufacturer Name: L3 Harris				Manufacturer Location: Van Nuys, CA			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 13			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates							
Delivery Dates							

Manufacturer Name: Selex ES				Manufacturer Location: Overland Park, KS			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 13			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates							
Delivery Dates							

Manufacturer Name: NIWC PAC				Manufacturer Location: San Diego, Ca			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 13			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates							
Delivery Dates							

Manufacturer Name: NAWC WOLF				Manufacturer Location: St. Inigoes, NAS Patuxent River MD			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 13			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates							
Delivery Dates							

Footnotes:

(20) Support and installation costs are included in the ECP/OCIR End Item.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 17 / X1043 TACAN Antenna Upgrade
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	57.479	7.498	9.783	10.289	0.000	10.289	10.659	13.189	13.527	13.797	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	57.479	7.498	9.783	10.289	0.000	10.289	10.659	13.189	13.527	13.797	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**57.479**	**7.498**	**9.783**	**10.289**	**0.000**	**10.289**	**10.659**	**13.189**	**13.527**	**13.797**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The TACAN Antenna Upgrade program will provide ships and shore installations with a new antenna for TACAN systems. Justification: TACAN is a dated systems with multiple obsolete parts. Modernization of the TACAN antenna is required to reduce maintenance and improve life span in order to meet needs of the Fleet, and provide a stand-alone recovery system for small combatants of the JPALS program restructure. Multiple Engineering Change Proposals (ECP) will address obsolescence with the system.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 17 / X1043 TACAN Antenna Upgrade
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Shore Sites	**Modification Type:** Modernization	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: X1043 TACAN Antenna Upgrade												
B Kits												
Recurring												
1.1.1) TACAN Antenna Upgrade - NonOrganic (21)	107 / 26.865	12 / 3.321	25 / 7.128	19 / 5.580	- / -	19 / 5.580	22 / 6.749	12 / 3.743	12 / 3.818	12 / 3.894	44 / 14.938	265 / 76.036
1.1.2) TACAN Shore Antenna - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 2.160	12 / 2.203	12 / 2.247	26 / 2.109	62 / 8.719
Subtotal: Recurring	*- / 26.865*	*- / 3.321*	*- / 7.128*	*- / 5.580*	*- / -*	*- / 5.580*	*- / 6.749*	*- / 5.903*	*- / 6.021*	*- / 6.141*	*- / 17.047*	*- / 84.755*
Subtotal: X1043 TACAN Antenna Upgrade	*107 / 26.865*	*12 / 3.321*	*25 / 7.128*	*19 / 5.580*	*- / -*	*19 / 5.580*	*22 / 6.749*	*24 / 5.903*	*24 / 6.021*	*24 / 6.141*	*70 / 17.047*	*327 / 84.755*
Subtotal: Procurement, All Modification Items	*- / 26.865*	*- / 3.321*	*- / 7.128*	*- / 5.580*	*- / -*	*- / 5.580*	*- / 6.749*	*- / 5.903*	*- / 6.021*	*- / 6.141*	*- / 17.047*	*- / 84.755*
Support *(All Modification Items)*												
2.1) Logistics (22)	- / 3.721	- / 0.238	- / 0.242	- / 0.248	- / -	- / 0.248	- / 0.252	- / 1.363	- / 1.594	- / 1.626	Continuing	Continuing
2.2) Production Engineering (23)	- / 4.005	- / 0.541	- / 0.694	- / 0.923	- / -	- / 0.923	- / 0.958	- / 2.403	- / 2.824	- / 2.880	Continuing	Continuing
2.3) Quality Assurance	- / 0.274	- / 0.040	- / 0.040	- / 0.041	- / -	- / 0.041	- / 0.042	- / 0.443	- / 0.452	- / 0.461	Continuing	Continuing
Subtotal: Support	*- / 8.000*	*- / 0.819*	*- / 0.976*	*- / 1.212*	*- / -*	*- / 1.212*	*- / 1.252*	*- / 4.209*	*- / 4.870*	*- / 4.967*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: X1043 TACAN Antenna Upgrade	- / 22.614	- / 3.358	- / 1.679	- / 3.497	- / 0.000	- / 3.497	- / 2.658	- / 3.077	- / 2.636	- / 2.689	- / 19.789	- / 61.997
Subtotal: Installation	*- / 22.614*	*- / 3.358*	*- / 1.679*	*- / 3.497*	*- / -*	*- / 3.497*	*- / 2.658*	*- / 3.077*	*- / 2.636*	*- / 2.689*	*- / 19.789*	*- / 61.997*
Total												
Total Cost (Procurement + Support + Installation)	**57.479**	**7.498**	**9.783**	**10.289**	**0.000**	**10.289**	**10.659**	**13.189**	**13.527**	**13.797**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 17 / X1043 TACAN Antenna Upgrade
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: X1043 TACAN Antenna Upgrade

Manufacturer Information

Manufacturer Name: MOOG	Manufacturer Location: Salt Lake City, UT
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 13

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	
Delivery Dates	Jan 2023	Jan 2024	Jan 2025	Jan 2026	Jan 2027	Jan 2028	

Installation Information

Method of Implementation: AIT Installation:: Installation Name: TACAN Antenna Upgrade

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	83 / 22.614	24 / 3.358	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	107 / 25.972
FY 2022	- / -	- / -	12 / 1.679	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	12 / 1.679
FY 2023	- / -	- / -	- / -	25 / 3.497	0 / 0.000	25 / 3.497	- / -	- / -	- / -	- / -	0 / 0.000	25 / 3.497
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	19 / 2.658	- / -	- / -	- / -	0 / 0.000	19 / 2.658
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	22 / 3.077	- / -	- / -	0 / 0.000	22 / 3.077
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 1.712	- / -	0 / 0.000	12 / 1.712
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 1.746	0 / 0.000	12 / 1.746
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 1.781	12 / 1.781
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	44 / 14.938	44 / 14.938
Total	83 / 22.614	24 / 3.358	12 / 1.679	25 / 3.497	0 / 0.000	25 / 3.497	19 / 2.658	22 / 3.077	12 / 1.712	12 / 1.746	56 / 16.719	265 / 57.060

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	83	-	8	8	8	-	4	4	4	-	8	8	9	-	7	6	6	-	8	7	7	-	4	5	3	-	4	5	3	56	265
Out	83	-	8	8	8	-	4	4	4	-	8	8	9	-	7	6	6	-	8	7	7	-	4	5	3	-	4	5	3	56	265

Method of Implementation: TBD:: Installation Name: TBD

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 17 / X1043 TACAN Antenna Upgrade
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: X1043 TACAN Antenna Upgrade

Installation Information

Method of Implementation: TBD:: Installation Name: TBD

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.924	- / -	0 / 0.000	12 / 0.924
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.943	0 / 0.000	12 / 0.943
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.961	12 / 0.961
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	26 / 2.109	26 / 2.109
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.924	12 / 0.943	38 / 3.070	62 / 4.937

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	-	4	4	4	38	62
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	-	4	4	4	38	62

Footnotes:

(21) X1043: Inventory objective is 265.

(22) Increased PE/ILS costs ISO the initial Shore Antenna procurement.

(23) Increased PE/ILS costs ISO the initial Shore Antenna procurement.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 18 / INACTIVE PROJECTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	89.218	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	89.218
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	89.218	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	89.218
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**89.218**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**89.218**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:
Inactive Projects prior year totals.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2820 / Ashore ATC Equipment	**Modification Number / Title:** 18 / INACTIVE PROJECTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan (*) Indicates the modification is being installed organically and no installation funds are required.	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
1.1.1) Inactive Projects - Organic(*)	- / 89.218	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 89.218
Subtotal: Procurement	*- / 89.218*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 89.218*
Installation												
Subtotal: Installation	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*
Total												
Total Cost (Procurement + Support + Installation)	**89.218**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**89.218**

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	231.417	61.502	79.591	90.487	0.000	90.487	93.448	107.568	108.545	112.950	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	231.417	61.502	79.591	90.487	0.000	90.487	93.448	107.568	108.545	112.950	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**231.417**	**61.502**	**79.591**	**90.487**	**0.000**	**90.487**	**93.448**	**107.568**	**108.545**	**112.950**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	6.184	5.178	5.730	-	5.730	0.145	0.263	-	-	-	17.500
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

In FY 2016 and prior years, efforts for Shipboard Air Traffic Control (SATC) and Automatic Carrier Landing System (ACLS) were previously funded under BLIs OPN 2831 and OPN 2832, respectively.

DESCRIPTION:
Shipboard Air Traffic Control (SATC):
SATC systems are responsible for safe and expeditious control of air traffic within 50 Nautical Miles of a ship. SATC systems include the air traffic surveillance radar (ASR), AN/SPN43 and the air traffic control processing and display system, AN/TPX-42A(V), which has three major configurations: AN/TPX-42A(V)14/15/16. v14 and v16 configurations comprise of Carrier Air Traffic Control Center - Direct Altitude and Identity Readout (CATCC-DAIR), Amphibious Air Traffic Control Center - Direct Altitude and Identity Readout (AATCC-DAIR); both (V)14 and (V)16 DAIR systems use AN/SPN-43 and Identification Friend or Foe (IFF) inputs to track and control aircraft. The third configuration, AN/TPX-42A(V)15 interfaces with next generation multipurpose radars and IFF to perform the same mission. Obsolescence problems are being addressed through various upgrades in a phased approach. The major upgrades include a series of AN/TPX-42A(V) modification kits requiring various combinations of OL-541processor re-host, track processor upgrade, OD-220 console, audio/video recorder, flat panel display, embedded trainer, and other components to bring the AN/TPX-42A(V)14 system to AN/TPX-42A(V)16 configuration and eventually, through execution of the Air Traffic Control Multifunction Console Engineering Change Proposal (ECP), to the AN/SYY-1 configuration. The nomenclature AN/SYY-1 more accurately reflects the system attributes as a (S) water (Surface Ship), (Y) data processing, (Y) surveillance and control system. The ASR capability provided by the AN/SPN-43 radar system is required for NIMITZ Class CVNs and LHA/LHD class ships until the capability is replaced by the AN/SPN-50 Shipboard Air Traffic Radar. Obsolescence problems are being addressed through various upgrades in a phased approach until replaced.

Shipboard Air Traffic Radar (SATR) (SPN-50)
The "National Defense Strategy of the United States of America" calls for military forces to assure allies and friends, dissuade potential adversaries, deter aggression and counter coercion, and defeat adversaries in order to accomplish our national objectives. The Shipboard Air Traffic Radar (SATR) AN/SPN-50(V)1 (hereinafter referred to as AN/SPN-50(V)1) supports these objectives and will be the primary Air Traffic Control (ATC) surveillance radar onboard Nimitz Class Aircraft Carrier (CVN) and Amphibious (LHA and LHD (LH)) type ships. The launch and recovery of aircraft, to include, ATC is a primary function of aircraft carriers and amphibious landing platforms. The surveillance function provides weather and radar data to air traffic controllers supporting aviation operations of all Navy, Marine Corps, joint and allied aviation assets within the assigned airspace. This data is utilized by air traffic controllers to provide a variety of ATC services such as ATC radar approach and departure services, which includes aircraft separation, airspace monitoring, navigational assistance, emergency vectoring, traffic calls, and vectoring and sequencing to the final approach point. Reliable and accurate ATC surveillance radar enhances overall mission and training effectiveness, and safety for aircrews and aircraft alike. The SPN-50 CDD was signed March 2015 and Milestone B was held September 2015 where the Milestone Decision Authority (MDA) designated the SPN-50 Program as an ACAT 4(T). The SPN-50 CPD was signed November 2018. Milestone C was achieved September 2020 and IOC is planned for 1st quarter FY 2023. The AN/SPN-50(V) inventory objective is 25 systems (5 LRIPs, and 20 FRP).

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Automatic Carrier Landing System (ACLS):
ACLS program comprises three legacy systems (AN/SPN-46, AN/SPN-41, and AN/SPN-35C) that provide the primary and secondary precision electronic guidance for landing suitably equipped aircraft under all weather conditions on CVNs, LHA/LHD class ships, and selected Naval Air Stations. Many of the components in the system have been in service for more than twenty years. This program funds maintainability, reliability, modernization and supportability improvements to existing equipment components that can no longer be maintained, procured or supported, as well as items providing upgraded capability and improved operational relevance in more environments. Life Cycle Extension (LCE) sustainment efforts for ACLS systems will be completed to address obsolescence and supportability issues, leverage Commercial Off-The-Shelf (COTS) technology, address cyber-security updates and requirements, and support external system interface requirements. The LCE efforts by system are planned to be conducted in blocks, to address the most critical obsolescence, supportability, and emergent requirements first and to group remaining improvements into logical block upgrade packages that minimize multiple, duplicative repair efforts and reduce costs while delivering hardware in a time phased approach to meet ship maintenance availability schedules. This program includes a shore-based variant, installed at key airfields, that provides identical control signal indications (for pilot familiarization) as those provided by the afloat based systems on board CVN and L-Class vessels.

AN/SPN-46 Automatic Carrier Landing System (ACLS) is a Precision Approach Landing System (PALS) on board CVN class ships that provides aircraft position information to the Final Control Workstation in Carrier Air Traffic Control Center (CATCC), and provides the pilot with the capability of selecting a fully automatic, instrument landing, or talk down approach. This system is certified to provide the carrier with an all-weather flight operational capability. Initial Operational Capability (IOC) of the AN/SPN-46 was in 1985, and the system has exceeded its design life. There are significant obsolescence issues. AN/SPN-46 Block IV upgrade is designed to correct known obsolescence issues in the antenna pedestal, 50KW Ka band modulator/transmitter, and various Circuit Card Assemblies (CCAs). If this effort is not accomplished, replacement parts will not be available to support the system, thereby, negatively affecting Operational Availability (Ao) and safety of flight on the aircraft
carrier.

AN/SPN-41 Transmitting set provides all weather instrument approach guidance from the ship to the aircraft equipped with AN/ARA-63 Receiver Group. It is a secondary precision electronic landing system and safety of flight back
up to provide azimuth and elevation alignment information to suitably equipped aircraft aboard CVN and LHA/LHD class ships. Initial Operational Capability (IOC) of the AN/SPN-41 was in 1970 and the system has exceeded its design life. AN/SPN-41 LCE upgrades include the Transmitter, Coder Monitor, Electronics Drawer, and Radome hardware to ensure continued operational availability of and extended the service life of the AN/SPN-41, and is the Joint Precision Approach and Landing System (JPALS) back-up system.

AN/SPN-35C is the Precision Approach Radar aboard LHA/LHD class ships and is used for Mode III aircraft recovery, which ensures the safe approach and landing of fixed and rotary wing aircraft during adverse weather and night conditions. Initial Operational Capability (IOC) of the AN/SPN-35C was in 2004. The AN/SPN-35C Block I upgrade planned to include replacement of high-failure items, obsolete components, and analog system components. However, the AN/ SPN-35C Block I program was terminated due to delays with EDM deliveries, and the impact on qualification testing and subsequent production efforts. Termination of the AN/SPN-35C Block I accelerates the AN/SPN-35C Block II program. The AN/SPN-35C Block II addresses the technological issues of the AN/SPN-35C Block I program, as well as obsolescence and operational limitations of the receiver-transmitter, pedestal, antenna group, and stabilization subsystem. These changes will improve operational availability and operational relevance in more environments.

Procurement, installations and associated support costs with these efforts prior to FY 2017 were funded under BLI 2832.

Installing Agent: Shipyards and Alteration Installation Teams.
When installation to be made: Selected Restricted Availability (SRA) / Restricted Availability (RAV).
Ships or facilities to receive the equipment: CVNs, LHA/LHD class ships, Software Support Activity (NAWCAD, St Inigoes, MD) and various selected shore and training sites.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	**Title***	**Subexhibits**	**ID CD**	**MDAP/ MAIS Code**	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*
P-3a	1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059) (Modernization)				- / 37.944	- / 8.470	- / 9.490	- / 9.281	- / 0.000	- / 9.281
P-3a	2 / AN/SPN-50(V)1 (TBD)				- / 47.412	- / 25.633	- / 47.047	- / 57.968	- / 0.000	- / 57.968
P-3a	3 / ACLS MOD KITS SUMMARY PN408 (Modernization)				- / 74.739	- / 14.542	- / 9.764	- / 11.143	- / 0.000	- / 11.143
P-3a	8 / AN/SPN-46 Block IV (PN420) (TBD)				- / 40.969	- / 12.857	- / 13.290	- / 12.095	- / 0.000	- / 12.095
P-3a	10 / AN/SPN-35 Block II (PN422) (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	11 / AN/SPN-46 Block V (PN423) (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	12 / INACTIVE PROJECTS (TBD)				- / 30.353	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40	**Total Gross/Weapon System Cost**				**- / 231.417**	**- / 61.502**	**- / 79.591**	**- / 90.487**	**- / 0.000**	**- / 90.487**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	**Title***	**Subexhibits**	**ID CD**	**MDAP/ MAIS Code**	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*
P-3a	1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059) (Modernization)				- / 7.632	- / 9.248	- / 3.945	- / 3.605	Continuing	Continuing
P-3a	2 / AN/SPN-50(V)1 (TBD)				- / 58.276	- / 57.856	- / 70.011	- / 30.126	- / 33.815	- / 428.144
P-3a	3 / ACLS MOD KITS SUMMARY PN408 (Modernization)				- / 15.475	- / 14.502	- / 13.358	- / 11.964	Continuing	Continuing
P-3a	8 / AN/SPN-46 Block IV (PN420) (TBD)				- / 12.065	- / 6.239	- / 1.942	- / 0.990	- / 0.000	- / 100.447
P-3a	10 / AN/SPN-35 Block II (PN422) (TBD)				- / 0.000	- / 12.865	- / 13.122	- / 58.738	Continuing	Continuing
P-3a	11 / AN/SPN-46 Block V (PN423) (TBD)				- / 0.000	- / 6.858	- / 6.167	- / 7.527	Continuing	Continuing
P-3a	12 / INACTIVE PROJECTS (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 30.353
P-40	**Total Gross/Weapon System Cost**				**- / 93.448**	**- / 107.568**	**- / 108.545**	**- / 112.950**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY 2024 funds baseline programs to provide Automatic Carrier Landing System (ACLS), Shipboard Air Traffic Control (SATC), and Shipboard Air Traffic Radar (SATR) systems.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	37.944	8.470	9.490	9.281	0.000	9.281	7.632	9.248	3.945	3.605	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	37.944	8.470	9.490	9.281	0.000	9.281	7.632	9.248	3.945	3.605	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**37.944**	**8.470**	**9.490**	**9.281**	**0.000**	**9.281**	**7.632**	**9.248**	**3.945**	**3.605**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:
This equipment and installation costs on this P-3a are for individual modification programs. This exhibit summarizes procurement and installation for Cost Codes MP054, MP056, MP057, MP058, and MP059. Line item Engineering Changes to Correct Deficiencies captures unanticipated emergent engineering changes.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: CVNs, LHA/LHD class ships	**Modification Type:** Modernization	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)												
B Kits												
Recurring												
1.1.4) (MP054)TPX-42 UPG, FC4 (Recorders) - NonOrganic	25 / 0.845	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	25 / 0.845
1.1.5) (MP056) TPX-42 Embedded Trainer - NonOrganic	17 / 3.689	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	17 / 3.689
1.1.6) (MP057) TPX-42 Embedded Trainer Final Control - NonOrganic (1)	18 / 0.856	7 / 0.398	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	25 / 1.254
1.1.7) (MP058) TPX-42 Multi-Function Console - NonOrganic (2)	9 / 11.776	4 / 5.274	4 / 5.380	2 / 2.717	- / -	2 / 2.717	2 / 2.900	3 / 4.437	1 / 1.485	- / -	- / -	25 / 33.969
1.1.8) (MP059) TPX-42 ECP Upgrades - NonOrganic (3)	9 / 2.767	- / -	- / -	6 / 1.713	- / -	6 / 1.713	6 / 1.748	6 / 1.783	- / -	- / -	- / -	27 / 8.011
1.1.9) SYY-1 ECP Upgrades - Organic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 1.855	- / -	6 / 1.855
Subtotal: Recurring	*- / 19.933*	*- / 5.672*	*- / 5.380*	*- / 4.430*	*- / -*	*- / 4.430*	*- / 4.648*	*- / 6.220*	*- / 1.485*	*- / 1.855*	*- / 0.000*	*- / 49.623*
Subtotal: SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)	*78 / 19.933*	*11 / 5.672*	*4 / 5.380*	*8 / 4.430*	*- / -*	*8 / 4.430*	*8 / 4.648*	*9 / 6.220*	*1 / 1.485*	*6 / 1.855*	*- / -*	*125 / 49.623*
Subtotal: Procurement, All Modification Items	*- / 19.933*	*- / 5.672*	*- / 5.380*	*- / 4.430*	*- / -*	*- / 4.430*	*- / 4.648*	*- / 6.220*	*- / 1.485*	*- / 1.855*	*- / 0.000*	*- / 49.623*
Support *(All Modification Items)*												
2.1) Engineering Changes to Correct Deficiencies	- / 2.660	- / 0.621	- / 0.521	- / 0.530	- / -	- / 0.530	- / 0.550	- / 0.561	- / 0.326	- / 0.333	Continuing	Continuing
2.2) Integrated Logistics Support	- / 1.447	- / 0.303	- / 0.307	- / 0.312	- / -	- / 0.312	- / 0.320	- / 0.326	- / 0.228	- / 0.233	Continuing	Continuing
2.3) Production Engineering	- / 1.391	- / 0.291	- / 0.295	- / 0.300	- / -	- / 0.300	- / 0.310	- / 0.329	- / 0.271	- / 0.276	Continuing	Continuing
2.4) Quality Assurance	- / 0.258	- / 0.054	- / 0.055	- / 0.055	- / -	- / 0.055	- / 0.056	- / 0.057	- / 0.057	- / 0.058	Continuing	Continuing
Subtotal: Support	*- / 5.756*	*- / 1.269*	*- / 1.178*	*- / 1.197*	*- / -*	*- / 1.197*	*- / 1.236*	*- / 1.273*	*- / 0.882*	*- / 0.900*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)	- / 12.255	- / 1.529	- / 2.932	- / 3.654	- / 0.000	- / 3.654	- / 1.748	- / 1.755	- / 1.578	- / 0.850	- / 0.000	- / 26.301
Subtotal: Installation	*- / 12.255*	*- / 1.529*	*- / 2.932*	*- / 3.654*	*- / -*	*- / 3.654*	*- / 1.748*	*- / 1.755*	*- / 1.578*	*- / 0.850*	*- / 0.000*	*- / 26.301*
Total												

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: CVNs, LHA/LHD class ships	**Modification Type:** Modernization	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total Cost (Procurement + Support + Installation)	**37.944**	**8.470**	**9.490**	**9.281**	**0.000**	**9.281**	**7.632**	**9.248**	**3.945**	**3.605**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

Manufacturer Information

Manufacturer Name: NAWCAD — Manufacturer Location: Patuxent River, MD

Administrative Leadtime *(in Months)*: 7 — Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Apr 2022	Apr 2023	Apr 2024	Apr 2025			
Delivery Dates	Oct 2022	Oct 2023	Oct 2024	Oct 2025			

Manufacturer Name: NAWCAD — Manufacturer Location: St. Inigoes, MD

Administrative Leadtime *(in Months)*: 6 — Production Leadtime *(in Months)*: 9

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023	Mar 2024	Mar 2025	Mar 2026		
Delivery Dates	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026		

Installation Information

Method of Implementation: [none specified]:: Installation Name: (MP054)TPX-42 UPG, FC4 (Recorders)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	25 / 1.981	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	25 / 1.981
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	25 / 1.981	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	25 / 1.981

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

Installation Information

Method of Implementation: [none specified]:: Installation Name: (MP054)TPX-42 UPG, FC4 (Recorders)

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
Out	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25

Method of Implementation: [none specified]:: Installation Name: (MP056) TPX-42 Embedded Trainer

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	17 / 4.449	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	17 / 4.449
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	17 / 4.449	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	17 / 4.449

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17
Out	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

Installation Information

Method of Implementation: [none specified]:: Installation Name: (MP057) TPX-42 Embedded Trainer Final Control

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	13 / 0.707	5 / 0.274	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	18 / 0.981
FY 2022	- / -	- / -	7 / 0.384	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 0.384
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	13 / 0.707	5 / 0.274	7 / 0.384	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	25 / 1.365

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	13	-	1	2	2	-	2	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
Out	13	-	1	2	2	-	2	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25

Method of Implementation: AIT:: Installation Name: (MP058) TPX-42 Multi-Function Console

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	6 / 3.581	2 / 1.255	1 / 0.637	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 5.473
FY 2022	- / -	- / -	3 / 1.911	1 / 0.646	0 / 0.000	1 / 0.646	- / -	- / -	- / -	- / -	0 / 0.000	4 / 2.557
FY 2023	- / -	- / -	- / -	4 / 2.576	0 / 0.000	4 / 2.576	- / -	- / -	- / -	- / -	0 / 0.000	4 / 2.576
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.310	- / -	- / -	- / -	0 / 0.000	2 / 1.310
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.315	- / -	- / -	0 / 0.000	2 / 1.315
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.578	- / -	0 / 0.000	3 / 1.578
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.850	0 / 0.000	1 / 0.850

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

Installation Information

Method of Implementation: AIT:: Installation Name: (MP058) TPX-42 Multi-Function Console

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	6 / 3.581	2 / 1.255	4 / 2.548	5 / 3.222	0 / 0.000	5 / 3.222	2 / 1.310	2 / 1.315	3 / 1.578	1 / 0.850	0 / 0.000	25 / 15.659

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	6	1	1	-	-	1	1	1	1	1	1	2	1	-	-	1	1	-	-	1	1	-	-	1	2	-	-	1	-	-	25
Out	6	1	1	-	-	1	1	1	1	1	1	2	1	-	-	1	1	-	-	1	1	-	-	1	2	-	-	1	-	-	25

Method of Implementation: AIT:: Installation Name: (MP059) TPX-42 ECP Upgrades

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	9 / 1.537	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 1.537
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	6 / 0.432	0 / 0.000	6 / 0.432	- / -	- / -	- / -	- / -	0 / 0.000	6 / 0.432
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.438	- / -	- / -	- / -	0 / 0.000	6 / 0.438
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.440	- / -	- / -	0 / 0.000	6 / 0.440
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	9 / 1.537	- / -	- / -	6 / 0.432	0 / 0.000	6 / 0.432	6 / 0.438	6 / 0.440	- / -	- / -	0 / 0.000	27 / 2.847

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 1 / SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: SATC Modernization Kit Summary (MP054, MP056, MP057, MP058, MP059)

Installation Information

Method of Implementation: AIT:: Installation Name: (MP059) TPX-42 ECP Upgrades

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	9	-	-	-	-	-	-	-	-	-	-	3	3	-	-	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	27
Out	9	-	-	-	-	-	-	-	-	-	-	3	3	-	-	3	3	-	-	3	3	-	-	-	-	-	-	-	-	-	27

Method of Implementation (Organic): SYY-1 ECP Upgrades - Not Installed **Installation Quantity:** 6

Footnotes:

(1) MP057 TPX-42 Embedded Trainer Final Control: Inventory Objective is 25.

(2) MP058 TPX-42 Multi-Function Console: Inventory Objective is 25. The 2 procurements requested in FY 2024 are required to be procured in FY 2024 to support the 15 month lead time and ship installation availability. The Multi-Function Console (MFC) provides a common human interface for all ATC workstations that includes complete upgrades of software and hardware to support new radar sensors that will reduce operational costs and improve reliability. This item is currently in development and is reflected in the RDT&E Budget (PE 0604504N Air Control/Project Unit 0993). Many of the other items in this P-3a are Engineering Change Proposals to resolve obsolescence issues. One system consists of OD/220 controller consoles, OL/541 racks and MT7326 power distribution racks. The OL/541 and MT7326 are common between CVNs and LHD/LHAs, OD/220s however vary between the type of ship, there are 5 OD/220s on CVNs and 8 OD/220s on LHA/Ds.

(3) MP059 TPX-42 ECP Upgrades. The 6 upgrades requested in FY 2024 supports emergent changes to address obsolete system displays.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 2 / AN/SPN-50(V)1
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	47.412	25.633	47.047	57.968	0.000	57.968	58.276	57.856	70.011	30.126	33.815	428.144
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	47.412	25.633	47.047	57.968	0.000	57.968	58.276	57.856	70.011	30.126	33.815	428.144
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**47.412**	**25.633**	**47.047**	**57.968**	**0.000**	**57.968**	**58.276**	**57.856**	**70.011**	**30.126**	**33.815**	**428.144**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Shipboard Air Traffic Radar (SATR) (AN/SPN-50(V)1)

The "National Defense Strategy of the United States of America" calls for military forces to assure allies and friends, dissuade potential adversaries, deter aggression and counter coercion, and defeat adversaries in order to accomplish our national objectives. The Shipboard Air Traffic Radar (SATR) AN/SPN-50(V)1 (hereinafter referred to as AN/SPN-50(V)1) supports these objectives and will be the primary Air Traffic Control (ATC) surveillance radar onboard Nimitz Class Aircraft Carrier (CVN) and Amphibious (LHA and LHD (LH)) type ships. The launch and recovery of aircraft, to include ATC, is a primary function of aircraft carriers and amphibious landing platforms. The surveillance function provides weather and radar data to air traffic controllers supporting aviation operations of all Navy, Marine Corps, joint and allied aviation assets within the assigned airspace. This data is utilized by air traffic controllers to provide a variety of ATC services such as ATC radar approach and departure services (which includes aircraft separation), airspace monitoring, navigational assistance, emergency vectoring, traffic calls, and vectoring and sequencing to the final approach point. Reliable and accurate ATC surveillance radar enhances overall mission and training effectiveness and safety for aircrews and aircraft alike. The AN/SPN-50(V)1 Capability Development Document was signed March 2015 and Milestone B was achieved September 2015, at which time the Milestone Decision Authority (MDA) designated the AN/SPN-50(V)1 program as an ACAT IV(T). Milestone C was achieved September 2020 and IOC is planned for 2nd quarter FY 2023. The AN/SPN-50(V)1 inventory objective is 25 systems (5 LRIPs, and 20 FRP). Twenty-one systems are schedule to be procured with Other Procurement, Navy, funding and 4 are scheduled to be procured with Ship Conversion, Navy, funding.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 2 / AN/SPN-50(V)1
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/SPN-50(V)1												
B Kits												
Recurring												
1.1.1) SATR (SPN-50) - NonOrganic [4]	3 / 34.798	1 / 11.789	2 / 24.320	3 / 37.536	- / -	3 / 37.536	3 / 38.147	3 / 38.404	4 / 49.694	1 / 14.009	1 / 14.429	21 / 263.126
Subtotal: Recurring	*- / 34.798*	*- / 11.789*	*- / 24.320*	*- / 37.536*	*- / -*	*- / 37.536*	*- / 38.147*	*- / 38.404*	*- / 49.694*	*- / 14.009*	*- / 14.429*	*- / 263.126*
Non-Recurring												
1.2.1) Engineering Changes to Correct Deficiencies - Organic [5]	- / -	- / -	- / 5.834	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.850	- / -	- / 7.684
Subtotal: Non-Recurring	*- / 0.000*	*- / -*	*- / 5.834*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 1.850*	*- / 0.000*	*- / 7.684*
Subtotal: AN/SPN-50(V)1	*3 / 34.798*	*1 / 11.789*	*2 / 30.154*	*3 / 37.536*	*- / -*	*3 / 37.536*	*3 / 38.147*	*3 / 38.404*	*4 / 49.694*	*1 / 15.859*	*1 / 14.429*	*21 / 270.810*
Subtotal: Procurement, All Modification Items	*- / 34.798*	*- / 11.789*	*- / 30.154*	*- / 37.536*	*- / -*	*- / 37.536*	*- / 38.147*	*- / 38.404*	*- / 49.694*	*- / 15.859*	*- / 14.429*	*- / 270.810*
Support *(All Modification Items)*												
2.1) Integrated Logistics Support [6]	- / 1.964	- / 4.098	- / 4.051	- / 7.173	- / -	- / 7.173	- / 4.447	- / 3.879	- / 4.312	- / 1.232	- / 0.355	- / 31.511
2.2) Production Engineering	- / 8.307	- / 6.962	- / 7.037	- / 8.219	- / -	- / 8.219	- / 6.404	- / 4.933	- / 5.373	- / 1.100	- / 7.740	- / 56.075
Subtotal: Support	*- / 10.271*	*- / 11.060*	*- / 11.088*	*- / 15.392*	*- / -*	*- / 15.392*	*- / 10.851*	*- / 8.812*	*- / 9.685*	*- / 2.332*	*- / 8.095*	*- / 87.586*
Installation												
Modification Item 1 of 1: AN/SPN-50(V)1	- / 2.343	- / 2.784	- / 5.805	- / 5.040	- / 0.000	- / 5.040	- / 9.278	- / 10.640	- / 10.632	- / 11.935	- / 11.291	- / 69.748
Subtotal: Installation	*- / 2.343*	*- / 2.784*	*- / 5.805*	*- / 5.040*	*- / -*	*- / 5.040*	*- / 9.278*	*- / 10.640*	*- / 10.632*	*- / 11.935*	*- / 11.291*	*- / 69.748*
Total												
Total Cost (Procurement + Support + Installation)	**47.412**	**25.633**	**47.047**	**57.968**	**0.000**	**57.968**	**58.276**	**57.856**	**70.011**	**30.126**	**33.815**	**428.144**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 2 / AN/SPN-50(V)1
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: AN/SPN-50(V)1

Manufacturer Information

Manufacturer Name: Saab	Manufacturer Location: Syracuse, NY
Administrative Leadtime *(in Months)*: 5	Production Leadtime *(in Months)*: 22

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Sep 2022	Aug 2023	Feb 2024	Feb 2025	Feb 2026	Feb 2027	Feb 2028
Delivery Dates	Mar 2024	Dec 2024	Dec 2025	Dec 2026	Dec 2027	Dec 2028	Dec 2029

Installation Information

Method of Implementation: [none specified]:: Installation Name: SATR (SPN-50)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	1 / 2.343	0 / 2.784	2 / 4.293	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 9.420
FY 2022	- / -	- / -	0 / 1.512	1 / 2.200	0 / 0.000	1 / 2.200	- / -	- / -	- / -	- / -	0 / 0.000	1 / 3.712
FY 2023	- / -	- / -	- / -	0 / 2.840	0 / 0.000	0 / 2.840	2 / 4.186	- / -	- / -	- / -	0 / 0.000	2 / 7.026
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.240	2 / 5.176	- / -	- / -	0 / 0.000	3 / 7.416
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	0 / 2.852	1 / 2.554	2 / 5.109	- / -	0 / 0.000	3 / 10.515
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 2.910	1 / 2.555	2 / 5.211	0 / 0.000	3 / 10.676
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 2.968	2 / 5.212	2 / 5.773	4 / 13.953
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 1.512	1 / 2.718	1 / 4.230
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.800	1 / 2.800
Total	1 / 2.343	0 / 2.784	2 / 5.805	1 / 5.040	0 / 0.000	1 / 5.040	3 / 9.278	3 / 10.640	3 / 10.632	4 / 11.935	4 / 11.291	21 / 69.748

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	-	-	-	-	-	2	-	-	1	-	-	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	2	4	21
Out	1	-	-	-	-	-	-	2	-	-	1	-	-	1	1	-	1	1	1	-	1	1	1	-	1	1	1	-	2	4	21

Footnotes:

(4) LRIP Lots 1-2 procured FY20-21 units by a new FFP production contract award; LRIP Lot 3 procured FY22 units by a FFP modification to the production contract; FRP Lots 1-2 will procure FY23-24 units by another FFP modification to the production contract; and FRP Lots 3-8 will procure FY25-29 units via a new FFP production contract. Advanced Planning costs for Installation occur 1-2 years prior to actual install and show as quantity zero.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 2 / AN/SPN-50(V)1
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(5) ECPs for production cut in. Current planned ECPs are Solid State Transmitter SSTx VSWR Voltage Standing Wave Ratio, Signal Interface Unit SIU Upgrade, Battery Switch Upgrade, IFF brackets- upgrade, SPN-50 LRIP SDU updates, Removal of SPN-50 LRIP Installation Cables, Power Conditioning Unit PCU, CUSE upgrades, Signal and Data Unit SDU Redundancy Enclosure SRE fiber interface, JFT cable kit, and future SW update.

(6) Integrated logistics support (ILS) increase through FY25 reflects an increase due to a higher quantity of units procured/installed in the fleet and the resultant increase of contractor support to those units. This contractor support provides Interim Sustainment during the transition period to Government Sustainment support of the system. Interim Sustainment includes Contractor Engineering and Technical Services and Repair of Repairable efforts that are based on the number of systems supported.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 3 / ACLS MOD KITS SUMMARY PN408
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	74.739	14.542	9.764	11.143	0.000	11.143	15.475	14.502	13.358	11.964	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	74.739	14.542	9.764	11.143	0.000	11.143	15.475	14.502	13.358	11.964	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**74.739**	**14.542**	**9.764**	**11.143**	**0.000**	**11.143**	**15.475**	**14.502**	**13.358**	**11.964**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The equipment and installation costs on this P-3a are for individual modification programs for AN/SPN-35/41/46 and FRN-49 systems. Funding has also been provided for upgrades addressing broadened cyber-security requirements to remain compliant with software cyber-security directives and Information Assurance mandates. Line item "Engineering Changes to Correct Deficiencies" captures anticipated emergent engineering changes. PMA213 configuration control board approves inventory objectives. Contract and Delivery dates are various. The variance in install costs from year to year is due to the makeup of the different equipment being installed each year, the different hull types receiving modifications, and the different Design Services Allocation (DSA) and install costs from different locations depending on where modifications are performed.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 3 / ACLS MOD KITS SUMMARY PN408
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: CVNs, LHA/LHD class ship, and selected shore sites	**Modification Type:** Modernization	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: ACLS MOD KITS SUMMARY PN408												
B Kits												
Non-Recurring												
1.1.1) AN/SPN-46 TS-4176 - NonOrganic	12 / 1.651	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 1.651
1.1.3) AN/SPN-46 COTS Refresh - NonOrganic (7)	43 / 10.140	9 / 2.250	4 / 1.020	7 / 1.555	- / -	7 / 1.555	9 / 2.043	10 / 2.311	14 / 3.300	9 / 2.164	Continuing	Continuing
1.1.4) AN/SPN-46 Obsolescence - NonOrganic	38 / 10.997	9 / 3.067	- / -	8 / 2.826	- / -	8 / 2.826	7 / 2.522	3 / 1.102	- / -	- / -	- / -	65 / 20.514
1.1.14) AN/SPN-35 Receiver Transmitter Mod - NonOrganic	5 / 0.084	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.084
1.1.15) AN/SPN-35/41 COTS Refresh - NonOrganic	1 / 3.526	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.526
1.1.17) AN/SPN-46 Unit 16 Power Supply - NonOrganic	10 / 1.877	3 / 0.582	3 / 0.585	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 3.044
1.1.18) AN/FRN-49 Instrument Carrier Landing Systems (ICLS) - NonOrganic	6 / 10.147	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 10.147
1.1.19) AN/SPN-41 Solid State Transmitter (SST) - NonOrganic (8)	36 / 3.153	8 / 1.184	8 / 1.188	8 / 1.400	- / -	8 / 1.400	18 / 3.213	16 / 2.912	12 / 2.227	12 / 2.272	18 / 2.317	136 / 19.866
1.1.20) AN/SPN-46 CCA - NonOrganic (9)	- / -	4 / 0.588	3 / 0.447	3 / 0.456	- / -	3 / 0.456	3 / 0.465	3 / 0.474	1 / 0.161	- / -	- / -	17 / 2.591
Subtotal: Non-Recurring	*- / 41.575*	*- / 7.671*	*- / 3.240*	*- / 6.237*	*- / -*	*- / 6.237*	*- / 8.243*	*- / 6.799*	*- / 5.688*	*- / 4.436*	*Continuing*	*Continuing*
Subtotal: ACLS MOD KITS SUMMARY PN408	*151 / 41.575*	*33 / 7.671*	*18 / 3.240*	*26 / 6.237*	*- / -*	*26 / 6.237*	*37 / 8.243*	*32 / 6.799*	*27 / 5.688*	*21 / 4.436*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 41.575*	*- / 7.671*	*- / 3.240*	*- / 6.237*	*- / -*	*- / 6.237*	*- / 8.243*	*- / 6.799*	*- / 5.688*	*- / 4.436*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Engineering Changes to Correct Deficiencies ECO SPN-46	- / 2.474	- / 0.459	- / 0.468	- / 0.768	- / -	- / 0.768	- / 0.783	- / 0.799	- / 0.815	- / 0.831	Continuing	Continuing
2.2) Engineering Changes to Correct Deficiencies ECO SPN-35/41	- / 3.722	- / 1.298	- / 0.817	- / 0.833	- / -	- / 0.833	- / 0.850	- / 0.867	- / 0.884	- / 0.902	Continuing	Continuing
2.3) Integrated Logistics Support	- / 2.731	- / 0.534	- / 0.545	- / 0.556	- / -	- / 0.556	- / 1.273	- / 1.298	- / 1.322	- / 1.347	Continuing	Continuing
2.4) Production Engineering	- / 7.941	- / 1.961	- / 1.458	- / 1.487	- / -	- / 1.487	- / 2.577	- / 2.628	- / 2.681	- / 2.735	Continuing	Continuing
2.5) Quality Assurance	- / 0.568	- / 0.286	- / 0.292	- / 0.298	- / -	- / 0.298	- / 0.304	- / 0.310	- / 0.316	- / 0.322	Continuing	Continuing
2.6) Acceptance, Test and Evaluation	- / 0.089	- / 0.132	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.221
Subtotal: Support	*- / 17.525*	*- / 4.670*	*- / 3.580*	*- / 3.942*	*- / -*	*- / 3.942*	*- / 5.787*	*- / 5.902*	*- / 6.018*	*- / 6.137*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: ACLS MOD KITS SUMMARY PN408	- / 15.639	- / 2.201	- / 2.944	- / 0.964	- / 0.000	- / 0.964	- / 1.445	- / 1.801	- / 1.652	- / 1.391	- / 2.325	- / 30.362

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 3 / ACLS MOD KITS SUMMARY PN408
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: CVNs, LHA/LHD class ship, and selected shore sites	**Modification Type:** Modernization	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Subtotal: Installation	- / 15.639	- / 2.201	- / 2.944	- / 0.964	- / -	- / 0.964	- / 1.445	- / 1.801	- / 1.652	- / 1.391	- / 2.325	- / 30.362
Total												
Total Cost (Procurement + Support + Installation)	**74.739**	**14.542**	**9.764**	**11.143**	**0.000**	**11.143**	**15.475**	**14.502**	**13.358**	**11.964**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 3 / ACLS MOD KITS SUMMARY PN408
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: ACLS MOD KITS SUMMARY PN408

Manufacturer Information

Manufacturer Name: NAWCAD (10)	Manufacturer Location: Patuxent River, MD
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027
Delivery Dates	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027	Dec 2028

Installation Information

Method of Implementation: AIT (Alteration Installation Team):: Installation Name: ACLS Mod Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	96 / 15.639	19 / 1.819	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	115 / 17.458
FY 2022	- / -	- / -	25 / 2.014	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	25 / 2.014
FY 2023	- / -	- / -	- / -	7 / 0.720	0 / 0.000	7 / 0.720	- / -	- / -	- / -	- / -	3 / 0.376	10 / 1.096
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	18 / 1.295	- / -	- / -	- / -	0 / 0.000	18 / 1.295
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	19 / 1.456	- / -	- / -	0 / 0.000	19 / 1.456
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 1.340	- / -	0 / 0.000	16 / 1.340
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 1.152	0 / 0.000	15 / 1.152
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 0.721	9 / 0.721
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 0.736	10 / 0.736
Total	96 / 15.639	19 / 1.819	25 / 2.014	7 / 0.720	0 / 0.000	7 / 0.720	18 / 1.295	19 / 1.456	16 / 1.340	15 / 1.152	22 / 1.833	237 / 27.268

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	96	1	9	9	-	1	10	6	8	-	-	5	2	-	3	7	8	-	5	8	6	-	6	5	5	4	3	4	4	22	237
Out	96	1	9	9	-	1	10	6	8	-	-	5	2	-	3	7	8	-	5	8	6	-	6	5	5	4	3	4	4	22	237

Method of Implementation: [none specified]:: Installation Name: AN/SPN-41 Solid State Transmitter (SST)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	13 / 0.382	23 / 0.690	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	36 / 1.072

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 3 / ACLS MOD KITS SUMMARY PN408
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: ACLS MOD KITS SUMMARY PN408

Installation Information

Method of Implementation: [none specified]:: Installation Name: AN/SPN-41 Solid State Transmitter (SST)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	8 / 0.240	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	8 / 0.240
FY 2023	- / -	- / -	- / -	8 / 0.244	0 / 0.000	8 / 0.244	- / -	- / -	- / -	- / -	0 / 0.000	8 / 0.244
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.150	- / -	- / -	- / -	0 / 0.000	8 / 0.150
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	18 / 0.345	- / -	- / -	0 / 0.000	18 / 0.345
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 0.312	- / -	0 / 0.000	16 / 0.312
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.239	0 / 0.000	12 / 0.239
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.244	12 / 0.244
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	18 / 0.248	18 / 0.248
Total	- / -	13 / 0.382	31 / 0.930	8 / 0.244	0 / 0.000	8 / 0.244	8 / 0.150	18 / 0.345	16 / 0.312	12 / 0.239	30 / 0.492	136 / 3.094

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	7	6	15	12	2	2	2	2	2	2	2	2	2	2	4	4	5	5	4	4	4	4	3	3	3	3	30	136
Out	-	-	-	7	6	15	12	2	2	2	2	2	2	2	2	2	2	4	4	5	5	4	4	4	4	3	3	3	3	30	136

Footnotes:

(7) The variance in kit costs from year to year is due to the makeup of the different equipment being installed each year, the different hull types receiving modifications, and the different Design Services Allocation (DSA) and install costs from different locations depending on where modifications are performed.

(8) The SST provides a reliable replacement for the legacy transmitters, and will solve multiple trouble reports associated with the AN/SPN-41B transmitter by replacing it with a new and proved technology with fewer moving parts and newer more sustainable technology. Legacy transmitters have continued to experience accelerating failure rates in the fleet due to age degradation and obsolescence. FY 2023 to FY 2024 increase reflects updated costs based on actual costs vice historical estimate.

(9) New Radar processor CCAs are required as soon as possible due to an inventory shortage and obsolescence issues with the existing 2850 CCAs in the fleet.

(10) The variance in install costs from year to year is due to the makeup of the different equipment being installed each year, the different hull types receiving modifications, and the different Design Services Allocation (DSA) and install costs from different locations depending on where modifications are performed.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 8 / AN/SPN-46 Block IV (PN420)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	40.969	12.857	13.290	12.095	0.000	12.095	12.065	6.239	1.942	0.990	0.000	100.447
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	40.969	12.857	13.290	12.095	0.000	12.095	12.065	6.239	1.942	0.990	0.000	100.447
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**40.969**	**12.857**	**13.290**	**12.095**	**0.000**	**12.095**	**12.065**	**6.239**	**1.942**	**0.990**	**0.000**	**100.447**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/SPN-46 Block IV Precision Approach Landing System (PALS) Block IV upgrade is designed to correct known obsolescence issues in the antenna pedestal, 50KW Ka band modulator/transmitter, and various Circuit Card
Assemblies (CCAs). This effort is designed to extend the supportability of the AN/SPN-46 beyond its current design life that has been exceeded. If this effort is not accomplished, replacement parts will not be available to support the
fielded AN/SPN-46 systems, thereby, negatively affecting Operational Availability (Ao) and safety of flight on the aircraft carrier. Each Block IV will be comprised of the upgraded ACIO CCA, 2500 CCA, Transmitter, and Pedestal.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 8 / AN/SPN-46 Block IV (PN420)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: CVNs and selected shore sites	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/SPN-46 Block IV (PN420)												
B Kits												
Recurring												
1.1.1) AN/SPN-46 Block IV: Power Supply/Circuit Card Kit - NonOrganic	9 / 2.981	3 / 1.036	1 / 0.352	2 / 0.718	- / -	2 / 0.718	- / -	- / -	- / -	- / -	- / -	15 / 5.087
1.1.2) AN/SPN-46 Block IV: Pedestal/Transmitter - NonOrganic (11)	6 / 21.346	2 / 3.678	2 / 4.858	2 / 4.954	- / -	2 / 4.954	2 / 5.054	1 / 2.578	- / -	- / -	- / -	15 / 42.468
Subtotal: Recurring	*- / 24.327*	*- / 4.714*	*- / 5.210*	*- / 5.672*	*- / -*	*- / 5.672*	*- / 5.054*	*- / 2.578*	*- / -*	*- / -*	*- / 0.000*	*- / 47.555*
Subtotal: AN/SPN-46 Block IV (PN420)	*15 / 24.327*	*5 / 4.714*	*3 / 5.210*	*4 / 5.672*	*- / -*	*4 / 5.672*	*2 / 5.054*	*1 / 2.578*	*- / -*	*- / -*	*- / -*	*30 / 47.555*
Subtotal: Procurement, All Modification Items	*- / 24.327*	*- / 4.714*	*- / 5.210*	*- / 5.672*	*- / -*	*- / 5.672*	*- / 5.054*	*- / 2.578*	*- / -*	*- / -*	*- / 0.000*	*- / 47.555*
Support *(All Modification Items)*												
2.1) Integrated Logistics Support	- / 5.462	- / 1.678	- / 1.424	- / 1.452	- / -	- / 1.452	- / 1.481	- / 0.540	- / -	- / -	- / -	- / 12.037
2.2) Production Engineering	- / 6.894	- / 2.386	- / 2.027	- / 2.068	- / -	- / 2.068	- / 2.109	- / 0.902	- / -	- / -	- / -	- / 16.386
2.3) Quality Assurance	- / 0.824	- / 0.330	- / 0.336	- / 0.343	- / -	- / 0.343	- / 0.350	- / 0.175	- / -	- / -	- / -	- / 2.358
2.4) Acceptance Test and Evaluation	- / 0.510	- / 0.265	- / 0.270	- / 0.276	- / -	- / 0.276	- / 0.281	- / 0.140	- / -	- / -	- / -	- / 1.742
Subtotal: Support	*- / 13.690*	*- / 4.659*	*- / 4.057*	*- / 4.139*	*- / -*	*- / 4.139*	*- / 4.221*	*- / 1.757*	*- / -*	*- / -*	*- / 0.000*	*- / 32.523*
Installation												
Modification Item 1 of 1: AN/SPN-46 Block IV (PN420)	- / 2.952	- / 3.484	- / 4.023	- / 2.284	- / 0.000	- / 2.284	- / 2.790	- / 1.904	- / 1.942	- / 0.990	- / 0.000	- / 20.369
Subtotal: Installation	*- / 2.952*	*- / 3.484*	*- / 4.023*	*- / 2.284*	*- / -*	*- / 2.284*	*- / 2.790*	*- / 1.904*	*- / 1.942*	*- / 0.990*	*- / 0.000*	*- / 20.369*
Total												
Total Cost (Procurement + Support + Installation)	**40.969**	**12.857**	**13.290**	**12.095**	**0.000**	**12.095**	**12.065**	**6.239**	**1.942**	**0.990**	**0.000**	**100.447**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 8 / AN/SPN-46 Block IV (PN420)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: AN/SPN-46 Block IV (PN420)

Manufacturer Information

Manufacturer Name: Sierra Nevada Corporation	Manufacturer Location: Sierra, Nevada
Administrative Leadtime *(in Months)*: 4	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Jan 2023	Jan 2024	Jan 2025				

Manufacturer Name: Sierra Nevada Corporation	Manufacturer Location: Sierra, Nevada
Administrative Leadtime *(in Months)*: 7	Production Leadtime *(in Months)*: 24

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Apr 2022	Apr 2023	Apr 2024	Apr 2025	Apr 2026		
Delivery Dates	Apr 2024	Apr 2025	Apr 2026	Apr 2027	Apr 2028		

Installation Information

Method of Implementation: Method:: Installation Name: AN/SPN-46 Block IV: Power Supply/Circuit Card Kit

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	7 / 2.952	2 / 0.868	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 3.820
FY 2022	- / -	- / -	3 / 1.329	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 1.329
FY 2023	- / -	- / -	- / -	1 / 0.452	0 / 0.000	1 / 0.452	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.452
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.922	- / -	- / -	- / -	0 / 0.000	2 / 0.922
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	7 / 2.952	2 / 0.868	3 / 1.329	1 / 0.452	0 / 0.000	1 / 0.452	2 / 0.922	- / -	- / -	- / -	0 / 0.000	15 / 6.523

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	7	-	1	1	-	-	1	2	-	-	-	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
Out	7	-	1	1	-	-	1	2	-	-	-	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 8 / AN/SPN-46 Block IV (PN420)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: AN/SPN-46 Block IV (PN420)

Installation Information

Method of Implementation: [none specified]:: Installation Name: AN/SPN-46 Block IV: Pedestal/Transmitter

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	3 / 2.616	3 / 2.694	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 5.310
FY 2022	- / -	- / -	- / -	2 / 1.832	0 / 0.000	2 / 1.832	- / -	- / -	- / -	- / -	0 / 0.000	2 / 1.832
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.868	- / -	- / -	- / -	0 / 0.000	2 / 1.868
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.904	- / -	- / -	0 / 0.000	2 / 1.904
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.942	- / -	0 / 0.000	2 / 1.942
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.990	0 / 0.000	1 / 0.990
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	3 / 2.616	3 / 2.694	2 / 1.832	0 / 0.000	2 / 1.832	2 / 1.868	2 / 1.904	2 / 1.942	1 / 0.990	0 / 0.000	15 / 13.846

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	2	1	2	1	-	-	-	-	2	-	-	-	2	-	-	-	2	-	-	-	2	-	-	-	1	-	-	15
Out	-	-	-	2	1	2	1	-	-	-	-	2	-	-	-	2	-	-	-	2	-	-	-	2	-	-	-	1	-	-	15

Footnotes:

(11) SPN-46 Block IV upgrade broken into two parts due to complexity of upgrade and difference in lead time per component. The installation of the Pedestal/Transmitter is more complex and involved than the installation for the Power Supply/Circuit Card kit. Decrease in FY 2024 quantity from 3 to 2 is due to the increased quantity in FY24 for AN/SPN-41 Solid State Transmitter (SST).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 10 / AN/SPN-35 Block II (PN422)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12.865	13.122	58.738	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12.865	13.122	58.738	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**12.865**	**13.122**	**58.738**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

AN/SPN-35C is the Precision Approach Radar aboard LHA/LHD class ships and is used for Mode III aircraft recovery, which ensures the safe approach and landing of fixed and rotary wing aircraft during adverse weather and night conditions. Initial Operational Capability (IOC) of the AN/SPN-35C was in 2004. The AN/SPN-35C Block I upgrade planned to include replacement of high-failure items, obsolete components, and analog system components. The AN/SPN-35C Block II addresses the technological issues of the AN/SPN-35C Block I program, as well as obsolescence and operational limitations of the receiver-transmitter, pedestal, antenna group, and stabilization subsystem. These changes will improve operational availability and operational relevance in more environments.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 10 / AN/SPN-35 Block II (PN422)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: LHD/LHA class ships	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/SPN-35 Block II (PN422)												
B Kits												
Recurring												
1.1.1) End Item - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 10.263	1 / 10.468	5 / 53.388	6 / 67.568	13 / 141.687
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 10.263*	*- / 10.468*	*- / 53.388*	*- / 67.568*	*- / 141.687*
Subtotal: AN/SPN-35 Block II (PN422)	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*1 / 10.263*	*1 / 10.468*	*5 / 53.388*	*6 / 67.568*	*13 / 141.687*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 10.263*	*- / 10.468*	*- / 53.388*	*- / 67.568*	*- / 141.687*
Support *(All Modification Items)*												
2.1) Production Engineering	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.384	- / 1.411	- / 2.255	Continuing	Continuing
2.2) ILS	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.142	- / 1.165	- / 2.082	Continuing	Continuing
2.3) Quality Assurance	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.076	- / 0.078	- / 0.080	Continuing	Continuing
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.602*	*- / 2.654*	*- / 4.417*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: AN/SPN-35 Block II (PN422)	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.933	- / 11.746	- / 12.679
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.933*	*- / 11.746*	*- / 12.679*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**12.865**	**13.122**	**58.738**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 10 / AN/SPN-35 Block II (PN422)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: AN/SPN-35 Block II (PN422)

Manufacturer Information

Manufacturer Name: NAWC	Manufacturer Location: St. Inigoes, NAS Patuxent River MD
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 16

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates					Dec 2025	Dec 2026	Dec 2027
Delivery Dates					Apr 2027	Apr 2028	Apr 2029

Installation Information

Method of Implementation: AIT:: Installation Name: End Item

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.933	0 / 0.000	1 / 0.933
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.952	1 / 0.952
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 4.853	5 / 4.853
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 5.941	6 / 5.941
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.933	12 / 11.746	13 / 12.679

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	12	13
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	12	13

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 11 / AN/SPN-46 Block V (PN423)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.858	6.167	7.527	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.858	6.167	7.527	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**6.858**	**6.167**	**7.527**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/SPN-46 Block V upgrade targets aging and obsolete hardware and software components within the carrier landing system and improves operational relevance in more environments. Block V consists of a major AN/SPN-46 operational software upgrade along with a refresh of numerous Commercial Off The Shelf (COTS) equipment subassemblies. Planned upgrades are updates to the radar's obsolete radar processor circuit card assemblies (CCAs) with new generation CCAs, upgrading the radar's Real Time Operating System (RTOS) with a current and supportable RTOS,and optimizing and reconfiguring the radar's software into a logical, modular format. The radar's top two degraders, the Radar Alignment Mast (RAM) pole and the TS-3098 test set, will be modified with less complex, higher reliability designs. Hardware changes will include reducing reliability issues caused by outdated bus systems and IP based substructures and provide as overall system hardening to mitigate external interference issues. The software architecture redesign and optimization will increase modularity and operational efficiency as well as resolve cyber security related issues inherent with the current system.

[AN/SPN-46 Block V] The AN/SPN-46 Block V Precision Approach Landing System (PALS) Block V upgrade has been split into two phases. Phase 1 upgrades the radar's obsolete processor circuit card assemblies (CCAs) with new generation CCAs, to include updating the radar's Real Time Operating System (RTOS) with a current and supportable RTOS; this effort is captured in the ACLS Mod Kits section of the budget and allows faster fielding of critical parts to the fleet. Phase 2 upgrades the Maintenance Local Area Network (LAN) hardware and implements Risk Management Framework Cyber-Security controls; this P-3a encompasses the procurement of Phase 2. These upgrades are required to keep the system supportable/operational through 2040 to support legacy fleet aircraft precision landing requirements.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 11 / AN/SPN-46 Block V (PN423)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: CVNs	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/SPN-46 Block V (PN423)												
B Kits												
Recurring												
1.1.1) AN/SPN-46 Block V - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.655	1 / 0.541	6 / 3.312	5 / 2.814	17 / 9.322
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.655*	*- / 0.541*	*- / 3.312*	*- / 2.814*	*- / 9.322*
Subtotal: AN/SPN-46 Block V (PN423)	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*5 / 2.655*	*1 / 0.541*	*6 / 3.312*	*5 / 2.814*	*17 / 9.322*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.655*	*- / 0.541*	*- / 3.312*	*- / 2.814*	*- / 9.322*
Support *(All Modification Items)*												
2.1) ILS	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.091	- / 1.135	- / 1.160	Continuing	Continuing
2.2) Production Engineering	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.081	- / 1.865	- / 2.444	Continuing	Continuing
2.3) Quality Assurance	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.031	- / 0.031	- / 0.031	Continuing	Continuing
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 4.203*	*- / 3.031*	*- / 3.635*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: AN/SPN-46 Block V (PN423)	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 2.595	- / 0.580	- / 5.933	- / 9.108
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.595*	*- / 0.580*	*- / 5.933*	*- / 9.108*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**6.858**	**6.167**	**7.527**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 11 / AN/SPN-46 Block V (PN423)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: AN/SPN-46 Block V (PN423)

Manufacturer Information

Manufacturer Name: NAWC	Manufacturer Location: St. Inigoes, NAS Patuxent River MD
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 16

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates					Dec 2025	Dec 2026	Dec 2027
Delivery Dates					Apr 2027	Apr 2028	Apr 2029

Installation Information

Method of Implementation: [none specified]:: Installation Name: AN/SPN-46 Block V

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.595	- / -	0 / 0.000	5 / 2.595
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.580	0 / 0.000	1 / 0.580
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 3.210	6 / 3.210
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.723	5 / 2.723
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 2.595	1 / 0.580	11 / 5.933	17 / 9.108

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	-	-	1	-	11	17
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	-	-	1	-	11	17

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 12 / INACTIVE PROJECTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	30.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.353
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	30.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.353
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**30.353**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**30.353**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:
Inactive projects prior year totals.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2830 / Afloat ATC Equipment	**Modification Number / Title:** 12 / INACTIVE PROJECTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan (*) Indicates the modification is being installed organically and no installation funds are required.	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
1.1.1) INACTIVE PROJECTS - Organic(*)	- / 30.353	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 30.353
Subtotal: Procurement	*- / 30.353*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 30.353*
Installation												
Subtotal: Installation	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*
Total												
Total Cost (Procurement + Support + Installation)	**30.353**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**30.353**

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2851 / ID Systems

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604777N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	385.882	46.918	59.226	59.234	0.000	59.234	60.444	61.763	62.967	64.407	116.736	917.577
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	385.882	46.918	59.226	59.234	0.000	59.234	60.444	61.763	62.967	64.407	116.736	917.577
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**385.882**	**46.918**	**59.226**	**59.234**	**0.000**	**59.234**	**60.444**	**61.763**	**62.967**	**64.407**	**116.736**	**917.577**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Identification Systems program funds procurements, Engineering Change Proposals (ECPs) to address obsolescence and fact of life changes, installations, and certifications for the following Mark XII / Mark XIIA systems: AN/UPX-37, AN/UPX-41, AN/UPX-45 and AN/UPX-50 Digital Interrogators (DIs), AN/APX-118 and AN/APX-123 Common Digital Transponders (CXPs), AN/UPX-29 Interrogator System (comprised of Interrogator Set AN/UPX-24, OE-120/ UPX Antenna Group, and Mark XII or Mark XIIA equipment), AN/UPX-29 Modernization (UPneXt), AN/UPX-46 Interrogator System (comprised of CP-2819/ UPX Processor and Mark XIIA equipment), Identification Friend or Foe (IFF) support equipment, and AN/UPX-34A Radar Track Discriminator System (RTDS).

The Air Traffic Control Radio Beacon System, IFF, Mark XII/XIIA System (AIMS) is a DoD directed tri-service program designed to provide a universal air traffic control radar beacon system compatible with the National Airspace System program. It provides a secure identification system for military use on all combatant ships, selected auxiliaries, patrol craft, and selected Coast Guard ships by allowing all friendly forces to identify each other and neutral forces. The Mark XII/XIIA system supports several missions such as anti-air warfare, aerial bombardment, and naval attack.

The OE-120/UPX antenna radiates Identification Friend or Foe (IFF) encoded Radio Frequency (RF) challenge pulses into space and receives the resultant IFF encoded RF transponder replies from space. Current surface ship OE-120()/UPX antenna systems will receive upgrade kits to improve system R&M. The upgrade kits will use open architecture and current technology that allows for continued production and future growth. An Engineering Change Proposal was awarded using RDT&E (PU 0676) funds for the Original Equipment Manufacturer to deliver an Engineering Design Model for shipboard test and evaluation in fiscal year 2018.

Modernization of the DDG 1000 Zumwalt Class IFF Sensor Suite includes procurement activities, product improvements, and engineering changes for three Electronically Scanned Array (ESA) antennas, one UPX-42(C) Interrogator, and three RT-1912(C)/APX Transponders.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy | **Date:** March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment

P-1 Line Item Number / Title:
2851 / ID Systems

ID Code (A=Service Ready, B=Not Service Ready): A | **Program Elements for Code B Items:** N/A | **Other Related Program Elements:** 0604777N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-3a	1 / Mark XII/ Mark XIIA Common Digital Transponder (MT032) (Reliability)				- / 66.618	- / 0.777	- / 0.793	- / 0.540	- / 0.000	- / 0.540
P-3a	2 / AN/UPX 24 (V) Mode S (MT035) (Capability Improvement)				- / 65.708	- / 11.350	- / 10.660	- / 10.547	- / 0.000	- / 10.547
P-3a	3 / Mark XII Mode 5 (MT037) (Capability Improvement)				- / 179.550	- / 0.890	- / 0.618	- / 0.631	- / 0.000	- / 0.631
P-3a	4 / Mode S Digital Interrogator (MT040) (Capability Improvement)				- / 60.560	- / 9.286	- / 11.089	- / 10.975	- / 0.000	- / 10.975
P-3a	5 / OE-120/UPX Antenna (MT041) (Reliability)				- / 13.446	- / 7.257	- / 7.407	- / 10.291	- / 0.000	- / 10.291
P-3a	6 / AN/UPX-46 Processor System (MT042) (Reliability)				- / 0.000	- / 17.358	- / 15.963	- / 12.468	- / 0.000	- / 12.468
P-3a	7 / Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043) (Reliability)				- / 0.000	- / 0.000	- / 3.047	- / 5.150	- / 0.000	- / 5.150
P-3a	8 / AN/UPX-36 Replacement (MT044) (Reliability)				- / 0.000	- / 0.000	- / 7.549	- / 7.932	- / 0.000	- / 7.932
P-3a	9 / DDG 1000 Modernization (MT045) (Modernization)				- / 0.000	- / 0.000	- / 2.100	- / 0.700	- / 0.000	- / 0.700
P-3a	10 / UPneXt (MT046) (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-40	**Total Gross/Weapon System Cost**				**- / 385.882**	**- / 46.918**	**- / 59.226**	**- / 59.234**	**- / 0.000**	**- / 59.234**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-3a	1 / Mark XII/ Mark XIIA Common Digital Transponder (MT032) (Reliability)				- / 0.531	- / 0.547	- / 0.558	- / 0.569	- / 0.000	- / 70.933
P-3a	2 / AN/UPX 24 (V) Mode S (MT035) (Capability Improvement)				- / 9.497	- / 6.574	- / 6.493	- / 5.801	- / 3.293	- / 129.923
P-3a	3 / Mark XII Mode 5 (MT037) (Capability Improvement)				- / 0.781	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 182.470
P-3a	4 / Mode S Digital Interrogator (MT040) (Capability Improvement)				- / 11.656	- / 8.483	- / 7.539	- / 8.612	- / 5.006	- / 133.206
P-3a	5 / OE-120/UPX Antenna (MT041) (Reliability)				- / 11.006	- / 15.639	- / 16.595	- / 20.467	- / 86.911	- / 189.019
P-3a	6 / AN/UPX-46 Processor System (MT042) (Reliability)				- / 11.433	- / 10.061	- / 8.714	- / 8.550	- / 7.500	- / 92.047
P-3a	7 / Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043) (Reliability)				- / 3.336	- / 3.868	- / 3.471	- / 2.166	- / 0.000	- / 21.038
P-3a	8 / AN/UPX-36 Replacement (MT044) (Reliability)				- / 11.404	- / 7.541	- / 6.865	- / 4.398	- / 0.000	- / 45.689
P-3a	9 / DDG 1000 Modernization (MT045) (Modernization)				- / 0.800	- / 0.380	- / 4.186	- / 0.000	- / 0.000	- / 8.166
P-3a	10 / UPneXt (MT046) (TBD)				- / 0.000	- / 8.670	- / 8.546	- / 13.844	- / 14.026	- / 45.086
P-40	**Total Gross/Weapon System Cost**				**- / 60.444**	**- / 61.763**	**- / 62.967**	**- / 64.407**	**- / 116.736**	**- / 917.577**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2851 / ID Systems	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0604777N
Line Item MDAP/MAIS Code: N/A		

The purpose of the AN/UPX-41(C) Digital Interrogators (DI) and AN/APX-123 Common Digital Transponder (CXP) program is to replace 20-25 year old hardware and software with reliability and maintenance enhancements through the use of Commercial off the Shelf / Non Developmental Item COTS/NDI form/fit/function improvements. Incorporation of the Mark XIIA (Mode 5) capability occurred in FY08 and changes nomenclatures from AN/UPX-37 and AN/APX-118(V) to AN/UPX-41(C) and AN/APX-123(V), respectively. Incorporation of the Mark XIIA (Mode S) capability into the AN/UPX-41(C) DI is currently ongoing and will change the DI nomenclature from AN/UPX-41(C) to AN/UPX-45(C).

AN/UPX-24(V) Field Changes will provide hardware updates to accommodate Mode 5 and Mode S functionality in fielded systems. AN/UPX-24(V) Mode S upgrades will provide improved shipboard combat identification by increasing the probability of identification of commercial and neutral aircraft. The AN/UPX-29(V) Interrogator System is deployed on high capability, state of the art surface platforms that require IFF operational performance beyond that provided by a standard Mark XII system for combat identification. Mark XIIA Mode 5 and Mode S provide improved secure cooperative combat identification throughout IFF. Mode 5 and Mode S are product improvements designed to be installed through engineering changes to digital Mark XII interrogators and transponders including AN/APX-118/123(V), AN/UPX-37/41(C), and AN/UPX-24(V). AN/UPX-29 Modernization (UPneXt) is required to address obsolescence with respect to the CP 1273/AN/UPX-24(V) Processor Controller, and associated system components and interfaces, with consideration for software architecture, hardware modernization (size, weight and power) network hardening and cyber security.

AN/UPX-46 field changes will provide hardware updates to IFF Interrogator/Transponder Systems fielded on LCS 1 and LCS 2 ship class variants, and United States Coast Guard (USCG) ship classes which are currently equipped with AN/UPX-29A or AN/UPX-37 (with Target Data Extractor) interrogator system configurations and Mark XII transponder systems. The hardware updates will reduce unique IFF configurations by installing common hardware with Mark XIIA capability.

AN/UPX-34A Radar Track Discriminator System (RTDS) field changes will provide hardware and software upgrades to fielded systems that will increase system performance and incorporate "other service" target libraries into the system's target database. The RTDS is a Non-Cooperative Target Recognition (NCTR) system.

OE-120/UPX kits provide hardware and software upgrades to 40-year old fielded systems to improve system Reliability and Maintainability (R&M) by replacing obsolete assemblies and units. The OE-120/UPX kits use open architecture and current technology that allows for continued production and future growth.

AN/UPX-36 replacement will install AN/UPX-46 Interrogator Systems on the twelve ships in the LSD 41 and LSD 49 ship classes. The replacement program will reduce unique IFF Interrogator Systems by installing common hardware configurations with Mark XIIA capability.

The DDG 1000 Zumwalt Class IFF Sensor Suite requires modernization, through product improvements and engineering changes, in order to implement product support elements, mitigate obsolescence, and incorporate cyber resiliency.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 1 / Mark XII/ Mark XIIA Common Digital Transponder (MT032)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	66.618	0.777	0.793	0.540	0.000	0.540	0.531	0.547	0.558	0.569	0.000	70.933
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	66.618	0.777	0.793	0.540	0.000	0.540	0.531	0.547	0.558	0.569	0.000	70.933
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**66.618**	**0.777**	**0.793**	**0.540**	**0.000**	**0.540**	**0.531**	**0.547**	**0.558**	**0.569**	**0.000**	**70.933**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Current Mark XII transponder systems no longer meet operational reliability and maintainability (R&M) requirements due to use beyond their intended life cycle and they suffer a high cost of ownership due to parts obsolescence. Current surface ship Mark XII transponders will be replaced to continue incremental digital and R&M upgrades to the Mark XII IFF system. The common digital transponder uses an open architecture that allows for future growth, including Mode 5 (AN/APX-123(V)) and Mode S which was incorporated into the production line beginning with the FY 2005 procurement. Inventory Objective of 521 is derived from the Naval Data Environment (NDE) database, the Ships & Aircraft Supplemental Data Table (SASDT) and ship/submarine Ship Program Manager (SPM) procurement plans and schedules. Incorporation of the Mark XIIA (Mode 5) capability occurred in FY08 and changed the nomenclature from AN/APX-118(V) to AN/APX-123(V). LRIP AN/APX-123(V) units were installed and operated in legacy-only modes until successful completion of the Mode 5 OPEVAL (MT037) and Full Rate Production decision. Full Rate Production was approved July 2012.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 1 / Mark XII/ Mark XIIA Common Digital Transponder (MT032)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/APX-118/AN/APX-123(V)	**Modification Type:** Reliability	**Related RDT&E PEs:** 0604777N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Mark XII/ Mark XIIA Common Digital Transponder (MT032)												
B Kits												
Recurring												
1.1.1) Equipment - NonOrganic (1)	491 / 25.646	15 / 0.777	15 / 0.793	10 / 0.540	- / -	10 / 0.540	10 / 0.531	10 / 0.547	10 / 0.558	10 / 0.569	- / -	571 / 29.961
Subtotal: Recurring	*- / 25.646*	*- / 0.777*	*- / 0.793*	*- / 0.540*	*- / -*	*- / 0.540*	*- / 0.531*	*- / 0.547*	*- / 0.558*	*- / 0.569*	*- / 0.000*	*- / 29.961*
Subtotal: Mark XII/ Mark XIIA Common Digital Transponder (MT032)	*491 / 25.646*	*15 / 0.777*	*15 / 0.793*	*10 / 0.540*	*- / -*	*10 / 0.540*	*10 / 0.531*	*10 / 0.547*	*10 / 0.558*	*10 / 0.569*	*- / -*	*571 / 29.961*
Subtotal: Procurement, All Modification Items	*- / 25.646*	*- / 0.777*	*- / 0.793*	*- / 0.540*	*- / -*	*- / 0.540*	*- / 0.531*	*- / 0.547*	*- / 0.558*	*- / 0.569*	*- / 0.000*	*- / 29.961*
Support *(All Modification Items)*												
2.1) ILS	- / 3.008	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.008
2.2) PE	- / 17.184	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 17.184
2.3) Product Improvement	- / 4.632	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.632
2.4) Acceptance, Test & Evaluation	- / 2.834	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.834
2.5) Depot	- / 0.010	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.010
2.6) Initial Training	- / 0.822	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.822
Subtotal: Support	*- / 28.490*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 28.490*
Installation												
Modification Item 1 of 1: Mark XII/ Mark XIIA Common Digital Transponder (MT032)	- / 12.482	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 12.482
Subtotal: Installation	*- / 12.482*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 12.482*
Total												
Total Cost (Procurement + Support + Installation)	**66.618**	**0.777**	**0.793**	**0.540**	**0.000**	**0.540**	**0.531**	**0.547**	**0.558**	**0.569**	**0.000**	**70.933**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 1 / Mark XII/ Mark XIIA Common Digital Transponder (MT032)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Mark XII/ Mark XIIA Common Digital Transponder (MT032)

Manufacturer Information

Manufacturer Name: BAE Systems LP | Manufacturer Location: Greenlawn, NY

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027
Delivery Dates	Jun 2022	Jun 2023	Jun 2024	Jun 2025	Jun 2026	Jun 2027	Jun 2028

Installation Information

Method of Implementation: [none specified]:: Installation Name: Equipment

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	366 / 12.482	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	366 / 12.482
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	366 / 12.482	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	366 / 12.482

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	366	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	366
Out	366	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	366

Footnotes:

(1) Ancillary hardware procurements only require a 6 month production lead time. Current inventory objective is 571, which includes 9 additional units purchased in the prior years to provide to the Mode 5 program contractor. FY19-22 116 units were procured for Naval Surface Warfare. Going forward 15 units will be procured in FY23 and 10 per year the rest of the FYDP. Procurements for Naval Surface Warfare will not be installed under BLI 2851.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 2 / AN/UPX 24 (V) Mode S (MT035)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	65.708	11.350	10.660	10.547	0.000	10.547	9.497	6.574	6.493	5.801	3.293	129.923
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	65.708	11.350	10.660	10.547	0.000	10.547	9.497	6.574	6.493	5.801	3.293	129.923
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**65.708**	**11.350**	**10.660**	**10.547**	**0.000**	**10.547**	**9.497**	**6.574**	**6.493**	**5.801**	**3.293**	**129.923**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Incorporation of a Mode S capability in the AN/UPX-24(V) to include an interface with a ship's Combat Systems. Inventory Objective of 130 is derived from the Naval Data Environment database, the Ships & Aircraft Supplemental Data Table (SASDT) and ship/submarine Ship Program Manager (SPM) procurement plans and schedules.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 2 / AN/UPX 24 (V) Mode S (MT035)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/UPX-24(V)	**Modification Type:** Capability Improvement	**Related RDT&E PEs:** 0604777N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/UPX 24 (V) Mode S (MT035)												
B Kits												
Non-Recurring												
1.1.1) Equipment - NonOrganic [2]	54 / 10.620	17 / 4.155	14 / 3.472	17 / 4.045	- / -	17 / 4.045	12 / 2.912	3 / 0.743	7 / 1.767	6 / 1.545	- / -	130 / 29.259
Subtotal: Non-Recurring	*- / 10.620*	*- / 4.155*	*- / 3.472*	*- / 4.045*	*- / -*	*- / 4.045*	*- / 2.912*	*- / 0.743*	*- / 1.767*	*- / 1.545*	*- / 0.000*	*- / 29.259*
Subtotal: AN/UPX 24 (V) Mode S (MT035)	*54 / 10.620*	*17 / 4.155*	*14 / 3.472*	*17 / 4.045*	*- / -*	*17 / 4.045*	*12 / 2.912*	*3 / 0.743*	*7 / 1.767*	*6 / 1.545*	*- / -*	*130 / 29.259*
Subtotal: Procurement, All Modification Items	*- / 10.620*	*- / 4.155*	*- / 3.472*	*- / 4.045*	*- / -*	*- / 4.045*	*- / 2.912*	*- / 0.743*	*- / 1.767*	*- / 1.545*	*- / 0.000*	*- / 29.259*
Support *(All Modification Items)*												
2.1) ILS	- / 5.183	- / 0.814	- / 0.793	- / 0.809	- / -	- / 0.809	- / 0.825	- / 0.842	- / 0.858	- / 0.657	- / 0.670	- / 11.451
2.2) PE [3]	- / 16.746	- / 3.111	- / 3.053	- / 3.423	- / -	- / 3.423	- / 3.208	- / 3.167	- / 3.230	- / 2.471	- / 1.852	- / 40.261
2.3) Product Improvement [4]	- / 29.293	- / 1.728	- / 1.754	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 32.775
2.4) Acceptance, Test & Evaluation [5]	- / 1.383	- / 0.106	- / 0.097	- / 0.293	- / -	- / 0.293	- / 0.416	- / 0.284	- / 0.113	- / 0.188	- / 0.224	- / 3.104
2.5) Depot	- / 0.046	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.046
2.6) Initial Training	- / 0.274	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.274
Subtotal: Support	*- / 52.925*	*- / 5.759*	*- / 5.697*	*- / 4.525*	*- / -*	*- / 4.525*	*- / 4.449*	*- / 4.293*	*- / 4.201*	*- / 3.316*	*- / 2.746*	*- / 87.911*
Installation												
Modification Item 1 of 1: AN/UPX 24 (V) Mode S (MT035)	- / 2.163	- / 1.436	- / 1.491	- / 1.977	- / 0.000	- / 1.977	- / 2.136	- / 1.538	- / 0.525	- / 0.940	- / 0.547	- / 12.753
Subtotal: Installation	*- / 2.163*	*- / 1.436*	*- / 1.491*	*- / 1.977*	*- / -*	*- / 1.977*	*- / 2.136*	*- / 1.538*	*- / 0.525*	*- / 0.940*	*- / 0.547*	*- / 12.753*
Total												
Total Cost (Procurement + Support + Installation)	**65.708**	**11.350**	**10.660**	**10.547**	**0.000**	**10.547**	**9.497**	**6.574**	**6.493**	**5.801**	**3.293**	**129.923**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 2 / AN/UPX 24 (V) Mode S (MT035)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: AN/UPX 24 (V) Mode S (MT035)

Manufacturer Information

Manufacturer Name: NAWCAD 4.11.2.1	Manufacturer Location: St. Inigoes, MD
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027
Delivery Dates	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027	Dec 2028

Installation Information

Method of Implementation: AIT:: Installation Name: Equipment

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	30 / 2.163	21 / 1.436	3 / 0.106	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	54 / 3.705
FY 2022	- / -	- / -	17 / 1.385	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	17 / 1.385
FY 2023	- / -	- / -	- / -	14 / 1.977	0 / 0.000	14 / 1.977	- / -	- / -	- / -	- / -	0 / 0.000	14 / 1.977
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	17 / 2.136	- / -	- / -	- / -	0 / 0.000	17 / 2.136
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 1.538	- / -	- / -	0 / 0.000	12 / 1.538
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.525	- / -	0 / 0.000	3 / 0.525
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 0.940	0 / 0.000	7 / 0.940
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.547	6 / 0.547
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	30 / 2.163	21 / 1.436	20 / 1.491	14 / 1.977	0 / 0.000	14 / 1.977	17 / 2.136	12 / 1.538	3 / 0.525	7 / 0.940	6 / 0.547	130 / 12.753

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	30	5	5	5	6	7	4	4	5	4	4	3	3	5	4	4	4	4	4	4	-	2	1	-	-	2	2	2	1	6	130
Out	30	5	5	5	6	7	4	4	5	4	4	3	3	5	4	4	4	4	4	4	-	2	1	-	-	2	2	2	1	6	130

Footnotes:

(2) Adjustment to procurements and installs are based on shift in ship availabilities and to align with Aegis Modernization schedules. Prior year procurement and installs adjusted to reflect actuals. Current Inventory Objective is 130. New Construction Ships added to the fleet, prior to Mode S Cut in will need retrofit.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 2 / AN/UPX 24 (V) Mode S (MT035)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(3) Production Engineering increase from FY23 to FY24 due to fluctuation in quantity of ship classes and additional combat system configurations. PE fluctuates throughout the FYDP as the program transitions from less complex installs on small number of ship classes with limited combat system configurations some years to installs on multiple ship classes with various additional combat system configurations other years.

(4) The fleet modernization ECP supports improvements in space, weight and power (SWAP), network hardening, and cyber security, and will result in a scalable IFF interrogator system for delivery to multiple ship classes; FFG(x), CVN-78, LHA(R), DDG, LPD, LHA, CG, and LHD.

(5) ATE funding increase from FY23 to FY24 due to an increase in Combat System configurations planned for installation.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 3 / Mark XII Mode 5 (MT037)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	179.550	0.890	0.618	0.631	0.000	0.631	0.781	0.000	0.000	0.000	0.000	182.470
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	179.550	0.890	0.618	0.631	0.000	0.631	0.781	0.000	0.000	0.000	0.000	182.470
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**179.550**	**0.890**	**0.618**	**0.631**	**0.000**	**0.631**	**0.781**	**0.000**	**0.000**	**0.000**	**0.000**	**182.470**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Mark XIIA Mode 5 provides improved secure cooperative combat identification throughout Identification Friend or Foe (IFF). Mode 5 is a product improvement which is designed to be installed via engineering changes to digital MarkXII interrogators and transponders including, AN/APX-118/123(V) Common Digital Transponder (CXP), AN/UPX-37/41/45 Digital Interrogator (DI), and AN/UPX-24(V). Procurements will include Cryptography, Long Lead Items, Low-Rate Initial Production (LRIP) Units, Full Rate Production units, Support/Test Equipment, and associated hardware and software changes for Fleet Modernization Plan (FMP) and non-FMP installations. Mode 5 is designed to be installed in all Navy ships which are currently Mode 4 IFF capable. Milestone C and LRIP was approved in July 2006 and Full Rate Production was approved in July 2012. In March 2007, Joint Requirements Oversight Council Memorandum (JROCM 047-07) endorsed a Mode 5 Joint Full Operational Capability in FY2020.

Procurement and installs differ by 108 units due to Naval Special Warfare Forces, which will be installing their own units.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 3 / Mark XII Mode 5 (MT037)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/APX-118/123(V), AN/UPX-37/41(C), AN/UPX-24(V)	**Modification Type:** Capability Improvement	**Related RDT&E PEs:** 0604777N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Mark XII Mode 5 (MT037)												
B Kits												
Non-Recurring												
1.1.1) Equipment - Organic - Organic	- / 3.775	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.775
1.1.2) Mode 5 CXP Systems/Kits - NonOrganic	427 / 14.690	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	427 / 14.690
1.1.3) Mode 5 UPX-24(V) Kits - NonOrganic	110 / 7.970	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	110 / 7.970
1.1.4) Mode 5 DI Systems/ Kits - NonOrganic	293 / 11.970	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	293 / 11.970
Subtotal: Non-Recurring	*- / 38.405*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 38.405*
Subtotal: Mark XII Mode 5 (MT037)	*830 / 38.405*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*830 / 38.405*
Subtotal: Procurement, All Modification Items	*- / 38.405*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 38.405*
Support *(All Modification Items)*												
2.1) Support Equipment	- / 9.559	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 9.559
2.2) ILS (6)	- / 8.363	- / 0.070	- / 0.061	- / 0.062	- / -	- / 0.062	- / 0.079	- / -	- / -	- / -	- / -	- / 8.635
2.3) PE (7)	- / 57.391	- / 0.604	- / 0.557	- / 0.569	- / -	- / 0.569	- / 0.702	- / -	- / -	- / -	- / -	- / 59.823
2.4) Product Improvement	- / 13.364	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 13.364
2.5) Acceptance, Test & Evaluation	- / 6.631	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 6.631
2.6) Initial Training	- / 0.517	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.517
Subtotal: Support	*- / 95.825*	*- / 0.674*	*- / 0.618*	*- / 0.631*	*- / -*	*- / 0.631*	*- / 0.781*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 98.529*
Installation												
Modification Item 1 of 1: Mark XII Mode 5 (MT037)	- / 45.320	- / 0.216	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 45.536
Subtotal: Installation	*- / 45.320*	*- / 0.216*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 45.536*
Total												
Total Cost (Procurement + Support + Installation)	**179.550**	**0.890**	**0.618**	**0.631**	**0.000**	**0.631**	**0.781**	**0.000**	**0.000**	**0.000**	**0.000**	**182.470**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 3 / Mark XII Mode 5 (MT037)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Mark XII Mode 5 (MT037)

Installation Information

Method of Implementation: [none specified]:: Installation Name: Mode 5 CXP Systems/Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	317 / 14.339	2 / 0.010	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	319 / 14.349
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	317 / 14.339	2 / 0.010	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	319 / 14.349

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	317	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	319
Out	317	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	319

Method of Implementation: [none specified]:: Installation Name: Mode 5 UPX-24(V) Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	110 / 7.874	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	110 / 7.874
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 3 / Mark XII Mode 5 (MT037)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Mark XII Mode 5 (MT037)

Installation Information

Method of Implementation: [none specified]:: Installation Name: Mode 5 UPX-24(V) Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	110 / 7.874	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	110 / 7.874

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110
Out	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	110

Method of Implementation: [none specified]:: Installation Name: Mode 5 DI Systems/ Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	289 / 23.107	4 / 0.206	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	293 / 23.313
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	289 / 23.107	4 / 0.206	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	293 / 23.313

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	289	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	293
Out	289	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	293

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 3 / Mark XII Mode 5 (MT037)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Footnotes:

(6) This cost element is impacted by the amount of documentation and logistics work needed because of the differences between ship classes.

(7) Production Engineering (PE) is required to cover the completion of mode 5 installations on remaining ships with extended availabilities.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 4 / Mode S Digital Interrogator (MT040)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	60.560	9.286	11.089	10.975	0.000	10.975	11.656	8.483	7.539	8.612	5.006	133.206
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	60.560	9.286	11.089	10.975	0.000	10.975	11.656	8.483	7.539	8.612	5.006	133.206
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**60.560**	**9.286**	**11.089**	**10.975**	**0.000**	**10.975**	**11.656**	**8.483**	**7.539**	**8.612**	**5.006**	**133.206**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Adds Mode Select (S) Beacon System commercial aircraft interrogation capability to shipboard IFF Digital Interrogators (DIs). Incorporation of a Mode S capability in the AN/UPX-41(C) will result in a nomenclature change to AN/UPX-45(C) and AN/UPX-50(C). In some installations, such as Aircraft Carriers, incorporation of the Mode S capability in the DI will include an interface with a ship's Air Traffic Control System. Mode S provides improved aircraft surveillance and communications necessary to support air traffic control automation in the dense traffic environments. Mode S provides more accurate aircraft positional information and minimizes interference by discrete interrogation of each Mode S transponder-equipped aircraft and improved processing of aircraft replies. In addition, Mode S provides the medium for a digital data link, which can be used to exchange information between aircraft and various air traffic control functions and weather databases. Inventory Objective of 286 is derived from the Naval Data Environment database, the Ships & Aircraft Supplemental Data Table and ship/submarine Ship Program Manager Procurement plans and schedules.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 4 / Mode S Digital Interrogator (MT040)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/UPX-37, AN/UPX-41(C), AN/UPX-45(C), AN/UPX-50(C)	**Modification Type:** Capability Improvement	**Related RDT&E PEs:** 0604777N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Mode S Digital Interrogator (MT040)												
B Kits												
Non-Recurring												
1.1.1) Equipment - NonOrganic [8]	71 / 1.521	43 / 0.526	42 / 0.524	47 / 2.507	- / -	47 / 2.507	33 / 1.796	11 / 0.611	18 / 1.019	21 / 1.213	- / -	286 / 9.717
Subtotal: Non-Recurring	*- / 1.521*	*- / 0.526*	*- / 0.524*	*- / 2.507*	*- / -*	*- / 2.507*	*- / 1.796*	*- / 0.611*	*- / 1.019*	*- / 1.213*	*- / 0.000*	*- / 9.717*
Subtotal: Mode S Digital Interrogator (MT040)	*71 / 1.521*	*43 / 0.526*	*42 / 0.524*	*47 / 2.507*	*- / -*	*47 / 2.507*	*33 / 1.796*	*11 / 0.611*	*18 / 1.019*	*21 / 1.213*	*- / -*	*286 / 9.717*
Subtotal: Procurement, All Modification Items	*- / 1.521*	*- / 0.526*	*- / 0.524*	*- / 2.507*	*- / -*	*- / 2.507*	*- / 1.796*	*- / 0.611*	*- / 1.019*	*- / 1.213*	*- / 0.000*	*- / 9.717*
Support *(All Modification Items)*												
2.1) Support Equipment	- / 0.688	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.688
2.2) ILS	- / 4.183	- / 0.428	- / 0.434	- / 0.920	- / -	- / 0.920	- / 0.889	- / 0.907	- / 0.925	- / 0.943	- / 0.481	- / 10.110
2.3) PE [9]	- / 32.827	- / 4.588	- / 4.618	- / 5.069	- / -	- / 5.069	- / 5.482	- / 4.317	- / 4.403	- / 4.491	- / 2.291	- / 68.086
2.4) Product Improvement	- / 15.067	- / 1.442	- / 3.208	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 19.717
2.5) Acceptance, Test & Evaluation [10]	- / 2.871	- / 0.458	- / 0.479	- / 0.502	- / -	- / 0.502	- / 0.414	- / 0.434	- / 0.438	- / 0.615	- / 0.627	- / 6.838
2.6) Depot	- / 0.200	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.200
2.7) Initial Training	- / 0.423	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.423
Subtotal: Support	*- / 56.259*	*- / 6.916*	*- / 8.739*	*- / 6.491*	*- / -*	*- / 6.491*	*- / 6.785*	*- / 5.658*	*- / 5.766*	*- / 6.049*	*- / 3.399*	*- / 106.062*
Installation												
Modification Item 1 of 1: Mode S Digital Interrogator (MT040)	- / 2.780	- / 1.844	- / 1.826	- / 1.977	- / 0.000	- / 1.977	- / 3.075	- / 2.214	- / 0.754	- / 1.350	- / 1.607	- / 17.427
Subtotal: Installation	*- / 2.780*	*- / 1.844*	*- / 1.826*	*- / 1.977*	*- / -*	*- / 1.977*	*- / 3.075*	*- / 2.214*	*- / 0.754*	*- / 1.350*	*- / 1.607*	*- / 17.427*
Total												
Total Cost (Procurement + Support + Installation)	**60.560**	**9.286**	**11.089**	**10.975**	**0.000**	**10.975**	**11.656**	**8.483**	**7.539**	**8.612**	**5.006**	**133.206**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 4 / Mode S Digital Interrogator (MT040)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Mode S Digital Interrogator (MT040)

Manufacturer Information

Manufacturer Name: BAE Systems LP	Manufacturer Location: Greenlawn, NY
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027
Delivery Dates	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027	Dec 2028

Installation Information

Method of Implementation: AIT:: Installation Name: Equipment

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	17 / 2.780	54 / 1.844	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	71 / 4.624
FY 2022	- / -	- / -	43 / 1.826	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	43 / 1.826
FY 2023	- / -	- / -	- / -	42 / 1.977	0 / 0.000	42 / 1.977	- / -	- / -	- / -	- / -	0 / 0.000	42 / 1.977
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	47 / 3.075	- / -	- / -	- / -	0 / 0.000	47 / 3.075
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	33 / 2.214	- / -	- / -	0 / 0.000	33 / 2.214
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 0.754	- / -	0 / 0.000	11 / 0.754
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	18 / 1.350	0 / 0.000	18 / 1.350
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	21 / 1.607	21 / 1.607
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	17 / 2.780	54 / 1.844	43 / 1.826	42 / 1.977	0 / 0.000	42 / 1.977	47 / 3.075	33 / 2.214	11 / 0.754	18 / 1.350	21 / 1.607	286 / 17.427

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	17	14	14	13	13	11	11	11	10	11	11	10	10	12	12	12	11	8	8	8	9	3	3	3	2	5	5	5	3	21	286
Out	17	14	14	13	13	11	11	11	10	11	11	10	10	12	12	12	11	8	8	8	9	3	3	3	2	5	5	5	3	21	286

Footnotes:

(8) Variations in procurement are correlated with installation schedules and ship availabilities. Increase in unit cost from FY23 to FY24 is due to Mode S retrofits will transition to UPX-50(C) configuration, the cost increase through the FYDP due to production line update for obsolescence. Retrofit kit cost will increase due to addition of five new circuit card assemblies to the kit contents. Prior year procurement and installs adjusted to reflect actuals. Inventory Objective updated to reflect decommission for CG47 and LSD ships. Retrofits no longer required for multiple ships.

(9) PE Increase in FY24 due to deliveries of new UPX-50 configuration commencing in FY24.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 4 / Mode S Digital Interrogator (MT040)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(10) Cost is based on ship availabilities and to align with Aegis Modernization schedules, and aligns with procurements/installs.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 5 / OE-120/UPX Antenna (MT041)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	13.446	7.257	7.407	10.291	0.000	10.291	11.006	15.639	16.595	20.467	86.911	189.019
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	13.446	7.257	7.407	10.291	0.000	10.291	11.006	15.639	16.595	20.467	86.911	189.019
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**13.446**	**7.257**	**7.407**	**10.291**	**0.000**	**10.291**	**11.006**	**15.639**	**16.595**	**20.467**	**86.911**	**189.019**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The OE-120/UPX antenna radiates Identification Friend or Foe (IFF) encoded radio frequency (RF) challenge pulses into space and receives the resultant IFF encoded RF transponder replies from space. Current surface ship OE-120/UPX antenna systems will receive upgrade kits to improve system Reliability & Maintainability (R&M). The upgrade kits will use open architecture and current technology that allows for continued production and future growth. An Engineering Change Proposal was awarded using RDT&E (PU 0676) funds for the Original Equipment Manufacturer to deliver an Engineering Design Model for shipboard test and evaluation in fiscal year 2018.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 5 / OE-120/UPX Antenna (MT041)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: OE-120/UPX Antenna Group	**Modification Type:** Reliability	**Related RDT&E PEs:** 0604777N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: OE-120/UPX Antenna (MT041)												
B Kits												
Non-Recurring												
1.1.1) Equipment - NonOrganic (11)	7 / 2.586	4 / 1.528	5 / 1.948	5 / 1.987	- / -	5 / 1.987	5 / 2.027	5 / 2.068	5 / 2.482	5 / 2.978	20 / 16.962	61 / 34.566
Subtotal: Non-Recurring	*- / 2.586*	*- / 1.528*	*- / 1.948*	*- / 1.987*	*- / -*	*- / 1.987*	*- / 2.027*	*- / 2.068*	*- / 2.482*	*- / 2.978*	*- / 16.962*	*- / 34.566*
Subtotal: OE-120/UPX Antenna (MT041)	*7 / 2.586*	*4 / 1.528*	*5 / 1.948*	*5 / 1.987*	*- / -*	*5 / 1.987*	*5 / 2.027*	*5 / 2.068*	*5 / 2.482*	*5 / 2.978*	*20 / 16.962*	*61 / 34.566*
Subtotal: Procurement, All Modification Items	*- / 2.586*	*- / 1.528*	*- / 1.948*	*- / 1.987*	*- / -*	*- / 1.987*	*- / 2.027*	*- / 2.068*	*- / 2.482*	*- / 2.978*	*- / 16.962*	*- / 34.566*
Support *(All Modification Items)*												
2.1) ILS	- / 1.849	- / 0.384	- / 0.196	- / 0.200	- / -	- / 0.200	- / 0.204	- / 0.398	- / 0.406	- / 0.414	- / 1.566	- / 5.617
2.2) PE (12)	- / 6.107	- / 2.328	- / 2.257	- / 2.937	- / -	- / 2.937	- / 2.082	- / 4.298	- / 4.384	- / 4.472	- / 14.074	- / 42.939
2.3) Product Improvement	- / -	- / 1.395	- / 1.535	- / -	- / -	- / -	- / -	- / 2.096	- / 4.480	- / 4.156	- / -	- / 13.662
2.4) Acceptance, Test & Evaluation (13)	- / 2.623	- / 0.630	- / 0.439	- / 1.292	- / -	- / 1.292	- / 1.673	- / 1.695	- / 1.729	- / 2.112	- / 13.577	- / 25.770
Subtotal: Support	*- / 10.579*	*- / 4.737*	*- / 4.427*	*- / 4.429*	*- / -*	*- / 4.429*	*- / 3.959*	*- / 8.487*	*- / 10.999*	*- / 11.154*	*- / 29.217*	*- / 87.988*
Installation												
Modification Item 1 of 1: OE-120/UPX Antenna (MT041)	- / 0.281	- / 0.992	- / 1.032	- / 3.875	- / 0.000	- / 3.875	- / 5.020	- / 5.084	- / 3.114	- / 6.335	- / 40.732	- / 66.465
Subtotal: Installation	*- / 0.281*	*- / 0.992*	*- / 1.032*	*- / 3.875*	*- / -*	*- / 3.875*	*- / 5.020*	*- / 5.084*	*- / 3.114*	*- / 6.335*	*- / 40.732*	*- / 66.465*
Total												
Total Cost (Procurement + Support + Installation)	**13.446**	**7.257**	**7.407**	**10.291**	**0.000**	**10.291**	**11.006**	**15.639**	**16.595**	**20.467**	**86.911**	**189.019**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 5 / OE-120/UPX Antenna (MT041)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: OE-120/UPX Antenna (MT041)

Manufacturer Information

Manufacturer Name: BAE Systems LP	Manufacturer Location: Nashua, NJ
Administrative Leadtime *(in Months)*: 6	Production Leadtime *(in Months)*: 23

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023	Mar 2024	Mar 2025	Mar 2026	Mar 2027	Mar 2028
Delivery Dates	Feb 2024	Feb 2025	Feb 2026	Feb 2027	Feb 2028	Feb 2029	Feb 2030

Installation Information

Method of Implementation: [none specified]:: Installation Name: Equipment

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	1 / 0.281	3 / 0.992	3 / 1.032	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 2.305
FY 2022	- / -	- / -	- / -	4 / 3.875	0 / 0.000	4 / 3.875	- / -	- / -	- / -	- / -	0 / 0.000	4 / 3.875
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	5 / 5.020	- / -	- / -	- / -	0 / 0.000	5 / 5.020
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 5.084	- / -	- / -	0 / 0.000	5 / 5.084
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 3.114	- / -	0 / 0.000	5 / 3.114
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 6.335	0 / 0.000	5 / 6.335
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 6.789	5 / 6.789
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 6.789	5 / 6.789
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	20 / 27.154	20 / 27.154
Total	1 / 0.281	3 / 0.992	3 / 1.032	4 / 3.875	0 / 0.000	4 / 3.875	5 / 5.020	5 / 5.084	5 / 3.114	5 / 6.335	30 / 40.732	61 / 66.465

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	1	-	1	2	-	-	1	2	-	-	2	2	-	-	3	2	-	-	3	2	-	-	3	2	-	-	3	2	-	30	61
Out	1	-	1	2	-	-	1	2	-	-	2	2	-	-	3	2	-	-	3	2	-	-	3	2	-	-	3	2	-	30	61

Footnotes:

(11) Install costs increase from FY23 to FY24 due to re-baseline of outdated estimates.

(12) Increase from FY23 to FY24 due to planned requirement for software operating system update.

(13) Increase from FY23 to FY24 due to planned requirement for software operating system update and certification.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 6 / AN/UPX-46 Processor System (MT042)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	17.358	15.963	12.468	0.000	12.468	11.433	10.061	8.714	8.550	7.500	92.047
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	17.358	15.963	12.468	0.000	12.468	11.433	10.061	8.714	8.550	7.500	92.047
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**17.358**	**15.963**	**12.468**	**0.000**	**12.468**	**11.433**	**10.061**	**8.714**	**8.550**	**7.500**	**92.047**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Replace or upgrade unique Shipboard IFF Interrogator Systems with common hardware configurations including the CP-2819/UPX processor, AN/APX-123(V) Common Digital Transponder (CXP), and Mark XIIA Digital Interrogator (DI) equipment. Unique interrogator systems will not meet Mode 5 requirements per Mark XIIA Cooperative IFF Operational Requirements Document 595-61-02 - dated 27 Apr 2001. Inventory Objective is 51.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 6 / AN/UPX-46 Processor System (MT042)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: UPX-29/UPX29A/ UPX-46 Processor System	**Modification Type:** Reliability	**Related RDT&E PEs:** 0604777N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/UPX-46 Processor System (MT042)												
B Kits												
Non-Recurring												
1.1.1) Mode 5 AN/UPX-46 Systems/Kits - NonOrganic (14)	- / -	6 / 4.140	8 / 5.603	5 / 3.572	- / -	5 / 3.572	4 / 2.915	3 / 2.230	1 / 0.758	2 / 1.546	- / -	29 / 20.764
1.1.2) Mode 5 CXP Systems/Kits - NonOrganic (15)	- / -	2 / 0.113	3 / 0.137	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 0.250
1.1.3) Mode 5 DI Systems/Kits - NonOrganic (16)	- / -	2 / 0.721	3 / 0.858	2 / 0.583	- / -	2 / 0.583	2 / 0.595	2 / 0.607	2 / 0.619	2 / 0.632	2 / 0.644	17 / 5.259
Subtotal: Non-Recurring	*- / 0.000*	*- / 4.974*	*- / 6.598*	*- / 4.155*	*- / -*	*- / 4.155*	*- / 3.510*	*- / 2.837*	*- / 1.377*	*- / 2.178*	*- / 0.644*	*- / 26.273*
Subtotal: AN/UPX-46 Processor System (MT042)	*- / -*	*10 / 4.974*	*14 / 6.598*	*7 / 4.155*	*- / -*	*7 / 4.155*	*6 / 3.510*	*5 / 2.837*	*3 / 1.377*	*4 / 2.178*	*2 / 0.644*	*51 / 26.273*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / 4.974*	*- / 6.598*	*- / 4.155*	*- / -*	*- / 4.155*	*- / 3.510*	*- / 2.837*	*- / 1.377*	*- / 2.178*	*- / 0.644*	*- / 26.273*
Support *(All Modification Items)*												
2.1) Support Equipment	- / -	- / 6.677	- / 4.156	- / 1.425	- / -	- / 1.425	- / 1.018	- / -	- / -	- / -	- / -	- / 13.276
2.2) ILS	- / -	- / 0.402	- / 0.418	- / 0.435	- / -	- / 0.435	- / 0.568	- / 0.579	- / 0.591	- / 0.603	- / 0.615	- / 4.211
2.3) PE	- / -	- / 3.711	- / 3.326	- / 3.393	- / -	- / 3.393	- / 3.460	- / 3.530	- / 3.600	- / 3.672	- / 3.596	- / 28.288
2.4) Product Improvement	- / -	- / 1.040	- / 0.981	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.021
2.5) Acceptance Test & Evaluation	- / -	- / 0.554	- / 0.484	- / 0.392	- / -	- / 0.392	- / 0.400	- / 0.408	- / 0.416	- / 0.424	- / 0.432	- / 3.510
Subtotal: Support	*- / 0.000*	*- / 12.384*	*- / 9.365*	*- / 5.645*	*- / -*	*- / 5.645*	*- / 5.446*	*- / 4.517*	*- / 4.607*	*- / 4.699*	*- / 4.643*	*- / 51.306*
Installation												
Modification Item 1 of 1: AN/UPX-46 Processor System (MT042)	- / 0.000	- / 0.000	- / 0.000	- / 2.668	- / 0.000	- / 2.668	- / 2.477	- / 2.707	- / 2.730	- / 1.673	- / 2.213	- / 14.468
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / 2.668*	*- / -*	*- / 2.668*	*- / 2.477*	*- / 2.707*	*- / 2.730*	*- / 1.673*	*- / 2.213*	*- / 14.468*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**17.358**	**15.963**	**12.468**	**0.000**	**12.468**	**11.433**	**10.061**	**8.714**	**8.550**	**7.500**	**92.047**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 6 / AN/UPX-46 Processor System (MT042)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: AN/UPX-46 Processor System (MT042)

Manufacturer Information

Manufacturer Name: NAWCAD | Manufacturer Location: St. Inigoes, MD

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 24

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027
Delivery Dates	Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027	Dec 2028	Dec 2029

Installation Information

Method of Implementation: AIT:: Installation Name: AN/UPX-46 Processor System

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	10 / 2.668	0 / 0.000	10 / 2.668	- / -	- / -	- / -	- / -	0 / 0.000	10 / 2.668
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	14 / 2.477	- / -	- / -	- / -	0 / 0.000	14 / 2.477
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.707	- / -	- / -	0 / 0.000	7 / 2.707
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 2.730	- / -	0 / 0.000	6 / 2.730
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 1.673	0 / 0.000	5 / 1.673
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.626	3 / 1.626
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 0.323	4 / 0.323
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.264	2 / 0.264
Total	- / -	- / -	- / -	10 / 2.668	0 / 0.000	10 / 2.668	14 / 2.477	7 / 2.707	6 / 2.730	5 / 1.673	9 / 2.213	51 / 14.468

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	6	2	2	-	4	4	4	2	2	2	1	2	3	1	1	1	3	1	1	-	9	51
Out	-	-	-	-	-	-	-	-	-	6	2	2	-	4	4	4	2	2	2	1	2	3	1	1	1	3	1	1	-	9	51

Footnotes:

(14) The AN/UPX-46 budget was established to convert Contractor Furnished Equipment (CFE) based IFF systems to Mode 5 capability and transfer production and configuration control to organic Navy facilities. The budget will provide the Mode 5 Capability to (3) Ship Classes: LCS1 variant, LCS2 variant and WMSL (USCG). LCS1 and WMSL ship classes require modification kits to update the existing installed

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 6 / AN/UPX-46 Processor System (MT042)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

equipment. LCS2 ship class requires complete UPX-46 system installation. UPX-46 systems and kits require a 24 month lead time. Install costs vary from year to year due to ship availability, ship class and location of the install. Initial spares are included in overall hardware cost.

(15) Inventory Objective decreased due to accelerated Mode 5 Transponder capability installation funded by PEO IWS 8, resulting in a reduction of FY24-FY28 procurements and total Inventory Objective decrease from 20 to 5.

(16) DI kits are required to convert legacy interrogators to Mode 5 capable interrogators. LCS1 and WMSL - Requires UPX-46 Kit (includes CXP and DI), this converts the existing transponder and interrogator equipment to Mode 5 capable end items. Inventory Objective decreased from 20 to 17 due to decommission of three LCS class ships.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 7 / Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	3.047	5.150	0.000	5.150	3.336	3.868	3.471	2.166	0.000	21.038
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	3.047	5.150	0.000	5.150	3.336	3.868	3.471	2.166	0.000	21.038
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**3.047**	**5.150**	**0.000**	**5.150**	**3.336**	**3.868**	**3.471**	**2.166**	**0.000**	**21.038**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

AN/UPX-34A Radar Track Discriminator System (RTDS) is installed on CG47 Class Aegis Cruisers and provides high fidelity, long range, Non-Cooperative Target Recognition (NCTR) capability to support the Air-Sea battle by providing timely tactical engagement decisions by Aegis action officers. Upgrades to the system will reduce Rules of Engagement (ROE) concerns, incorporate "other services" target libraries into the RTDS database, and increase the system's range performance. These enhancements are critical to the Aegis Cruiser's primary Anti-Air warfare (AAW) role. These enhancements also provide critical capability to accurately identify and discern civilian versus military aircraft. Inventory objective 10.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 7 / Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Radar Track Discriminator System (RTDS) AN/UPX-34A	**Modification Type:** Reliability	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043)												
B Kits												
Non-Recurring												
1.1.1) AN/UPX-34A Kit - NonOrganic [17]	- / -	- / -	2 / 0.232	3 / 1.449	- / -	3 / 1.449	1 / 0.500	3 / 1.485	1 / 0.505	- / -	- / -	10 / 4.171
Subtotal: Non-Recurring	*- / 0.000*	*- / -*	*- / 0.232*	*- / 1.449*	*- / -*	*- / 1.449*	*- / 0.500*	*- / 1.485*	*- / 0.505*	*- / -*	*- / 0.000*	*- / 4.171*
Subtotal: Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043)	*- / -*	*- / -*	*2 / 0.232*	*3 / 1.449*	*- / -*	*3 / 1.449*	*1 / 0.500*	*3 / 1.485*	*1 / 0.505*	*- / -*	*- / -*	*10 / 4.171*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / 0.232*	*- / 1.449*	*- / -*	*- / 1.449*	*- / 0.500*	*- / 1.485*	*- / 0.505*	*- / -*	*- / 0.000*	*- / 4.171*
Support *(All Modification Items)*												
2.1) ILS	- / -	- / -	- / 0.206	- / 0.210	- / -	- / 0.210	- / 0.223	- / 0.243	- / 0.248	- / 0.253	- / -	- / 1.383
2.2) PE [18]	- / -	- / -	- / 1.637	- / 1.937	- / -	- / 1.937	- / 1.546	- / 1.576	- / 1.608	- / 1.640	- / -	- / 9.944
2.3) Product Improvement	- / -	- / -	- / 0.700	- / 0.761	- / -	- / 0.761	- / -	- / -	- / -	- / -	- / -	- / 1.461
2.4) Acceptance Test and Evaluation	- / -	- / -	- / 0.198	- / 0.211	- / -	- / 0.211	- / 0.215	- / 0.220	- / 0.224	- / -	- / -	- / 1.068
2.5) Initial Training	- / -	- / -	- / 0.074	- / 0.077	- / -	- / 0.077	- / 0.079	- / 0.081	- / 0.082	- / -	- / -	- / 0.393
Subtotal: Support	*- / 0.000*	*- / -*	*- / 2.815*	*- / 3.196*	*- / -*	*- / 3.196*	*- / 2.063*	*- / 2.120*	*- / 2.162*	*- / 1.893*	*- / 0.000*	*- / 14.249*
Installation												
Modification Item 1 of 1: Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043)	- / 0.000	- / 0.000	- / 0.000	- / 0.505	- / 0.000	- / 0.505	- / 0.773	- / 0.263	- / 0.804	- / 0.273	- / 0.000	- / 2.618
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / 0.505*	*- / -*	*- / 0.505*	*- / 0.773*	*- / 0.263*	*- / 0.804*	*- / 0.273*	*- / 0.000*	*- / 2.618*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**3.047**	**5.150**	**0.000**	**5.150**	**3.336**	**3.868**	**3.471**	**2.166**	**0.000**	**21.038**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 7 / Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043)

Manufacturer Information

Manufacturer Name: NAWCAD WOLF | Manufacturer Location: St. Inigoes, MD

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Dec 2022	Dec 2023	Dec 2024	Dec 2025	Dec 2026	
Delivery Dates		Dec 2023	Dec 2024	Dec 2025	Dec 2026	Dec 2027	

Installation Information

Method of Implementation: [none specified]:: Installation Name: AN/UPX-34A Kit

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	2 / 0.505	0 / 0.000	2 / 0.505	- / -	- / -	- / -	- / -	0 / 0.000	2 / 0.505
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.773	- / -	- / -	- / -	0 / 0.000	3 / 0.773
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.263	- / -	- / -	0 / 0.000	1 / 0.263
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.804	- / -	0 / 0.000	3 / 0.804
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.273	0 / 0.000	1 / 0.273
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	2 / 0.505	0 / 0.000	2 / 0.505	3 / 0.773	1 / 0.263	3 / 0.804	1 / 0.273	0 / 0.000	10 / 2.618

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	2	-	-	-	2	1	-	-	1	-	-	-	2	1	-	-	1	-	-	-	-	10
Out	-	-	-	-	-	-	-	-	-	2	-	-	-	2	1	-	-	1	-	-	-	2	1	-	-	1	-	-	-	-	10

Footnotes:

(17) FY24 kit procurements are required due to production lead time and ship class integration for the UPX-34, initial buys are planned with consideration for production lead time and ship class integration. The planned timeline and associated funding profile are aligned to ship availability within the limited obtainability of these ships in port. FY24-FY27 hardware costs updated based on information discovered during the development phase.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 7 / Radar Track Discriminator System (RTDS) AN/UPX-34A (MT043)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(18) Production engineering costs will cover initial system integration on ships with different host combat system configurations. Efforts include the installation and integration of new equipment, evaluation of engineering changes to correct deficiencies, update of ship drawing packages, and technical evaluation of waivers and deviations. Production engineering covers the costs to re-certify the Combat Engagement Capability (CEC) systems which will be required following an upgrade of the UPX-34 system.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 8 / AN/UPX-36 Replacement (MT044)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	7.549	7.932	0.000	7.932	11.404	7.541	6.865	4.398	0.000	45.689
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	7.549	7.932	0.000	7.932	11.404	7.541	6.865	4.398	0.000	45.689
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**7.549**	**7.932**	**0.000**	**7.932**	**11.404**	**7.541**	**6.865**	**4.398**	**0.000**	**45.689**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Replace or upgrade unique Shipboard IFF Interrogator Systems with UPX-46 common hardware configuration. Unique AN/UPX-36 interrogator systems currently installed on LSD 41 and LSD 49 ship classes will not meet Mode 5 requirements per Mark XIIA Cooperative IFF Operational Requirements Document 595-61-02 dated 27 Apr 2001. Inventory Objective is 11.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 8 / AN/UPX-36 Replacement (MT044)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/UPX-36	**Modification Type:** Reliability	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: AN/UPX-36 Replacement (MT044)												
B Kits												
Non-Recurring												
1.1.1) AN/UPX-36A Kit - NonOrganic [19]	- / -	- / -	3 / 3.724	3 / 3.873	- / -	3 / 3.873	4 / 5.456	1 / 1.364	- / -	- / -	- / -	11 / 14.417
Subtotal: Non-Recurring	*- / 0.000*	*- / -*	*- / 3.724*	*- / 3.873*	*- / -*	*- / 3.873*	*- / 5.456*	*- / 1.364*	*- / -*	*- / -*	*- / 0.000*	*- / 14.417*
Subtotal: AN/UPX-36 Replacement (MT044)	*- / -*	*- / -*	*3 / 3.724*	*3 / 3.873*	*- / -*	*3 / 3.873*	*4 / 5.456*	*1 / 1.364*	*- / -*	*- / -*	*- / -*	*11 / 14.417*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / 3.724*	*- / 3.873*	*- / -*	*- / 3.873*	*- / 5.456*	*- / 1.364*	*- / -*	*- / -*	*- / 0.000*	*- / 14.417*
Support *(All Modification Items)*												
2.1) Support Equipment	- / -	- / -	- / 0.600	- / 0.373	- / -	- / 0.373	- / 0.514	- / 0.524	- / 0.248	- / 0.190	- / -	- / 2.449
2.2) ILS [20]	- / -	- / -	- / 0.564	- / 0.534	- / -	- / 0.534	- / 0.866	- / 0.890	- / 0.917	- / 0.978	- / -	- / 4.749
2.3) PE [21]	- / -	- / -	- / 2.488	- / 2.976	- / -	- / 2.976	- / 3.212	- / 3.267	- / 3.355	- / 2.559	- / -	- / 17.857
2.4) Acceptance Test & Evaluation	- / -	- / -	- / 0.173	- / 0.176	- / -	- / 0.176	- / 0.180	- / 0.184	- / 0.187	- / 0.143	- / -	- / 1.043
Subtotal: Support	*- / 0.000*	*- / -*	*- / 3.825*	*- / 4.059*	*- / -*	*- / 4.059*	*- / 4.772*	*- / 4.865*	*- / 4.707*	*- / 3.870*	*- / 0.000*	*- / 26.098*
Installation												
Modification Item 1 of 1: AN/UPX-36 Replacement (MT044)	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 1.176	- / 1.312	- / 2.158	- / 0.528	- / 0.000	- / 5.174
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 1.176*	*- / 1.312*	*- / 2.158*	*- / 0.528*	*- / 0.000*	*- / 5.174*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**7.549**	**7.932**	**0.000**	**7.932**	**11.404**	**7.541**	**6.865**	**4.398**	**0.000**	**45.689**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 8 / AN/UPX-36 Replacement (MT044)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: AN/UPX-36 Replacement (MT044)

Manufacturer Information

Manufacturer Name: NAWCAD WOLF	Manufacturer Location: St. Inigoes, MD
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 24

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Dec 2022	Dec 2023	Dec 2024	Dec 2025		
Delivery Dates		Dec 2024	Dec 2025	Dec 2026	Dec 2027		

Installation Information

Method of Implementation: [none specified]:: Installation Name: AN/UPX-36A Kit

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.176	- / -	- / -	- / -	0 / 0.000	3 / 1.176
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.312	- / -	- / -	0 / 0.000	3 / 1.312
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.158	- / -	0 / 0.000	4 / 2.158
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.528	0 / 0.000	1 / 0.528
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.176	3 / 1.312	4 / 2.158	1 / 0.528	0 / 0.000	11 / 5.174

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	1	1	1	-	1	1	1	1	1	-	-	-	-	11
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	1	1	1	-	1	1	1	1	1	-	-	-	-	11

Footnotes:

(19) FY24 funding is required for the UPX-36 Replacement, which will provide a much needed capability to the fleet. Initial buys are planned with consideration for production lead time, ship class integration and ship availabilities. Inventory Objective decrease due to ship decommissioning. (LSD 41 decommissioned)

(20) ILS fluctuations in FY23 to FY24 are due to Initial fielding commencing in FY25.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 8 / AN/UPX-36 Replacement (MT044)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(21) Production engineering costs will cover upgrades/changes to host combat system, engineering changes to correct deficiencies, ship drawing package updates, and technical evaluation of waivers and deviations identified during system testing. Production engineering costs will also facilitate re-certification of the entire suite of ship combat systems in accordance with Air Traffic Control Radio Beacon System, IFF, Mark XII/XIIA System (AIMS), Federal Aviation Administration (FAA), and National Telecommunications and Information Administration (NTIA) requirements. FY23 to FY24 increase due to implementation of hardware configuration unique to the LSD41/49 ship classes.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 9 / DDG 1000 Modernization (MT045)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	2.100	0.700	0.000	0.700	0.800	0.380	4.186	0.000	0.000	8.166
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	2.100	0.700	0.000	0.700	0.800	0.380	4.186	0.000	0.000	8.166
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**2.100**	**0.700**	**0.000**	**0.700**	**0.800**	**0.380**	**4.186**	**0.000**	**0.000**	**8.166**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:
Modernization of the DDG 1000 Zumwalt Class IFF Sensor Suite includes product improvement and engineering changes for a three panel electronically scanned array (ESA) antenna, one UPX-42(C) interrogator with Target Data Extractor, and three RT-1912(C)/APX or RT-1912A(C)/APX Transponders.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 9 / DDG 1000 Modernization (MT045)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: DDG 1000 IFF Suite	**Modification Type:** Modernization	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DDG 1000 Modernization (MT045)												
B Kits												
Recurring												
1.1.1) Equipment - NonOrganic (22)	- / -	- / -	3 / 1.447	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.447
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / 1.447*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 1.447*
Subtotal: DDG 1000 Modernization (MT045)	*- / -*	*- / -*	*3 / 1.447*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*3 / 1.447*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / 1.447*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 1.447*
Support *(All Modification Items)*												
2.1) ILS (23)	- / -	- / -	- / 0.653	- / 0.450	- / -	- / 0.450	- / 0.675	- / 0.380	- / 4.186	- / -	- / -	- / 6.344
Subtotal: Support	*- / 0.000*	*- / -*	*- / 0.653*	*- / 0.450*	*- / -*	*- / 0.450*	*- / 0.675*	*- / 0.380*	*- / 4.186*	*- / -*	*- / 0.000*	*- / 6.344*
Installation												
Modification Item 1 of 1: DDG 1000 Modernization (MT045)	- / 0.000	- / 0.000	- / 0.000	- / 0.250	- / 0.000	- / 0.250	- / 0.125	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.375
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / 0.250*	*- / -*	*- / 0.250*	*- / 0.125*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 0.375*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**2.100**	**0.700**	**0.000**	**0.700**	**0.800**	**0.380**	**4.186**	**0.000**	**0.000**	**8.166**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 9 / DDG 1000 Modernization (MT045)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DDG 1000 Modernization (MT045)

Manufacturer Information

Manufacturer Name: NAWC	Manufacturer Location: St. Inigoes, NAS Patuxent River MD
Administrative Leadtime *(in Months)*: 6	Production Leadtime *(in Months)*: 16

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates		Mar 2023					
Delivery Dates		Jul 2024					

Installation Information

Method of Implementation: AIT:: Installation Name: Equipment

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	2 / 0.250	0 / 0.000	2 / 0.250	1 / 0.125	- / -	- / -	- / -	0 / 0.000	3 / 0.375
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	2 / 0.250	0 / 0.000	2 / 0.250	1 / 0.125	- / -	- / -	- / -	0 / 0.000	3 / 0.375

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Out	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3

Footnotes:

(22) FY23 funding is required for the DDG 1000 class Mode 5 capable test equipment. Initial buys are planned with consideration for production lead time.

(23) ILS funds updates to ILS products resulting from changes during installation.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 10 / UPneXt (MT046)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.670	8.546	13.844	14.026	45.086
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.670	8.546	13.844	14.026	45.086
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**8.670**	**8.546**	**13.844**	**14.026**	**45.086**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Modernization of the AN/UPX-24(V) includes software, firmware and hardware changes to the CP-1273/UPX-24(V) Processor-Controller. The purpose of the change is to address obsolescence, consolidation of multiple configurations and variants across the surface Navy; integration of the system architecture to reflect tomorrow's Navy combat suites; and ensure network and cyber security requirements are met.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 10 / UPneXt (MT046)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: UPneXt (MT046)												
B Kits												
Non-Recurring												
1.1.1) UPneXt Kit - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 2.150	10 / 2.193	30 / 6.711	- / -	50 / 11.054
Subtotal: Non-Recurring	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.150*	*- / 2.193*	*- / 6.711*	*- / 0.000*	*- / 11.054*
Subtotal: UPneXt (MT046)	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*10 / 2.150*	*10 / 2.193*	*30 / 6.711*	*- / -*	*50 / 11.054*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.150*	*- / 2.193*	*- / 6.711*	*- / 0.000*	*- / 11.054*
Support *(All Modification Items)*												
2.1) ILS	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.565	- / 0.577	- / 0.605	- / -	- / 1.747
2.2) PE	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 3.328	- / 3.312	- / 3.478	- / 3.548	- / 13.666
2.3) PRODUCT IMPROVEMENT	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.125	- / 1.952	- / 0.222	- / 0.167	- / 4.466
2.4) ACCEPTANCE, TEST & EVALUATION	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.502	- / 0.512	- / 0.522	- / 0.533	- / 2.069
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 6.520*	*- / 6.353*	*- / 4.827*	*- / 4.248*	*- / 21.948*
Installation												
Modification Item 1 of 1: UPneXt (MT046)	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 2.306	- / 9.778	- / 12.084
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.306*	*- / 9.778*	*- / 12.084*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**8.670**	**8.546**	**13.844**	**14.026**	**45.086**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2851 / ID Systems	**Modification Number / Title:** 10 / UPneXt (MT046)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: UPneXt (MT046)

Manufacturer Information

Manufacturer Name: NAWC WOLF	Manufacturer Location: St. Inigoes, NAS Patuxent River MD
Administrative Leadtime *(in Months)*: 3	Production Leadtime *(in Months)*: 24

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates					Dec 2025	Dec 2026	Dec 2027
Delivery Dates					Dec 2027	Dec 2028	Dec 2029

Installation Information

Method of Implementation: AIT:: Installation Name: UPneXt Kit

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 2.306	0 / 0.000	10 / 2.306
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 2.755	10 / 2.755
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	30 / 7.023	30 / 7.023
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 2.306	40 / 9.778	50 / 12.084

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	3	40	50
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	3	40	50

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2867 / Joint Precision Approach and Landing System(JPALS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0603860N	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 238

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	220.290	35.386	8.186	3.343	0.000	3.343	11.453	9.759	8.245	4.331	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	220.290	35.386	8.186	3.343	0.000	3.343	11.453	9.759	8.245	4.331	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**220.290**	**35.386**	**8.186**	**3.343**	**0.000**	**3.343**	**11.453**	**9.759**	**8.245**	**4.331**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	2.873	-	-	-	-	-	-	-	-	-	2.873
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Joint Precision Approach and Landing System (JPALS) is the primary precision approach and landing system for CVN and LHA/D ships to support aircraft without SPN-46 Automatic Carrier Landing Systems (ACLS) capability, which include F-35B, F-35C, MQ-25 and future platforms. The nomenclature for JPALS has been designated AN/USN-3(V)1, Satellite Signals Landing System. JPALS ship systems are required to provide CVN and LHA/D ships a primary precision approach capability during night and instrument flight conditions, including coupled approach capability to a hover transition point for LHA/D ships, and coupled approach to the deck (auto-land) capability aboard CVN ships, and in contested environments. JPALS also provides over-the-air inertial alignment capability for CVN and LHA/D ships to support aircraft platforms without Link-4A capability, including F-35, MQ-25 and future platforms. JPALS MS B occurred June 2016 and MS C occurred April 2019. Production contract awarded May 2019.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2867 / Joint Precision Approach and Landing System(JPALS)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0603860N	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 238

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-3a	1 / CR001 AN/USN-3 (V)1 (Modernization)				- / 220.290	- / 35.386	- / 8.186	- / 3.343	- / 0.000	- / 3.343
P-40	**Total Gross/Weapon System Cost**				**- / 220.290**	**- / 35.386**	**- / 8.186**	**- / 3.343**	**- / 0.000**	**- / 3.343**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-3a	1 / CR001 AN/USN-3 (V)1 (Modernization)				- / 11.453	- / 9.759	- / 8.245	- / 4.331	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 11.453**	**- / 9.759**	**- / 8.245**	**- / 4.331**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY 2024 funds emergent engineering proposals.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2867 / Joint Precision Approach and Landing System(JPALS)	**Modification Number / Title:** 1 / CR001 AN/USN-3 (V)1
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	220.290	35.386	8.186	3.343	0.000	3.343	11.453	9.759	8.245	4.331	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	220.290	35.386	8.186	3.343	0.000	3.343	11.453	9.759	8.245	4.331	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**220.290**	**35.386**	**8.186**	**3.343**	**0.000**	**3.343**	**11.453**	**9.759**	**8.245**	**4.331**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

JPALS ship systems are required to provide CVN and LH ships a primary precision approach capability during night and instrument flight conditions, including coupled approach capability to a hover transition point for LHA/D ships, and coupled approach to the deck (auto-land) capability aboard CVN ships. JPALS also provides over-the-air inertial alignment capability for CVN and LHA/D ships to support aircraft platforms without Link-4A capability, including F-35, MQ-25 and future platforms.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2867 / Joint Precision Approach and Landing System(JPALS)	**Modification Number / Title:** 1 / CR001 AN/USN-3 (V)1
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: CVN, L-class ships.	**Modification Type:** Modernization	**Related RDT&E PEs:** 0603860N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CR001 AN/USN-3 (V)1												
B Kits												
Recurring												
1.1.1) AN/USN-3 (V)1 - NonOrganic	18 / 162.886	1 / 9.636	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	19 / 172.522
1.1.2) ECP/OCIR - Organic (1)	- / -	- / -	- / 2.216	- / 1.676	- / -	- / 1.676	- / 1.325	- / 0.752	- / 0.770	- / 0.807	Continuing	Continuing
1.1.3) GPS M-Code Receivers - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	8 / 3.500	8 / 3.570	8 / 3.641	- / -	- / -	24 / 10.711
1.1.4) LANTERNS - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	2 / 3.300	- / -	- / -	- / -	- / -	2 / 3.300
Subtotal: Recurring	*- / 162.886*	*- / 9.636*	*- / 2.216*	*- / 1.676*	*- / -*	*- / 1.676*	*- / 8.125*	*- / 4.322*	*- / 4.411*	*- / 0.807*	*Continuing*	*Continuing*
Subtotal: CR001 AN/USN-3 (V)1	*18 / 162.886*	*1 / 9.636*	*- / 2.216*	*- / 1.676*	*- / -*	*- / 1.676*	*10 / 8.125*	*8 / 4.322*	*8 / 4.411*	*- / 0.807*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 162.886*	*- / 9.636*	*- / 2.216*	*- / 1.676*	*- / -*	*- / 1.676*	*- / 8.125*	*- / 4.322*	*- / 4.411*	*- / 0.807*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Integrated Logistics Support	- / 12.228	- / 9.310	- / 1.097	- / 0.678	- / -	- / 0.678	- / 1.292	- / 1.318	- / 1.047	- / 0.782	Continuing	Continuing
2.2) Production Engineering	- / 27.742	- / 7.883	- / 3.115	- / 0.989	- / -	- / 0.989	- / 2.036	- / 2.077	- / 2.119	- / 2.061	Continuing	Continuing
Subtotal: Support	*- / 39.970*	*- / 17.193*	*- / 4.212*	*- / 1.667*	*- / -*	*- / 1.667*	*- / 3.328*	*- / 3.395*	*- / 3.166*	*- / 2.843*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: CR001 AN/USN-3 (V)1	- / 17.434	- / 8.557	- / 1.758	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 2.042	- / 0.668	- / 0.681	- / 0.000	- / 31.140
Subtotal: Installation	*- / 17.434*	*- / 8.557*	*- / 1.758*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.042*	*- / 0.668*	*- / 0.681*	*- / 0.000*	*- / 31.140*
Total												
Total Cost (Procurement + Support + Installation)	**220.290**	**35.386**	**8.186**	**3.343**	**0.000**	**3.343**	**11.453**	**9.759**	**8.245**	**4.331**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2867 / Joint Precision Approach and Landing System(JPALS)	**Modification Number / Title:** 1 / CR001 AN/USN-3 (V)1
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CR001 AN/USN-3 (V)1

Manufacturer Information

Manufacturer Name: Raytheon	Manufacturer Location: Fullerton, CA
Administrative Leadtime *(in Months)*: 0	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Oct 2021						
Delivery Dates	Oct 2022						

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime *(in Months)*: 4	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates				Jan 2025			
Delivery Dates				Jan 2026			

Manufacturer Name: TBD 2	Manufacturer Location: TBD
Administrative Leadtime *(in Months)*: 4	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates				Jan 2025	Jan 2026	Jan 2027	
Delivery Dates				Jan 2026	Jan 2027	Jan 2028	

Installation Information

Method of Implementation: JPALS:: Installation Name: FMP

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	10 / 17.434	5 / 8.557	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	15 / 25.991
FY 2022	- / -	- / -	1 / 1.758	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 1.758
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	10 / 17.434	5 / 8.557	1 / 1.758	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	16 / 27.749

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2867 / Joint Precision Approach and Landing System(JPALS)	**Modification Number / Title:** 1 / CR001 AN/USN-3 (V)1
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CR001 AN/USN-3 (V)1

Installation Information

Method of Implementation: JPALS:: Installation Name: FMP

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	10	-	-	3	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
Out	10	-	-	3	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16

Method of Implementation: [none specified]:: Installation Name: GPS M-Code Receivers

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.642	- / -	- / -	0 / 0.000	8 / 0.642
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.668	- / -	0 / 0.000	8 / 0.668
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.681	0 / 0.000	8 / 0.681
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 0.642	8 / 0.668	8 / 0.681	0 / 0.000	24 / 1.991

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2	-	24
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2	-	24

Method of Implementation: FMP:: Installation Name: LANTERNS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	**P-1 Line Item Number / Title:** 2867 / Joint Precision Approach and Landing System(JPALS)	**Modification Number / Title:** 1 / CR001 AN/USN-3 (V)1
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CR001 AN/USN-3 (V)1

Installation Information

Method of Implementation: FMP:: Installation Name: LANTERNS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.400	- / -	- / -	0 / 0.000	2 / 1.400
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.400	- / -	- / -	0 / 0.000	2 / 1.400

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	2
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	2

Footnotes:

(1) FY2024 funding is required to integrate solutions required to correct critically obsolete system architecture components.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2876 / Naval Mission Planning Systems

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	309.022	16.777	25.092	39.180	0.000	39.180	45.241	55.139	48.182	51.165	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	309.022	16.777	25.092	39.180	0.000	39.180	45.241	55.139	48.182	51.165	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**309.022**	**16.777**	**25.092**	**39.180**	**0.000**	**39.180**	**45.241**	**55.139**	**48.182**	**51.165**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.271	0.217	0.343	-	0.343	0.297	0.367	0.388	0.192	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This line item provides funding to procure Mission Planning workstations and associated Support Equipment, Software/Production Engineering Support, and Integrated Logistics Support (ILS) for the Naval Mission Planning Systems (NavMPS) family of systems. The NavMPS family of systems includes the Joint Mission Planning System-Maritime (JMPS-M) (primary product), Next Generation Naval Mission Planning System (NGNMPS), JMPS-E (Expeditionary), Electronic Kneeboard (EKB), Common Munitions Built-in-Test (BIT)/Reprogramming Equipment (CMBRE), and Standardized Tester of Reprogrammable Munitions (STORM, formerly called "Next Generation CMBRE").

JMPS-M (Maritime) is the legacy automated mission planning system for Naval Aviation, currently supporting over 40 Type/Model/Series (T/M/S) U.S. Navy and Marine Corps aircraft and expeditionary forces. The JMPS-M program support includes platforms such as: F/A-18 A/B/C/D/E/F, EA-18G, CH-53K, Marine Helicopters, H-60 R/S, and P-8A. JMPS-M enables weapon system employment by providing the information and decision aids needed to rapidly plan aircraft, weapon or sensor missions, load mission data into aircraft and weapons, conduct mission rehearsal, and post mission analysis. The Naval Aviation's modern aircraft need data loaded from JMPS-M to fly their missions. The JMPS-M system procures hardware and software assets at all appropriate classification levels to support mission-planning requirements

The Next Generation Naval Mission Planning System (NGNMPS) will address critical capability gaps and deficiencies in the legacy JMPS that are required for modern 21st century integrated mission-centric and collaborative multi-domain mission planning, execution and analysis. The NGNMPS will replace Naval Aviation's legacy JMPS no later than FY 2027 while also affordably leveraging prior investments across the systems of systems to deliver integrated and collaborative capability. The NGNMPS will affordably address technological obsolescence while also delivering collaborative and automated capabilities in an integrated virtual collaborative data environment. The NGNMPS capability provides advanced multiple aircraft planning capabilities focused on emerging, high-threat mission areas. Current mission planning capabilities support individual aircraft and weapon initialization requirements. The emerging, near-peer threat environment demands a much more capable system that enables a team of aircraft to cooperate effectively across multiple mission areas, domains, and security levels. The NGNMPS will also leverage service-oriented architecture to provide revolutionary improvements in workflow, usability, cybersecurity. Additionally NGNMPS will provide information and decision aids needed to rapidly plan/employ/maximize effectiveness of aircraft/weapon/sensor/payload mission plans. This functionality includes advanced pre-mission rehearsal/analysis, loading mission data into aircraft and weapons, dynamic replanning/retargeting against evolving threats in contested environments, and advanced post-mission debrief/ analysis. The NGNMPS will provide support cross-domain solution capabilities. These mission planning, mission execution, and mission analysis functions meet the National Defense Strategy and Interim National Security Strategic Guidance key objectives. The NGNMPS system procures hardware and software assets at all appropriate classification levels to support mission-planning requirements .

JMPS-E (Expeditionary) is a scalable, tailorable and collaborative web-based mission planning and execution monitoring tool for Marine Expeditionary Unit and Amphibious Squadron staffs embarked with each Amphibious Ready Group (ARG) and Expeditionary Strike Group (ESG).

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2876 / Naval Mission Planning Systems	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

EKB provides Naval Aviation with a scalable, rapidly deployable capability to support Department of Defense (DOD) digital transformation initiatives. EKB is configured on a commercially available portable electronic device and contains digital flight information, aeronautical products, reference material, and flight planning tools to support aviation operations in land-based, littoral, and blue-water environments. EKB also provides tactical mission planning and execution capabilities including tactical decision aids that support the range of Naval Aviation Enterprise (NAE) operations. The EKB has two baseline configurations - an unclassified Electronic Flight Bag (EFB) device and the Tactical Flight Bag (TFB) device, which is currently classified up to Secret after loading mission-specific software. The EFB's function is to support flight planning and execution while the TFB's function is to support tactical mission employment. The EKB effort addresses a high-priority fleet "paperless cockpit" initiative which reduces the number of printed paper-based products needed for in-flight use while also accommodating the need to store and display data to the operator necessary to execute training and tactical missions. EKB funding provides at least one operational EKB device per aircraft cockpit seat based on Primary Aircraft Authorization (PAA) requirements.

CMBRE provides USN/USMC forces with the critical capability to perform built-in-test (BIT) and programming/reprogramming of various weapons afloat and ashore. CMBRE operations afloat require the modernization of ammunition Magazine Operations (MAGOPS) in all aircraft carriers (CVN-68 and CVN-78 classes) as well as large-deck L-Class (LHA/LHD) ships; it enables safe BIT checks and programming/reprogramming of stores in CVN magazines to support carrier air wing sortie generation requirements. The Standardized Tester of Reprogrammable Munitions (STORM) (formerly called Next Generation CMBRE) is the follow-on replacement system for the legacy CMBRE System; it addresses legacy CMBRE end of life obsolescence issues while also modernizing the system into an affordable, lightweight, compact, modular design. CMBRE and STORM further supports USMC expeditionary mission requirements, mandatory cybersecurity protections and resilience, and data transfer speeds that are required to support air wing combat readiness. Further STORM supports advanced Net-Enabled Weapons across the enterprise that are required in support of the National Defense Strategy and Interim National Security Strategic Guidance to pace the emerging threat. STORM will affordably enhance mission readiness and security, generate improved flexibility, depth and capacity for existing and emerging aviation weapon capabilities during the conduct of ship, shore, and ship-to-shore operations in both conventional and Disaggregated Aviation Operating (DAO) environments.

As aircraft and weapons become increasingly advanced, they will require increased access, quantity, processing analysis and fidelity of data to support mission planning, mission execution, dynamic mission re-planning and mission analysis. These data requirements will require additional advanced processors, memory, storage, and servers. Mission Planning Seats refer to the computer workstations that employ the mission planning software. Program cost is not directly related to FY hardware quantity; software is a cost factor independent of FY hardware quantity and cost. Funding profile accounts for required four-year workstation refresh cycle to preclude aging/obsolete hardware and reduce failure rates, procure supporting emerging technology such as EKB (and STORM starting in FY 2024) to support advanced operational capabilities and address system obsolescence/cybersecurity requirements/mission readiness requirements, and support memory requirements for high-end mission planning capabilities.

NGNMPS and STORM are using a Middle Tier Acquisition approach per Section 804/Rapid Prototype of the FY 2016 National Defense Authorization Act (NDAA), as amended in FY 2017 NDAA(codified at 10 U.S.C. sub sec 2302 note) to deliver NGNMPS and STORM capability to the Navy across multiple platforms. Funding in FY24 transitions NGNMPS from a Section 804 Mid-Tier acquisition Rapid Prototype to a follow-on program of record and STORM 804 MTA to follow-on acquisition activities.

Prior to FY 2017, the EKB was funded in BLI 4268.

[P5 / Multi Level Mission Planning]: Multi-level Mission Planning refers to a classified capability. Details are held at a higher classification.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2876 / Naval Mission Planning Systems

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Naval Mission Planning Systems	P-5a			- / 309.022	- / 16.777	- / 25.092	- / 39.180	- / 0.000	- / 39.180
P-40	**Total Gross/Weapon System Cost**				**- / 309.022**	**- / 16.777**	**- / 25.092**	**- / 39.180**	**- / 0.000**	**- / 39.180**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2024 provides funding to procure 750 Mission Planning Seats, EKB's, training assets, and other JMPS and NGNMPS support equipment; and continues the release of software enhancements based on fleet inputs, emerging technologies, cybersecurity mandates and associated logistics support. FY 2024-2025 laptop procurement supports Naval Aviation platforms, particularly F/A-18, E/A-18G, H-53, H-1, V-22, and P-8 platform variants. This hardware is required to field critical electronic attack mission planning capabilities and support cybersecurity. Updated hardware is required to continue to meet JMPS and NGNMPS operational requirements for complex platforms, which include F/A-18 (all variants) and EA-18G. Procurements, allocations, and deployments of assets are made at all appropriate security classification levels necessary to support all Naval Aviation platforms. Additionally, funding provides for database and server systems with storage space capable of storing National Geospatial-Intelligence Agency (NGA) world-wide map, data imagery, and intelligence data with associated network hardware. This will provide the Fleet with the required storage for map data, Digital Terrain Elevation Data (DTED), imagery, and intelligence required to plan missions. FY 2024 continues modernization of legacy mission planning, execution and analysis software and hardware for affordable integration with the NGNMPS, as well as the continuation of modernization of magazine operations (MAGOPS) on NIMITZ (CVN-68) and FORD (CVN-78) class aircraft carriers, at a baseline rate of two CVN MAGOPS mods/installs per year, based on ship availability. STORM program of record begins in FY 2024 to meet mandatory cyber security requirements, affordably address obsolescence, and meet emergent operational requirements including support for Disaggregated Aviation Operations supporting the National Defense Strategy. Increase in FY 2024 supports additional hardware requirements necessary to meet the needs of more complex NGNMPS software as we transition away from legacy JMPS, and ship change documents to install hardware on air capable and amphibious assault ships. Funding increase in FY 2024 continues EFB/TFB procurement and deployment through the FYDP. EFB/TFB funding provides at least one operational EKB device per aircraft cockpit seat based on Primary Aircraft Authorization (PAA) requirements.

Items to be funded in this line include:

Workstation Components - Tactical computer hardware, at all appropriate classification levels, is procured through a non-developmental item acquisition strategy. Tactical computer equipment is used to plan and analyze expeditionary missions and aircraft routes under various mission configurations and operational threat environments, and classifications. Primary outputs are tasking orders, Courses of Actions (COAs), Route Plans, Munitions / Weapons Plans, and Navigation and mission essential data loads for mission execution. New workstations consist of aircraft unique data transfer devices and interfaces, Memory Data Loader Receptacles (MDLR) Small Computer Standard Interface (SCSI) (MDLR-S), EKB, STORM, Ogden Data Device Ethernet Crypto (ODD-EC), Data Storage Unit Receptacle SCSI (DSUR-S), servers, network hubs, printers, fleet training school workstations, JMPS Application Central Access Library (JACAL), training assets, and other peripheral devices for USN/USNR/USMC/USMCR missions. JMPS and NGNMPS Authority to Operate (ATO) requires compliance with Naval Network Warfare Command (NNWC)-issued Information Assurance (IA) mandates and Communications Tasking Orders (CTOs).

EKB components - The EKB mobile computing devices are procured as commercial-off-the-shelf mobile computing devices. Funding also supports procurement of software licenses as well as deployment of software applications to fleet users.

STORM Components - Funding in FY24 transitions STORM from a Section 804 Mid-Tier acquisition Rapid Prototype to follow-on acquisition activities.

Software/Production Engineering Support - The JMPS-M, NGNMPS, EKB, and STORM programs produce software releases via evolutionary and agile development processes. These releases contain enhancements based on fleet inputs and technology challenges at all appropriate classification levels. They also contain changes required to retain compatibility with supported platforms, associated weapons, and threat and imagery databases. Software releases are independent of hardware buys. This cost element includes production support services, engineering support services, independent verification and validation test and acceptance, site activation, IA compliance and quality assurance efforts, to include those associated with the software pipeline.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 9: Aviation Electronic Equipment	**P-1 Line Item Number / Title:** 2876 / Naval Mission Planning Systems	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Integrated Logistics Support - The JMPS-M and NGNMPS programs conduct site surveys, prepares site installation drawings, conduct on-site engineering, and perform logistics evaluations for installations and delivery systems to ensure compliance with the specified configuration. This includes the production and delivery of technical documentation and training materials such as OPNOTES, installation instructions and user manuals required during the fielding of JMPS-M and NGNMPS products. ILS is a cost factor independent of FY hardware quantity and cost.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	P-1 Line Item Number / Title: 2876 / Naval Mission Planning Systems	Item Number / Title [DODIC]: 1 / Naval Mission Planning Systems
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	309.022	16.777	25.092	39.180	0.000	39.180
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	309.022	16.777	25.092	39.180	0.000	39.180
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**309.022**	**16.777**	**25.092**	**39.180**	**0.000**	**39.180**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	0.271	0.217	0.343	-	0.343
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Hardware - Hardware Cost																		
Recurring Cost																		
1.1.1) S7403 MISSION PLANNING SEAT(†) (1)	4,050.74	14,249	57.719	2,037.00	174	0.354	2,037.00	750	1.528	3,146.00	600	1.888	-	-	-	3,146.00	600	1.888
1.1.2) NEXT GENERATION MISSION PLANNING SEATS(†) (2)	-	-	-	-	-	-	-	-	-	3,146.00	150	0.472	-	-	-	3,146.00	150	0.472
1.1.3) S7408 EXPEDITIONARY WARFARE PLANNING SEAT(†)	3,250.63	399	1.297	-	-	-	2,037.00	138	0.281	-	-	-	-	-	-	-	-	-
1.1.4) S7850 JMPS-M Support Equipment (3)	-	-	32.772	-	-	3.186	-	-	3.505	-	-	2.643	-	-	-	-	-	2.643
1.1.5) S7851 JMPS-E Support Equipment	-	-	0.154	-	-	-	-	-	1.032	-	-	-	-	-	-	-	-	-
1.1.6) S7852 STORM Support Equipment (4)	-	-	-	-	-	-	-	-	-	-	-	0.579	-	-	-	-	-	0.579
1.1.7) S7412 CMBRE MAGOPS (5)	-	-	-	-	-	4.000	-	-	4.266	-	-	3.789	-	-	-	-	-	3.789
1.1.8) S7411 Next Generation Naval Mission Planning System (6)	-	-	5.300	-	-	1.794	-	-	3.480	-	-	8.868	-	-	-	-	-	8.868

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	P-1 Line Item Number / Title: 2876 / Naval Mission Planning Systems	Item Number / Title [DODIC]: 1 / Naval Mission Planning Systems
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1.1.9) S7853 EFB/TFB Support Equipment (7)	-	-	-	-	-	-	-	-	3.434	-	-	3.080	-	-	-	-	-	3.080
1.1.10) Multi Level Mission Planning (8)	-	-	-	-	-	-	-	-	-	-	-	8.252	-	-	-	-	-	8.252
Subtotal: Recurring Cost	-	-	*97.242*	-	-	*9.334*	-	-	*17.526*	-	-	*29.571*	-	-	-	-	-	*29.571*
Subtotal: Hardware - Hardware Cost	**-**	**-**	***97.242***	**-**	**-**	***9.334***	**-**	**-**	***17.526***	**-**	**-**	***29.571***	**-**	**-**	**-**	**-**	**-**	***29.571***
Support Cost																		
2.1) S7820 Other Costs	-	-	152.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.2) S7830 JMPS Software/Production Engineering Support (9)	-	-	43.334	-	-	5.061	-	-	5.144	-	-	4.130	-	-	-	-	-	4.130
2.3) S7800 JMPS Integrated Logistics Support (10)	-	-	16.131	-	-	2.076	-	-	2.110	-	-	1.702	-	-	-	-	-	1.702
2.4) NGNMPS Software/ Production Engineering Support (11)	-	-	0.200	-	-	0.204	-	-	0.208	-	-	1.335	-	-	-	-	-	1.335
2.5) NGNMPS Integrated Logistics Support (12)	-	-	0.100	-	-	0.102	-	-	0.104	-	-	0.571	-	-	-	-	-	0.571
2.6) STORM Production Engineering Support (13)	-	-	-	-	-	-	-	-	-	-	-	0.750	-	-	-	-	-	0.750
2.7) STORM Integrated Logistics Support (14)	-	-	-	-	-	-	-	-	-	-	-	0.210	-	-	-	-	-	0.210
2.8) CMBRE MAGOPS Production Engineering Support (15)	-	-	-	-	-	-	-	-	-	-	-	0.404	-	-	-	-	-	0.404
2.9) CMBRE MAGOPS Integrated Logistics Support (16)	-	-	-	-	-	-	-	-	-	-	-	0.099	-	-	-	-	-	0.099
2.10) EFB/TFB Production Engineering Support (17)	-	-	-	-	-	-	-	-	-	-	-	0.306	-	-	-	-	-	0.306
2.11) EFB/TFB Integrated Logistics Support (18)	-	-	-	-	-	-	-	-	-	-	-	0.102	-	-	-	-	-	0.102
Subtotal: Support Cost	**-**	**-**	***211.780***	**-**	**-**	***7.443***	**-**	**-**	***7.566***	**-**	**-**	***9.609***	**-**	**-**	**-**	**-**	**-**	***9.609***
Gross/Weapon System Cost	**-**	**-**	**309.022**	**-**	**-**	**16.777**	**-**	**-**	**25.092**	**-**	**-**	**39.180**	**-**	**-**	**0.000**	**-**	**-**	**39.180**

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	P-1 Line Item Number / Title: 2876 / Naval Mission Planning Systems	Item Number / Title [DODIC]: 1 / Naval Mission Planning Systems
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

(†) indicates the presence of a P-5a

Footnotes:

(1) 1.1.1) S7403 Mission Planning Seat - Procures JMPS-M laptops annually as a component of the JMPS-M Mission Planning Seat. JMPS laptop quantities are currently based on Fleet demand and number of Mission Planning Environments/aircraft supported (over 40 T/M/S) which is validated by Commander Naval Air Forces (CNAF). Fiscal year 2024-2025 unit costs increased because of the demand for processing power and additional storage requirements necessary to plan increasingly complex missions required for modern 21st century integrated mission-centric and collaborative multi-domain mission planning which have caused price increase. Mission Planning Seat quantities are determined by Fleet requirements and COTS/Military spec software/hardware compatibility. Mission Planning laptop contract is re-competed every two years (one base year, one option year) where pricing and fleet requirements are evaluated to ensure they meet fleet requirements while remaining cost effective.

(2) 1.1.2) Next Generation Mission Planning Seat - Procures NGNMPS laptops annually as a component of the Mission Planning Seat. Laptop quantities are currently based on Fleet demand and number of Mission Planning Environments/aircraft supported (over 40 T/M/S) which is validated by CNAF. FY 2024-2025 unit costs are based on historical Mission Planning Seat model (GETAC S410 G2), plus inflation and additional costs due to additional data storage, multiple communication ports for data transfer and peripheral requirements. Mission Planning Seat candidates are determined by Fleet requirements and COTS/ Military spec software/hardware compatibility. Mission Planning laptop contract is re-competed every two years (one base year, one option year) where pricing and fleet requirements are evaluated to ensure they meet fleet requirements while remaining cost effective.

(3) 1.1.4) S7850 JMPS-M Support Equipment - Support Equipment includes storage devices, network hubs, printers, initial fleet training school workstations, Advanced Data Loader Receptacles, Electronic Kneeboards (EKB), Common Munitions Bit Reprogramming Equipment (CMBRE) prior to FY 2021, training assets, and other peripheral devices for USN/USNR/USMC/USMCR missions. Support Equipment adjusted to meet Fleet demand and number of Mission Planning Environments/aircraft supported (over 40 T/M/S).

(4) 1.1.6) S7852 Standardized Tester of Reprogrammable Munitions (STORM) Support Equipment replaces the legacy CMBRE system and provides the USN/USMC the ability to perform built-in-test and programming/reprogramming of various weapons. Funding starting in FY 2024 will procure STORM products to meet mandatory cyber security requirements, affordably address obsolescence, and meet emergent operational requirements including support for Disaggregated Aviation Operations supporting the National Defense Strategy. STORM hardware will maintain mission readiness, fleet readiness, and affordable system sustainability.

(5) 1.1.7) S7412 CMBRE MAGOPS- CMBRE MAGOPS is a fleet requirement to increase weapons maintenance and support throughput rates to meet Carrier Air Wing Sortie Generation Rate requirements in support of the National Defense Strategy, driving relocation of CMBRE stations to CVN Armored Box Magazines. Funds are required to outfit the next available CVN for CMBRE MAGOPS, and upgrade the CVN Armored Box Magazines in support of CMBRE station relocation.

(6) 1.1.8) Next Generation Naval Mission Planning System- NGNMPS is the replacement to JMPS, which is the legacy automated mission planning system for Naval Aviation, supporting over 40 Type/Model/ Series (T/M/S), U.S. Navy and Marine Corps aircraft and expeditionary forces. Funding increase in FY 2024 due to transition of hardware from JMPS to NGNMPS. NGNMPS will require hardware updates that meet the needs of more complex NGNMPS software and ship change document composition required to install hardware on air capable and amphibious assault ships.

(7) 1.1.9) S7853 Funding increase in FY 2024 due to EFB/TFB procurement and deployment continuing through the FYDP. EFB/TFB funding provides at least one operational EKB device per aircraft cockpit seat based on Primary Aircraft Authorization (PAA) requirements.

(8) 1.1.10) Multi-level Mission Planning - details of this capability are held at a higher classification. Item included in overall Naval Mission Planning Systems budget from FY24 and out to increase transparency.

(9) 2.2) S7830 JMPS Software/Production Engineering Support- Funds sustainment/updates to Mission Planning Environments supporting over 40 T/M/S aircraft, including support of cybersecurity mandates.

(10) 2.3) S7800 JMPS Integrated Logistics Support- Provides JMPS technical documentation, training materials and installation instructions that are compliant with cyber security mandates and Communications Tasking Orders (CTOs) for newly deployed platforms.

(11) 2.4) NGNMPS Software/Production Engineering- Supports the transition to NGNMPS for over 40 T/M/S, supports micro-services architecture / aircraft, and supports cyber security mandates. NGNMPS SW/ PES support cost increases from FY 2023 to FY 2024 are due to NGNMPS transitioning from a Section 804 Mid-Tier acquisition Rapid Prototype program to a follow-on Program of Record in FY 2024. Additional support funding is required to begin the transition of over 40 T/M/S away from legacy JMPS to NGNMPS. Efforts include production support services, engineering support services, independent verification and validation test and acceptance, site activation, IA compliance and quality assurance efforts, to include those associated with the software pipeline

(12) 2.5) NGNMPS Integrated Logistics Support- Provides technical documentation, training materials and installation instructions that are compliant with cyber security mandates and Communications Tasking Orders (CTOs) for newly deployed platforms and software. NGNMPS ILS support cost increases from FY 2023 to FY 2024 are due to NGNMPS transitioning from a Section 804 Mid-Tier acquisition Rapid Prototype program to a follow-on Program of Record in FY 2024. Additional support funding is required to begin the transition of over 40 T/M/S away from legacy JMPS to NGNMPS. Efforts include site surveys,

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	P-1 Line Item Number / Title: 2876 / Naval Mission Planning Systems	Item Number / Title [DODIC]: 1 / Naval Mission Planning Systems
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

prepares site installation drawings, conducting on-site engineering, and perform logistics evaluations for installations and delivery systems to ensure compliance with the specified configuration. This includes the production and delivery of technical documentation and training materials such as OPNOTES, installation instructions and user manuals required during the fielding of NGNMPS products.

(13) 2.6) STORM Production Engineering Support- Funding supports engineering production drawings, assembly as well as engineering change proposals / updates to the STORM system. Efforts include implementation of cybersecurity mandates as well as addressing emergent cybersecurity vulnerabilities.

(14) 2.7) STORM Integrated Logistics Support- Provides technical documentation, training materials, and installation / operation instructions for the STORM system. The STORM Program documentation is compliant with cybersecurity mandates and Communications Tasking Orders for newly deployed platforms.

(15) 2.8) CMBRE MAGOPS Production Engineering Support- Funding supports engineering drawings and ship change documents for modification and installation of the power connections for the CMBRE units in the CVN Armored Box Magazines.

(16) 2.9) CMBRE MAGOPS Integrated Logistics Support- Funding provides technical documentation, training materials, and installation / operations instructions for CMBRE units when conducting magazine operations.

(17) 2.10) EFB/TFB Production Engineering Support- Funding supports sustainment and updates to EFB / TFB mobile computing devices. Support includes compliance with cybersecurity mandates as well as addressing emergent cybersecurity vulnerabilities.

(18) 2.11) EFB/TFB Integrated Logistics Support- Funding supports sustainment, updates, and distribution EFB / TFB hardware and software products. Additionally funding supports technical documentation, operational documentation, and training materials for EFB / TFB that are compliant with cyber security mandates and Communications Tasking Orders (CTOs) for newly deployed platforms and software.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 9	P-1 Line Item Number / Title: 2876 / Naval Mission Planning Systems	Item Number / Title [DODIC]: 1 / Naval Mission Planning Systems

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) S7403 MISSION PLANNING SEAT		2022 (19)	GNOSTECH, LLC / WARMINSTER PA	C / TBD	NAVAIRHQ	Jun 2022	Jun 2022	174	2,037.00	N		Oct 2021
1.1.1) S7403 MISSION PLANNING SEAT		2023 (20)	GNOSTECH, LLC / WARMINSTER PA	C / TBD	NAVAIRHQ	Feb 2023	Feb 2023	750	2,037.00	N		Oct 2021
1.1.1) S7403 MISSION PLANNING SEAT		2024 (21)	TBD / TBD	C / TBD	TBD	Oct 2023	Nov 2023	600	3,146.00	N		Oct 2023
1.1.2) NEXT GENERATION MISSION PLANNING SEATS		2024	TBD / TBD	C / TBD	TBD	Oct 2023	Oct 2023	150	3,146.00	N		Oct 2023
1.1.3) S7408 EXPEDITIONARY WARFARE PLANNING SEAT		2021 (22)	OSI Federal Technologies / Aldie, VA	C / FFP	NAWCWD, CHINA LAKE	Feb 2021	Mar 2021	5	1,997.00	Y		Oct 2019
1.1.3) S7408 EXPEDITIONARY WARFARE PLANNING SEAT		2023 (23)	OSI Federal Technologies / Aldie, VA	C / TBD	TBD	Feb 2023	Sep 2023	138	2,037.00	N		

Footnotes:

(19) This contract consists of a base year (FY 2022) and option year (FY 2023). Mission Planning laptop contract is re-competed every two years where pricing and fleet requirements are evaluated to ensure they meet fleet requirements while remaining cost effective.

(20) This contract consists of a base year (FY 2022) and option year (FY 2023). Mission Planning laptop contract is re-competed every two years where pricing and fleet requirements are evaluated to ensure they meet fleet requirements while remaining cost effective.

(21) The FY 2024-2025 Mission Planning laptop effort is a competitive FY 2024 award therefore the performing activity and location are currently TBD to support a competitive contracting strategy. This contract consists of a base year (FY 2024) and option year (FY 2025). Once awarded, the performing activity and location will be updated to reflect the selected contractor.

(22) Mission Planning laptops are procured every two years where pricing and fleet requirements are evaluated to ensure they meet fleet requirements while remaining cost effective.

(23) The FY23 Mission Planning laptop effort is a competitive FY22 award therefore the performing activity and location are currently TBD to support a competitive contracting strategy. This contract consists of a base year (FY22) and option year (FY23). Once awarded, the performing activity and location will be updated to reflect the selected contractor.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2900 / Maritime Integrated Broadcast System

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	83.725	1.760	3.520	6.994	0.000	6.994	8.112	8.839	5.014	5.132	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	83.725	1.760	3.520	6.994	0.000	6.994	8.112	8.839	5.014	5.132	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**83.725**	**1.760**	**3.520**	**6.994**	**0.000**	**6.994**	**8.112**	**8.839**	**5.014**	**5.132**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Maritime Integrated Broadcast Service (MIBS): Program delivers Integrated Broadcast Service (IBS) data to operational and tactical decision makers aboard United States Navy surface ships, shore headquarters, and other joint platforms. MIBS provides the Navy a capability to receive and deliver near real time IBS data, enhancing the Common Operation Picture (COP) supporting operations in all warfare areas, including Ballistic Missile Defense (BMD), Anti-Air Warfare (AAW), Anti-Surface Warfare (ASUW), Undersea Warfare (UW) and Electronic Warfare (EW).

This budget will procure JTT-M Technical Refresh (TR) Kits in the form of the Joint Tactical Terminal - Maritime Embedded National Tactical Receiver (JTT-ME), replacing aging JTT-M terminals with a modern, network enabled infrastructure. This system is formally specified by Fleet Commanders as a threshold capability for global Maritime Command, Control and Communications in a Distributed Maritime Environment to execute current Warfighting plans and is required for National Command and Control capability. The MIBS program is going to field a technical refresh to replace an End of Life (EoL) JTT-M radio that has been in sustainment for 20+ years.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2900 / Maritime Integrated Broadcast System

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Maritime Integrated Broadcast System	P-5a			- / 83.725	- / 1.760	- / 3.520	- / 6.994	- / -	- / 6.994
P-40	**Total Gross/Weapon System Cost**				**- / 83.725**	**- / 1.760**	**- / 3.520**	**- / 6.994**	**- / 0.000**	**- / 6.994**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The FY 2024 budget will procure (11) Joint Tactical Terminal - Maritime Embedded National Tactical Receiver (JTT-ME) systems that will replace JTT-M terminals in obsolescence in order to meet the NSA mandate (date classified) in alignment with security requirements. The increase from FY 2023 to FY 2024 is due to the installation of fifteen (15) JTT-ME systems originally procured in FY 2023.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2900 / Maritime Integrated Broadcast System	**Aggregated Items Title:** Maritime Integrated Broadcast System

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
1) Maritime Integrated Broadcast System (MIBS) - Procurement																				
1.1) Joint Tactical Terminal - Maritime Embedded (JTT-ME) (1)(†)	A		194.000	6	1.164	-	-	-	197.000	15	2.955	200.940	11	2.210	-	-	-	200.940	11	2.210
1.2) Consolidated Prior Year Requirements (2)	A		-	-	82.350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Maritime Integrated Broadcast System (MIBS) - Procurement			**-**	**-**	***83.514***	**-**	**-**	**-**	**-**	**-**	***2.955***	**-**	**-**	***2.210***	**-**	**-**	**-**	**-**	**-**	***2.210***
2) Installations																				
2.1) JTT-ME Installations (3)	A		-	-	-	-	-	1.700	-	-	-	-	-	4.416	-	-	-	-	-	4.416
2.2) JTT-ME DSA	A		-	-	0.141	-	-	0.060	-	-	0.388	-	-	0.235	-	-	-	-	-	0.235
Subtotal: 2) Installations			**-**	**-**	***0.141***	**-**	**-**	***1.760***	**-**	**-**	***0.388***	**-**	**-**	***4.651***	**-**	**-**	**-**	**-**	**-**	***4.651***
3) Support																				
3.1) Production Support (4)	A		-	-	0.070	-	-	-	-	-	0.177	-	-	0.133	-	-	-	-	-	0.133
Subtotal: 3) Support			**-**	**-**	***0.070***	**-**	**-**	**-**	**-**	**-**	***0.177***	**-**	**-**	***0.133***	**-**	**-**	**-**	**-**	**-**	***0.133***
Total			**-**	**-**	**83.725**	**-**	**-**	**1.760**	**-**	**-**	**3.520**	**-**	**-**	**6.994**	**-**	**-**	**-**	**-**	**-**	**6.994**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) 1.1) Joint Tactical Terminal - Maritime Embedded (JTT-ME): Decrease from FY 2023 to FY 2024 is attributed to the procurement of (4) less systems in alignment with the current fielding plan.

(2) Consolidated Prior Year Requirements - PY requirements include JTT-ME terminals, Quad Diversity Combiner, Security Appliance, Power systems, Rack Mounted Computer, Monitor, mouse/keyboard and associated wiring.

(3) 2.1) JTT-ME Installations: Installations are funded the following FY due to lead times.

(4) 3.1) Production Support: Decrease from FY 2023 to FY 2024 is attributed to the procurement of (4) less systems.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2900 / Maritime Integrated Broadcast System	**Aggregated Items:** Maritime Integrated Broadcast System

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty *(Each)*	Unit Cost *($ K)*	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) Maritime Integrated Broadcast System (MIBS) - Procurement												
1.1) Joint Tactical Terminal - Maritime Embedded (JTT-ME) (1)		2023	L3Harris Technologies / San Diego, CA	C / CPFF	San Diego, CA	Jul 2023	Jul 2024	15	197.000	Y		
1.1) Joint Tactical Terminal - Maritime Embedded (JTT-ME) (1)		2024	L3Harris Technologies / San Diego, CA	C / CPFF	San Diego, CA	Jul 2024	Jul 2025	11	200.940	Y		

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604231N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	247.731	18.790	27.434	52.026	0.000	52.026	65.664	71.364	61.095	62.492	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	247.731	18.790	27.434	52.026	0.000	52.026	65.664	71.364	61.095	62.492	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**247.731**	**18.790**	**27.434**	**52.026**	**0.000**	**52.026**	**65.664**	**71.364**	**61.095**	**62.492**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.994	1.049	2.411	-	2.411	1.200	0.913	0.093	0.096	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Tactical/Mobile (TacMobile) Command, Control, Communications, Computers, and Intelligence (C4I) Systems: TacMobile is the ground station program that supports P-8A Poseidon and MQ-4C Triton pre and post-flight C4I requirements and Inflight Command and Control support. These ground stations provide critical reach-back capabilities between the airborne platforms and the Maritime Intelligence, Surveillance, and Reconnaissance (ISR) Enterprise/ decision makers. TacMobile consists of fixed-site Tactical Operations Centers (TOCs), Mobile Tactical Operations Centers (MTOCs), and Fly Away Kits (FAKs). TOCs are located at major Maritime Patrol and Reconnaissance Aircraft (MPRA) Continental United States (CONUS) and deployment hub sites. MTOCs are scalable, mobile versions of the TOC used for extended contingency operations at remote forward operating bases, while FAKs are small transportable systems that support emergent short term detachments for limited duration.

Total program of record consists of:

a.) 6 TOCs: Systems located at Naval Air Station (NAS) Jacksonville, Florida; NAS Sigonella, Italy; Marine Corps Base Hawaii (MCBH) Kaneohe Bay, Hawaii; NAS Whidbey Island, Washington; Naval Air Facility (NAF) Kadena, Japan; and Isa Air Base Bahrain

b.) 12 MTOCs: 6 systems home ported at NAS Jacksonville, Florida and 6 systems at NAS Whidbey Island, Washington,

c.) 10 FAKs: Fly Away Kits consist of a rotatable pool that is assigned to TOCRON 11 in NAS Jacksonville, Florida, and to TOCRON 10 in NAS Whidbey Island, Washington.

d.) 1 Schoolhouse located at the Center for Naval Air Technical Training Unit (CNATT-U) NAS Jacksonville Florida

The TacMobile program is comprised of 23 subsystems that utilizes an evolutionary development strategy consisting of incremental upgrades synchronized to match increased P-8A capabilities, while retaining current functionality and readiness. Incremental upgrades and tech refreshes are planned to support the Maritime Patrol and Reconnaissance Force (MPRF) Family of Systems aircraft advances.

TacMobile Acquisition strategy is to modernize the C4I architecture that implements a modular system design approach which allows for rapid upgrades to system capabilities to keep pace with evolving operational environments. The modular design approach also allows for the fielding of incremental capability packages (CP-1, CP-2, CP-3) over the FYDP.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0604231N
Line Item MDAP/MAIS Code: N/A		

TacMobile 2.1.2 Tech Refresh upgrades the Communications equipment in order to address End-of-Life (EOL) issues, Interim P-8A Ground Station (PGS) and TacMobile Capability Packages over the FYDP. The communications equipment includes Ultra High Frequency (UHF)/Very High Frequency (VHF) satellite radios and Super High Frequency (SHF) voice and data communications systems. Tech refresh also includes Tactical Mobile Advanced Airborne Sensor (TMAAS) Interface Kit (TIK) to support Advanced Airborne Sensor (AAS) operations worldwide and Tactical Mobile Acoustic Support System (TacMASS) upgrade to support Post Flight Analysis of Acoustic Intelligence Data.

TacMobile Tech Refresh 2.1.3 is Capability Package 1 (CP-1) which modernizes the Secret domain C4I architecture, leverages 2.1.2 Tech Refresh equipment, reuses applicable P-8A Ground Station (PGS) components, and provides risk reduction for TacMobile Increment 3 at non-PGS units. CP-1 modernizes the Computers, Communications, Command, Control, and Intelligence (C4I) server stack using converged network attached storage which increases data storage and improves maintainability while also reducing Size, Weight, and Power (SWaP).

Implementing a services-based architecture that leverages Platform as a Service (PaaS) and Software as a Service (SaaS) technology using containerized applications. This modernization facilitates speed to capability, increased agility and reliability, and better quality and maintainability of TacMobile software. Additionally, Tech Refresh 2.1.3 modernizes legacy Fly Away Kits (FAK) to maintain alignment with P-8A aircraft Fleet Release modernization.

Funding for PGS is aligned under Program Element (PE) 0204251N and will be executed by Budget Submitting Office (BSO) N00019 PEO Air ASW, Assault and Special Mission Programs to support the introduction of the P-8A Increment 3 configuration. Concurrent with ongoing TacMobile Inc 2.1 sustainment efforts, the interim PGS will support the P-8A Inc 3 testing through Initial Operating Capability (IOC) and initial deployments until the final follow on TacMobile Inc 3 system is fielded. Ultimately, the full TacMobile Inc 3 systems will leverage the PGS architecture with a focus on increased mobility (Size, Weight, Power and Cooling (SWaP-C)), cloud based architecture at multi-security classifications levels that meets TacMobile Inc 3's full Capability Production Document (CPD) requirements.

P-8A Inc 3 Ground Station (PGS): The PGS is the interim solution that supports the P-8 Increment 3 ECP-6 & 7 system design. ECP 6/7 is a significant Hardware & Software modification that includes Combat System architecture improvements, Anti-Submarine Warfare (ASW) and Anti Surface Warfare (ASuW) sensor improvements, SATCOM capability upgrades, an ASuW Net Enabled Weapon, and a Higher-Than-Secret security capability. PGS provides the timely support to P-8A ECP 6/7 configured aircraft to conduct preflight mission planning, operate within SECRET and TS/SCI enclaves, perform in-flight Command and Control (C2) mission support, and conduct post flight debriefing and sensor data dissemination. This effort also funds fleet prioritized requirements as a part of the Rapid Capability Insertion (RCI) process to pace the global ASW and ASuW threats and address reliability improvements, obsolescence, periodic technology insertion, correction of deficiencies, including funds to implement various changes at Tactical Operations Centers (TOCs) and Mobile Tactical Operations Centers (MTOCs) to improve systems reliability and cyber security.

Deployable Joint Command and Control (DJC2)(JH500): DJC2 provides a self-contained, standardized, rapidly deployable, modular, scalable, and reconfigurable joint command and control (C2) capability to designated Geographic Combatant Commands (GCCs). DJC2 is the materiel solution to Defense Planning Guidance that called for the development of standing Joint Task Forces (JTF) with a deployable C2 capability. DJC2 will ensure Joint Force Commanders (JFC) are equipped, and organized to carry out their C2 responsibilities. It is designed to deploy rapidly, set up within hours and quickly provide necessary C2 mission and collaboration functionality across the full spectrum of all Joint operations. This capability is intended for all levels of conflict and can be reconfigured to meet specific GCC and JTF missions. This capability is interoperable with higher and adjacent echelons of command (to include coalition allies), as well as supporting elements to include joint forces. DJC2 sites are as follows: six (6) DJC2 core systems garrisoned in Tampa, Florida (2); Brunswick, Georgia (1); Okinawa, Japan (1); Pearl Harbor, Hawaii (1); and Sigonella, Italy (1).

[P40A / Initial Fly Away Kit (FAK)]: End-to-End Fly Away Kit procurement. Achieves threshold requirement for P-8A Operations. Provides Expeditionary Command and Control, Networking SECRET enclave within a package that incorporates Size, Weight and Power (SWAP) reductions for mobility to be readily transported by Navy P-8A Aircraft, in order to maintain worldwide operational support for Maritime Patrol Family of Systems aircraft operations. Increases P-8A ability to operate from expeditionary airfields and provide better P-8A support to Major Combat Operations (MCO) Operational Plans (OPLANS).

[P40A / Tac Mobile Tech Refresh 2.1.2]: Technical Refresh of Command and Control, Networking and Communications systems necessary to maintain support of Maritime Patrol Family of Systems aircraft operations. Includes: Network modernization to maintain Cyber Security posture; Communications refresh and modernization; Sensor analysis, mission planning, and in-flight mission support capabilities, avionics and weapons system interfaces modernization necessary to support P-8A Operations

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604231N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-40a	Tactical/Mobile (TacMobile) C4I Systems	P-5a, P-21			- / 247.731	- / 18.790	- / 23.709	- / 5.887	- / -	- / 5.887
P-3a	1 / Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3 (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 27.907	- / 0.000	- / 27.907
P-3a	2 / P-8A Ground Station (TBD)				- / 0.000	- / 0.000	- / 3.725	- / 18.232	- / 0.000	- / 18.232
P-40	**Total Gross/Weapon System Cost**				**- / 247.731**	**- / 18.790**	**- / 27.434**	**- / 52.026**	**- / 0.000**	**- / 52.026**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-40a	Tactical/Mobile (TacMobile) C4I Systems	P-5a, P-21			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3 (TBD)				- / 38.569	- / 18.296	- / 1.500	- / 0.000	- / 0.000	- / 86.272
P-3a	2 / P-8A Ground Station (TBD)				- / 23.804	- / 27.184	- / 24.063	- / 24.606	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 65.664**	**- / 71.364**	**- / 61.095**	**- / 62.492**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY24 funding supports technical refreshes of TacMobile TOC, MTOC, and FAKS to support all PRE-Engineering Change Proposal (ECP) 6/7 P-8A configured aircraft, Technical Refreshes for TOC and MTOC systems and funds:

- Procurement of Qty 2 TacMobile Fly Away Kits (FAK) to meet required Inventory Threshold.
- Procurement of Qty 4 Technical Refresh (TR 2.1.3) at Mobile Tactical Operations Centers.
- Installation of Qty 6 Technical Refresh (TR 2.1.2) of Increment 2.1 at Tactical Operations Centers

TacMobile Tech Refresh 2.1.3 is Capability Package 1 (CP-1). CP-1 modernizes the Computers, Communications, Command, Control, and Intelligence (C4I) server stack using converged network attached storage which increases data storage and improves maintainability while also reducing Size, Weight, and Power (SWaP). Implementing a services-based architecture that leverages Platform as a Service (PaaS) and Software as a Service (SaaS) technology using containerized applications. This modernization facilitates speed to capability, improved cyber resiliency, increased agility and reliability, and better quality and maintainability of TacMobile software. Additionally, Tech Refresh 2.1.3 modernizes legacy Fly Away Kits (FAK) to maintain alignment with P-8A aircraft Fleet Release modernization.

The increase in per unit procurement cost from a Tech Refresh 2.1.2 to 2.1.3 is because 2.1.3 is replacing approximately 60% of the TacMobile 2.1 baseline where a 2.1.2 tech refresh upgraded approximately 30%. The 2.1.3 upgrade is essential in order to address quickly degrading End-of-Life (EOL) components and to keep pace with cyber policy updates.

FY24 supports the initial procurement and production of Interim P-8A Ground Station (PGS) to implement changes at one Tactical Operation Center (TOC) and procure 2 Fly-Away Kits (FAKs). These will be installed in FY2025 to support P-8A Increment 3 ECP6/7 configured aircraft.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0604231N
Line Item MDAP/MAIS Code: N/A		

FY24 funding supports DJC2 system modernization efforts for six (6) sites. DJC2 will maintain interoperability with Joint Force Commanders, address cyber vulnerabilities, and extend service life of fielded systems. Specific efforts include delivering upgrades to the server stacks for 2 Cores, and associated communication equipment to improve mission readiness and reliability. These improvements reduce size, weight, power requirements, as well as improves DJC2 cyber posture.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2906 / Tactical/Mobile C4I Systems	Aggregated Items Title: Tactical/Mobile (TacMobile) C4I Systems

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
1) T4050 Tactical/Mobile																				
1.1) Consolidated Prior Year Requirements	A		1,120.335	164	183.735	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) Initial Fly Away Kit (FAK)(†)	A		-	-	-	-	-	-	-	-	-	1,000.000	2	2.000	-	-	-	1,000.000	2	2.000
Subtotal: 1) T4050 Tactical/Mobile			**-**	**-**	***183.735***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***2.000***	**-**	**-**	**-**	**-**	**-**	***2.000***
2) Tac Mobile Tech Refresh 2.1.2																				
2.1) TOC(†)	A		2,740.333	6	16.442	2,606.667	3	7.820	2,831.667	3	8.495	-	-	-	-	-	-	-	-	-
2.2) MTOC(†)	A		2,847.000	9	25.623	2,606.333	3	7.819	2,567.250	4	10.269	-	-	-	-	-	-	-	-	-
Subtotal: 2) Tac Mobile Tech Refresh 2.1.2			**-**	**-**	***42.065***	**-**	**-**	***15.639***	**-**	**-**	***18.764***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
4) P-8A Ground Station (PGS)																				
4.1) FAK(†)	A		-	-	-	-	-	-	-	-	-	435.000	2	0.870	-	-	-	435.000	2	0.870
4.2) NRE	A		-	-	-	-	-	-	-	-	1.750	-	-	-	-	-	-	-	-	-
Subtotal: 4) P-8A Ground Station (PGS)			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***1.750***	**-**	**-**	***0.870***	**-**	**-**	**-**	**-**	**-**	***0.870***
5) JH500 DJC2 Increment I System Enhancements																				
5.1) DJC2 Increment I System Enhancements (1)(†)	A		411.500	30	12.345	341.833	6	2.051	356.167	6	2.137	367.166	6	2.203	-	-	-	367.166	6	2.203
Subtotal: 5) JH500 DJC2 Increment I System Enhancements			**-**	**-**	***12.345***	**-**	**-**	***2.051***	**-**	**-**	***2.137***	**-**	**-**	***2.203***	**-**	**-**	**-**	**-**	**-**	***2.203***
6) T4776 Installation																				
6.1) Consolidated Prior Year Requirements	A		-	-	6.777	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.2) Tac Mobile Tech Refresh 2.1.2 Installation	A		-	-	1.100	-	-	0.500	-	-	0.510	-	-	0.607	-	-	-	-	-	0.607
Subtotal: 6) T4776 Installation			**-**	**-**	***7.877***	**-**	**-**	***0.500***	**-**	**-**	***0.510***	**-**	**-**	***0.607***	**-**	**-**	**-**	**-**	**-**	***0.607***
7) Tac Mobile Support																				
7.1) Tac Mobile Tech Refresh 2.1.2 Shore Pre Installation Design	A		-	-	1.709	-	-	0.600	-	-	0.350	-	-	-	-	-	-	-	-	-
Subtotal: 7) Tac Mobile Support			**-**	**-**	***1.709***	**-**	**-**	***0.600***	**-**	**-**	***0.350***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
8) Support																				
8.1) P-8A Ground Station Other Support	A		-	-	-	-	-	-	-	-	0.198	-	-	0.207	-	-	-	-	-	0.207
Subtotal: 8) Support			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***0.198***	**-**	**-**	***0.207***	**-**	**-**	**-**	**-**	**-**	***0.207***
Total			**-**	**-**	**247.731**	**-**	**-**	**18.790**	**-**	**-**	**23.709**	**-**	**-**	**5.887**	**-**	**-**	**-**	**-**	**-**	**5.887**

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Aggregated Items Title:** Tactical/Mobile (TacMobile) C4I Systems

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) Quantities listed represent six (6) Deployable Joint Command and Control (DJC2) core systems garrisoned in Tampa, Florida (2); Brunswick, Georgia (1); Okinawa, Japan (1); Pearl Harbor, Hawaii (1); and Sigonella, Italy (1). Unit costs vary due to the number or level of core system modernization efforts performed at each site from year to year. FY24 funding focuses on laptop replacement, communication and environmental equipment and fielding to improve mission readiness and reliability. These improvements reduce size, weight, power requirements, as well as improves DJC2 cyber posture. DJC2 will maintain interoperability with Joint Force Commanders, address cyber vulnerabilities, and extend service life of fielded systems.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2906 / Tactical/Mobile C4I Systems	Aggregated Items: Tactical/Mobile (TacMobile) C4I Systems

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) T4050 Tactical/Mobile												
1.2) Initial Fly Away Kit (FAK)		2024	NIWC LANT / Charleston, SC	C / CPFF	NIWC LANT	Feb 2024	Aug 2024	2	1,000.000	N	Jun 2023	Oct 2023
2) Tac Mobile Tech Refresh 2.1.2												
2.1) TOC		2022	NIWC LANT / Charleston, SC	C / CPFF	Charleston, SC	Feb 2022	Aug 2022	3	2,606.667	N	Jun 2023	
2.1) TOC		2023	NIWC LANT / Charleston, SC	C / CPFF	Charleston, SC	Feb 2023	Aug 2023	3	2,831.667	N	Jun 2023	
2.2) MTOC		2022	NIWC LANT / Charleston, SC	C / CPFF	Charleston, SC	Feb 2022	Aug 2022	3	2,606.333	N	Jun 2023	
2.2) MTOC		2023	NIWC LANT / Charleston, SC	C / TBD	Charleston, SC	Mar 2023	Sep 2023	4	2,567.250	N	Jun 2023	
4) P-8A Ground Station (PGS)												
4.1) FAK		2024	CACI / Austin, TX	C / FFP	Patuxent River, MD	Dec 2023	Dec 2024	2	435.000	Y		Dec 2022
5) JH500 DJC2 Increment I System Enhancements												
5.1) DJC2 Increment I System Enhancements (1)(†)		2022	NAVWAR / San Diego	WR	San Diego, CA	Apr 2022	Jun 2022	6	341.833	Y		
5.1) DJC2 Increment I System Enhancements (1)(†)		2023	NAVWAR / San Diego	WR	San Diego, CA	Apr 2023	Jun 2023	6	356.167	Y		
5.1) DJC2 Increment I System Enhancements (1)(†)		2024	NAVWAR / San Diego	WR	San Diego, CA	Apr 2024	Jun 2024	6	367.166	Y		

(†) indicates the presence of a P-21

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Aggregated Items:** Tactical/Mobile (TacMobile) C4I Systems

Items (Units in Each)							Fiscal Year 2022												Fiscal Year 2023												BALANCE
										Calendar Year 2022												Calendar Year 2023									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5) JH500 DJC2 Increment I System Enhancements																															
5.1) DJC2 Increment I System Enhancements [1]																															
Prior Years Deliveries: 30																															
	7	2022	NAVY	6	0	6							A -	-	1	1	1	1	1	1											0
	7	2023	NAVY	6	0	6																			A -	-	1	1	1	1	2
	7	2024	NAVY	6	0	6																									6
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Aggregated Items:** Tactical/Mobile (TacMobile) C4I Systems

Items (Units in Each)							Fiscal Year 2024												Fiscal Year 2025												BALANCE
							Calendar Year 2024												Calendar Year 2025												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5) JH500 DJC2 Increment I System Enhancements																															
5.1) DJC2 Increment I System Enhancements [1]																															
Prior Years Deliveries: 30																															
	7	2022	NAVY	6	6	0																									0
	7	2023	NAVY	6	4	2	1	1																							0
	7	2024	NAVY	6	0	6							A -	-	1	1	1	1	1	1											0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Aggregated Items:** Tactical/Mobile (TacMobile) C4I Systems

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2024	1-8-5 For 2024	MAX For 2024	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	NAVWAR - San Diego	1	3	6	0	6	2	8	0	6	2	8

"A" in the Delivery Schedule indicates the Contract Award Date.
Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Modification Number / Title:** 1 / Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	27.907	0.000	27.907	38.569	18.296	1.500	0.000	0.000	86.272
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	27.907	0.000	27.907	38.569	18.296	1.500	0.000	0.000	86.272
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**27.907**	**0.000**	**27.907**	**38.569**	**18.296**	**1.500**	**0.000**	**0.000**	**86.272**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Technical Refresh of Command and Control, Networking SECRET enclave to commence TacMobile Mobile systems (MTOC) alignment with P-8A Inc 3 Ground Station (PGS) at Non PGS site architecture within a package that encorporates Size, Weight and Power (SWAP) reductions for mobility to be readily transported by Navy Transport Aircraft, in order to maintain worldwide operational support for Maritime Patrol Family of Systems aircraft operations.

FY24 increase supports the procurement of (4) Tactical Mobile tech refreshes, as well as associated production support.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Modification Number / Title:** 1 / Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3												
A Kits												
Recurring												
1.1.1) TOC - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	1 / 6.164	- / -	- / -	- / -	- / -	1 / 6.164
1.1.2) MTOC - NonOrganic (2)	- / -	- / -	- / -	4 / 25.400	- / -	4 / 25.400	3 / 19.470	2 / 13.264	- / -	- / -	- / -	9 / 58.134
1.1.3) Fly Away Kit - Organic	- / -	- / -	- / -	- / -	- / -	- / -	8 / 8.176	- / -	- / -	- / -	- / -	8 / 8.176
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / 25.400*	*- / -*	*- / 25.400*	*- / 33.810*	*- / 13.264*	*- / -*	*- / -*	*- / 0.000*	*- / 72.474*
Subtotal: Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3	*- / -*	*- / -*	*- / -*	*4 / 25.400*	*- / -*	*4 / 25.400*	*12 / 33.810*	*2 / 13.264*	*- / -*	*- / -*	*- / -*	*18 / 72.474*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / 25.400*	*- / -*	*- / 25.400*	*- / 33.810*	*- / 13.264*	*- / -*	*- / -*	*- / 0.000*	*- / 72.474*
Support *(All Modification Items)*												
2.1) Pre Shore Installation Design (3)	- / -	- / -	- / -	- / 1.000	- / -	- / 1.000	- / 0.750	- / 0.750	- / -	- / -	- / -	- / 2.500
2.2) Production Support (4)	- / -	- / -	- / -	- / 1.507	- / -	- / 1.507	- / 1.009	- / 0.532	- / -	- / -	- / -	- / 3.048
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / 2.507*	*- / -*	*- / 2.507*	*- / 1.759*	*- / 1.282*	*- / -*	*- / -*	*- / 0.000*	*- / 5.548*
Installation												
Modification Item 1 of 1: Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 3.000	- / 3.750	- / 1.500	- / 0.000	- / 0.000	- / 8.250
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 3.000*	*- / 3.750*	*- / 1.500*	*- / -*	*- / 0.000*	*- / 8.250*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**27.907**	**0.000**	**27.907**	**38.569**	**18.296**	**1.500**	**0.000**	**0.000**	**86.272**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Modification Number / Title:** 1 / Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3

Manufacturer Information

Manufacturer Name: NIWC LANT | Manufacturer Location: Charleston, SC

Administrative Leadtime *(in Months)*: 4 | Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Feb 2024				
Delivery Dates			Aug 2024				

Installation Information

Method of Implementation: Method:: Installation Name: TacMobile Tech Refresh 2.1.3

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	4 / 3.000	- / -	- / -	- / -	0 / 0.000	4 / 3.000
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 3.750	- / -	- / -	0 / 0.000	4 / 3.750
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 1.500	- / -	0 / 0.000	2 / 1.500
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	4 / 3.000	4 / 3.750	2 / 1.500	- / -	0 / 0.000	10 / 8.250

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	2	2	-	-	1	1	-	-	-	-	-	10
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	2	2	-	-	1	1	-	-	-	-	-	10

Method of Implementation (Organic): Fly Away Kit | **Installation Quantity:** 8

Footnotes:

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Modification Number / Title:** 1 / Tactical Mobile (TacMobile) C4I Systems - Tech Refresh 2.1.3
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(2) Unit cost increase from Tech Refresh 2.1.2 to Tech Refresh 2.1.3 is driven by scope and complexity of TacMobile subsystems being replaced in 2.1.3 Tech Refresh. 2.1.3 Tech Refresh modernizes the Secret domain Computers, Communications, Command, Control, and Intelligence (C4I) architecture and addresses quickly degrading End-of-Life (EOL) components to keep pace with cyber policy updates by replacing 60% of the TacMobile 2.1 baseline. 2.1.2 Tech Refresh upgraded 30% of TacMobile 2.1 baseline. NIWC LANT conducts 6-month Integration, Assembly and Test of HW/SW components prior to final installation in subsequent fiscal year.

(3) Pre-Shore Installation Design funding supports installation planning and other pre-installation activities required by shore site. Each MTOC and TOC procured unit requires funding by installation event and is budgeted the year prior to MTOC/TOC installation.

(4) Establishing Production Support line due to complexity of 2.1.3 Tech Refresh. 2.1.3 Tech Refresh modernizes the Secret domain C4I architecture replacing 60% of the TacMobile 2.1 baseline. NIWC LANT conducts 6-month integration, assembly and test efforts prior to installation.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Modification Number / Title:** 2 / P-8A Ground Station
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	3.725	18.232	0.000	18.232	23.804	27.184	24.063	24.606	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	3.725	18.232	0.000	18.232	23.804	27.184	24.063	24.606	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**3.725**	**18.232**	**0.000**	**18.232**	**23.804**	**27.184**	**24.063**	**24.606**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Implements P-8A Inc 3 Ground Station (PGS) necessary changes to the Tactical Operations Centers (TOCs) and Mobile Tactical Operations Centers (MTOCs) in order to support the P-8 Increment 3 ECP 6 & 7 configured aircraft to conduct preflight mission planning, operate within SECRET and TS/SCI enclaves, perform in-flight Command and Control (C2) mission support, and conduct post flight debriefing and sensor data dissemination.

FY24 increase supports procurement of (1) P-8A ground station and associated support.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Modification Number / Title:** 2 / P-8A Ground Station
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: P-8A Ground Station												
B Kits												
Recurring												
1.1.1) TOC/MTOC - NonOrganic [5]	- / -	- / -	- / -	1 / 17.816	- / -	1 / 17.816	1 / 18.615	1 / 19.576	1 / 19.617	1 / 19.950	Continuing	Continuing
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / 17.816*	*- / -*	*- / 17.816*	*- / 18.615*	*- / 19.576*	*- / 19.617*	*- / 19.950*	*Continuing*	*Continuing*
Non-Recurring												
1.2.1) NRE - Organic	- / -	- / -	- / 3.341	- / -	- / -	- / -	- / -	- / 2.662	- / -	- / -	Continuing	Continuing
Subtotal: Non-Recurring	*- / 0.000*	*- / -*	*- / 3.341*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 2.662*	*- / -*	*- / -*	*Continuing*	*Continuing*
Subtotal: P-8A Ground Station	*- / -*	*- / -*	*- / 3.341*	*1 / 17.816*	*- / -*	*1 / 17.816*	*1 / 18.615*	*1 / 22.238*	*1 / 19.617*	*1 / 19.950*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / 3.341*	*- / 17.816*	*- / -*	*- / 17.816*	*- / 18.615*	*- / 22.238*	*- / 19.617*	*- / 19.950*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Other Support	- / -	- / -	- / 0.384	- / 0.416	- / -	- / 0.416	- / 0.419	- / 0.426	- / 0.436	- / 0.446	Continuing	Continuing
Subtotal: Support	*- / 0.000*	*- / -*	*- / 0.384*	*- / 0.416*	*- / -*	*- / 0.416*	*- / 0.419*	*- / 0.426*	*- / 0.436*	*- / 0.446*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: P-8A Ground Station	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 4.770	- / 4.520	- / 4.010	- / 4.210	- / 4.210	- / 21.720
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 4.770*	*- / 4.520*	*- / 4.010*	*- / 4.210*	*- / 4.210*	*- / 21.720*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**3.725**	**18.232**	**0.000**	**18.232**	**23.804**	**27.184**	**24.063**	**24.606**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2906 / Tactical/Mobile C4I Systems	**Modification Number / Title:** 2 / P-8A Ground Station
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: P-8A Ground Station

Manufacturer Information

Manufacturer Name: CACI	Manufacturer Location: Austin, TX
Administrative Leadtime *(in Months)*: 0	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Dec 2023				
Delivery Dates			Dec 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: TOC/MTOC

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.770	- / -	- / -	- / -	0 / 0.000	1 / 4.770
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.520	- / -	- / -	0 / 0.000	1 / 4.520
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.010	- / -	0 / 0.000	1 / 4.010
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.210	0 / 0.000	1 / 4.210
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.210	1 / 4.210
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.770	1 / 4.520	1 / 4.010	1 / 4.210	1 / 4.210	5 / 21.720

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	5
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	-	-	1	-	-	1	5

Footnotes:

(5) Differences in unit cost between Tacmobile and P-8 Ground System (PGS) are due to the new infrastructure added by PGS which includes: HTS enclaves, Minotaur servers, Crowbar Mission Drive Management, Aircraft Media Gateway (AMG) media builder, and Data At Rest Encryption (DARE).

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: 0305208N, 0304785N

Line Item MDAP/MAIS Code: 000

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	325.964	16.691	15.606	16.579	0.000	16.579	16.452	16.881	17.249	17.631	318.640	761.693
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	325.964	16.691	15.606	16.579	0.000	16.579	16.452	16.881	17.249	17.631	318.640	761.693
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**325.964**	**16.691**	**15.606**	**16.579**	**0.000**	**16.579**	**16.452**	**16.881**	**17.249**	**17.631**	**318.640**	**761.693**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.781	0.479	0.443	-	0.443	0.343	0.125	-	-	-	2.171
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Distributed Common Ground System (DCGS) is a cooperative effort between the services, agencies, and the Department of Defense (DoD) to provide systems capable of receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance platforms. DCGS - Navy (DCGS-N) is the Navy instance of the Under Secretary of Defense, Intelligence (USD (I)) DCGS Family of Systems (FoS). The DoD has defined a DCGS architecture that will be compatible and interoperable across all of the Services Intelligence, Surveillance, and Reconnaissance (ISR) systems and operations. DCGS accesses and ingests data from space borne, airborne, subsurface, and surface ISR collection assets, intelligence databases and intelligence producers. The DCGS Integrated Backbone (DIB), which is responsible for federating data collected across the joint enterprise, is transferring to the Common Data Fabric (CDF) under the auspices of Defense Intelligence Agency (DIA). Further integration with CDF will enhance access and sharing of ISR information across Joint forces using common enterprise standards and services. DCGS FoS supports Joint Task Force (JTF)-level and below combat operations with critical intelligence for battle management and information dominance to maintain a tactical advantage over adversaries.

DCGS-N Afloat and Ashore systems fulfills a critical mission set Afloat and Ashore. DCGS-N processes and exploits tactical and Imagery Intelligence (IMINT), Geospatial Intelligence (GEOINT) and Signal Intelligence (SIGINT), facilitates precision target geopositioning, mensuration, and imagery capabilities, integrates national IMINT requirements and processing capabilities from the National Geospatial-Intelligence Agency (NGA), and shares Intelligence, Surveillance, Reconnaissance, and Targeting (ISR&T) and Command and Control information via the DIB, Defense Intelligence Information Enterprise (DI2E), and Net-Centric Enterprise Services (NCES) standards with a wide range of customers. The DCGS-N program conducts research and assessments of tactically relevant, emerging technologies program insertion to ensure superiority in the intelligence domain. The DCGS-N Enterprise Node (DEN), which incorporates current DIB standards and CDF (formally DI2E) policy, facilitates interoperability and data sharing among the DCGS FoS. DCGS-N complies with the DoD DCGS network architecture. The DCGS-N Analytics Node (DAN) is a cloud based instantiation of the DEN, and is the foundation for DCGS-N to transform DCGS-N into a modernized data environment.

[P5 - 2 / Intelligence Carry-On Program (ICOP)]: Intelligence Carry-On Program (ICOP) is a suite of multi-source intelligence and analytical capabilities which includes an integrated Three-Dimensional (3-D) operational picture displaying intelligence and other data sources to provide a richer and more complete picture of the battle space on Unit Level platforms. The system supports a full motion video capability that receives, processes, exploits, and disseminates organic and non-organic data as well as the ability to process and correlate Electronic Intelligence (ELINT) and external Communications Intelligence (COMINT Externals). It integrates a menu of mature Commercial Off-the-Shelf (COTS) and Government Off-the-Shelf (GOTS) applications with shared storage and communication paths to reach back to the DEN, and to provide data sharing to the Maritime Operations Centers (MOC) and National ISR systems, making tactical users a part of the larger ISR enterprise. ICOP provides Indications and Warnings (I&W), battlespace awareness/visualization, pattern of life analysis, Full-Motion Video (FMV) and ISR Processing, Exploitation and Dissemination (PED) capabilities in support of Unit-Level Navy surface (CG, DDG, and LPD classes) and expeditionary operations. The ICOP system includes a three-eyed ruggedized workstation that serves as a powerful afloat edge computing device that is capable of operating on all three security domains (NIPR, SIPR and JWICs) and an antenna/receiver set (called Communications Module 3 - CM3) that is used to ingest, process and exploit airborne sensor data. In addition to supporting multi-

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0305208N, 0304785N
Line Item MDAP/MAIS Code: 000		

intelligence capabilities, Intelligence Carry-On Program (ICOP)/Communications Module 3 (CM3) provides an end-to-end Intelligence, Surveillance, and Reconnaissance (ISR) PED architecture that includes processing organic shipboard camera systems to support Navy-wide Operational Task (OPTASK) Visual Information (Strategic Communications - "First to the Truth," pattern of life analysis and use of force/rules of engagement decisions).

[P3A / DCGS-N Increment 2 Afloat]: Distributed Common Ground System, Navy (DCGS-N) Increment 2 addresses a critical shortfall in Tasking, Collection, Processing, Exploitation, and Dissemination (TCPED) capability and capacity to support operational, tactical planning, and execution across the full range of joint military operations. Existing TCPED shortfalls will be exacerbated by planned Navy, Joint, and Allied fielding of new Intelligence, Surveillance and Reconnaissance (ISR) platforms. Currently fielded systems provide localized processing capabilities that will be overwhelmed in future years without a significant change in the way the Navy processes, exploits and disseminates intelligence data. DCGS-N Increment 2 will deliver all source fusion and analytical capabilities; provide Maritime Domain Awareness (MDA) capabilities; integrate TCPED capabilities to improve the use and analysis of sensor and platform data; based on an enterprise solution to share this information across commands, services, and agencies to promote shared situational awareness.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: N/A	Other Related Program Elements: 0305208N, 0304785N

Line Item MDAP/MAIS Code: 000

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / DCGS-N CONSOLIDATED PRIOR YEAR REQUIREMENTS				- / 188.861	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-5	2 / Intelligence Carry-On Program (ICOP)	P-5a			- / 25.852	- / 2.841	- / 3.301	- / 2.760	- / 0.000	- / 2.760
P-5	3 / Product Improvement Afloat	P-5a			- / 92.096	- / 0.293	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-5	4 / DCGS-N Increment 2 Ashore	P-5a			- / 5.573	- / 2.267	- / 4.845	- / 3.672	- / 0.000	- / 3.672
P-3a	1 / DCGS-N Increment 2 Afloat (TBD)				- / 13.582	- / 11.290	- / 7.460	- / 10.147	- / 0.000	- / 10.147
P-40	**Total Gross/Weapon System Cost**				**- / 325.964**	**- / 16.691**	**- / 15.606**	**- / 16.579**	**- / 0.000**	**- / 16.579**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / DCGS-N CONSOLIDATED PRIOR YEAR REQUIREMENTS				- / -	- / -	- / -	- / -	- / -	- / -
P-5	2 / Intelligence Carry-On Program (ICOP)	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-5	3 / Product Improvement Afloat	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-5	4 / DCGS-N Increment 2 Ashore	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / DCGS-N Increment 2 Afloat (TBD)				- / 11.104	- / 10.135	- / 11.643	- / 10.673	- / 168.616	- / 254.650
P-40	**Total Gross/Weapon System Cost**				**- / 16.452**	**- / 16.881**	**- / 17.249**	**- / 17.631**	**- / 318.640**	**- / 761.693**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The FY 2024 budget will procure the following:

P-5:
Intelligence Carry-On Program (ICOP)
- (3) ICOP Workstation Procurement
- (26) ICOP Workstation Procurement Tech Refreshes
- (6) Communications Module 3 (CM3) Set Procurements

Distributed Common Ground System - Navy (DCGS-N) Increment 2 Ashore
- (3) DCGS-N Inc 2 Ashore Procurements

P-3a:
DCGS-N Increment 2 Afloat
- (7) DCGS-N Inc 2 Afloat Procurements

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)	**Item Number / Title [DODIC]:** 1 / DCGS-N CONSOLIDATED PRIOR YEAR REQUIREMENTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	188.861	0.000	0.000	0.000	0.000	0.000
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	188.861	0.000	0.000	0.000	0.000	0.000
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**188.861**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - Consolidated Prior Year Requirements Cost																		
Recurring Cost																		
1.1.1) Consolidated Prior Year Requirements	-	-	188.861	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*188.861*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Hardware - Consolidated Prior Year Requirements Cost	**-**	**-**	***188.861***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Gross/Weapon System Cost	**-**	**-**	**188.861**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**

Remarks:
[Hardware] Consolidated Prior Year Requirements includes: Distributed Common Ground System - Navy (DCGS-N) to include Joint Services Imagery Processing System - Navy (JSIPS-N) and Distributed Common Ground System - Navy (DCGS-N) Increment 1 Ashore and Afloat initial Full Rate Production (FRP) Systems, and DCGS-N Increment 1 Product Improvement, Intelligence Carry-On Program (ICOP) Foundation Kit Procurement, ICOP CM3 Set Procurements, DCGS-N Hardware/Workstation Upgrades, and associated production support and installation cost.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)	**Item Number / Title [DODIC]:** 2 / Intelligence Carry-On Program (ICOP)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	25.852	2.841	3.301	2.760	0.000	2.760
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	25.852	2.841	3.301	2.760	0.000	2.760
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**25.852**	**2.841**	**3.301**	**2.760**	**0.000**	**2.760**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - ICOP Cost																		
Recurring Cost																		
1.1.1) ICOP Workstation Procurement(†) (1)	192.530	117	22.526	71.429	7	0.500	73.400	7	0.514	75.667	3	0.227	-	-	0.000	75.667	3	0.227
1.1.2) ICOP Workstation Procurement Tech Refreshes(†)	70.000	24	1.680	45.913	23	1.056	49.667	26	1.291	51.160	26	1.330	-	-	0.000	51.160	26	1.330
1.1.3) CM3 Set Procurements Tech Refreshes(†) (2)	-	-	0.000	163.000	7	1.141	166.333	8	1.331	173.000	6	1.038	-	-	0.000	173.000	6	1.038
Subtotal: Recurring Cost	-	-	*24.206*	-	-	*2.697*	-	-	*3.136*	-	-	*2.595*	-	-	*0.000*	-	-	*2.595*
Subtotal: Hardware - ICOP Cost	**-**	**-**	***24.206***	**-**	**-**	***2.697***	**-**	**-**	***3.136***	**-**	**-**	***2.595***	**-**	**-**	***0.000***	**-**	**-**	***2.595***
Support Cost																		
2.1) ICOP System Production Support	-	-	1.646	-	-	0.144	-	-	0.165	-	-	0.165	-	-	0.000	-	-	0.165
Subtotal: Support Cost	**-**	**-**	***1.646***	**-**	**-**	***0.144***	**-**	**-**	***0.165***	**-**	**-**	***0.165***	**-**	**-**	***0.000***	**-**	**-**	***0.165***
Gross/Weapon System Cost	**-**	**-**	**25.852**	**-**	**-**	**2.841**	**-**	**-**	**3.301**	**-**	**-**	**2.760**	**-**	**-**	**0.000**	**-**	**-**	**2.760**

Remarks:
For procurement activities, Intelligence Carry-On Program (ICOP) satisfies Unit-Level requirements as part of the Distributed Common Ground System - Navy (DCGS-N) Family of Systems (FoS). ICOP is currently budgeted to field to the following Unit-Level ships: DDG, CG, and LPD class platforms. ICOP has been designated as a Navy equipage system (carry on/carry off). ICOP employs a cross-decking

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2914 / Distributed Common Ground System-Navy (DCGS-N)	Item Number / Title [DODIC]: 2 / Intelligence Carry-On Program (ICOP)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

methodology by drawing from a rotatable pool of workstations to support the total inventory objective of 94 ships. In December 2020, the program received permission to add 15 additional ships to the ICOP baseline. Thirteen (13) DDG and two (2) LPD-class ships are scheduled to receive "Partial" infrastructure installations and ICOP workstations. The ICOP workstation and CM3 antenna/receivers are considered carry on/carry off equipment while the supporting infrastructure to mount the systems is considered permanent infrastructure. There are currently two methodologies for fielding - ships that receive both the ICOP workstation and CM3 antenna/receivers are considered "Full" Foundation Kit installations while ships that only receive the ICOP workstation are considered "Partial" Foundation Kit installations. ICOP Foundation Kits include all the Radio Frequencies (RF), network cabling and mounting plates. All CM3 antenna/receivers are required to be fielded with Type 1 Encryption devices in order to be able to ingest and process certain airborne platforms to include but not limited to: P-8 Poseidon, MQ-8C Fire Scout, MQ-9 Reaper, MQ-4 Triton, RQ-21 Black Jack, and MH-60R.

(†) indicates the presence of a P-5a

Footnotes:

(1) (1.1.1) ICOP Workstation Procurement: Decrease from FY 2023 to FY 2024 is attributed to the procurement of (4) less systems in alignment with the current fielding plan. FY 2024 minimal unit cost increase is attributed to changes in the procurement contract's Variable Pricing Matrix (VPM); the hardware cost escalates each FY.

(2) (1.1.3) CM3 Set Procurements Tech Refreshes: Decrease from FY 2023 to FY 2024 is attributed to the procurement of (2) less systems in alignment with the current fielding plan.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2914 / Distributed Common Ground System-Navy (DCGS-N)	Item Number / Title [DODIC]: 2 / Intelligence Carry-On Program (ICOP)

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) ICOP Workstation Procurement		2022	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2021	Mar 2022	7	71.429	Y		
1.1.1) ICOP Workstation Procurement		2023	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2022	Mar 2023	7	73.400	Y		
1.1.1) ICOP Workstation Procurement		2024	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2023	Mar 2024	3	75.667	Y		
1.1.2) ICOP Workstation Procurement Tech Refreshes		2021	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2020	Mar 2021	24	70.000	Y		
1.1.2) ICOP Workstation Procurement Tech Refreshes		2022	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2021	Mar 2022	23	45.913	Y		
1.1.2) ICOP Workstation Procurement Tech Refreshes		2023	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2022	Mar 2023	26	49.667	Y		
1.1.2) ICOP Workstation Procurement Tech Refreshes		2024	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2023	Mar 2024	26	51.160	Y		
1.1.3) CM3 Set Procurements Tech Refreshes		2022	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2021	Mar 2022	7	163.000	Y		
1.1.3) CM3 Set Procurements Tech Refreshes		2023	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2022	Mar 2023	8	166.333	Y		
1.1.3) CM3 Set Procurements Tech Refreshes		2024	BAE Systems / San Diego, CA	C / FFP	San Diego	Dec 2023	Mar 2024	6	173.000	Y		

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)	**Item Number / Title [DODIC]:** 3 / Product Improvement Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	92.096	0.293	0.000	0.000	0.000	0.000
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	92.096	0.293	0.000	0.000	0.000	0.000
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**92.096**	**0.293**	**0.000**	**0.000**	**0.000**	**0.000**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - Product Improvement Afloat Cost																		
Recurring Cost																		
1.1.1) DCGS-N Tech Refresh Upgrade(†)	943.366	41	38.678	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*38.678*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Hardware - Product Improvement Afloat Cost	**-**	**-**	***38.678***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Hardware - DCGS-N Tech Refresh/Upgrade Installation Cost																		
Recurring Cost																		
2.1.1) Installation	-	-	43.423	-	-	0.287	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*43.423*	-	-	*0.287*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Hardware - DCGS-N Tech Refresh/Upgrade Installation Cost	**-**	**-**	***43.423***	**-**	**-**	***0.287***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Support - Support Cost Cost																		
3.1) Production Support	-	-	4.869	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
3.2) DSA	-	-	5.126	-	-	0.006	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Support - Support Cost Cost	**-**	**-**	***9.995***	**-**	**-**	***0.006***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Gross/Weapon System Cost	**-**	**-**	**92.096**	**-**	**-**	**0.293**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**

Remarks:

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)	**Item Number / Title [DODIC]:** 3 / Product Improvement Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

DCGS-N Increment 1 Product Improvement includes DCGS-N hardware and software technical refresh, ancillary equipment and upgrades to extend service life and provide the fleet imagery intelligence capability. Equipment support includes the assembly and integration associated with the product improvements or modification. Tech Refresh/Upgrade integration procures Commercial Off-The-Shelf/Non-Developmental Item (COTS/NDI) equipment to replace obsolete and unsupportable equipment for the DCGS-N program for the processing and exploitation of tactical and Imagery Intelligence (IMINT) and Signal Intelligence (SIGINT); Precision target geopositioning, mensuration, and imagery dissemination capabilities; Selected national IMINT requirements and processing capabilities from the National Geospatial-Intelligence Agency (NGA); Sharing of Intelligence, Surveillance, Reconnaissance and Targeting (ISRT) and Command and Control (C2) information via DCGS Integrated Backbone (DIB) and Net-Centric Enterprise Services (NCES) standards. Specifically, this funds tech refresh/upgrades/Engineering Change Proposals (ECPs) to its subsystems to provide access and ingest data from space borne, airborne, subsurface, and surface ISR collection assets, intelligence databases and intelligence producers.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2914 / Distributed Common Ground System-Navy (DCGS-N)	Item Number / Title [DODIC]: 3 / Product Improvement Afloat

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) DCGS-N Tech Refresh Upgrade		2021	BAE / SAN DIEGO, CA	C / FFP	San Diego	Dec 2020	Jun 2021	1	950.000	Y		

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2914 / Distributed Common Ground System-Navy (DCGS-N)	Item Number / Title [DODIC]: 4 / DCGS-N Increment 2 Ashore
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	5.573	2.267	4.845	3.672	0.000	3.672
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	5.573	2.267	4.845	3.672	0.000	3.672
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**5.573**	**2.267**	**4.845**	**3.672**	**0.000**	**3.672**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - DCGS-N Increment 2 Ashore Cost																		
Recurring Cost																		
1.1.1) DCGS-N Inc 2 Procurements (Ashore)(†) (3)	1,187.333	3	3.562	920.000	2	1.840	963.750	4	3.855	983.025	3	2.949	-	-	0.000	983.025	3	2.949
Subtotal: Recurring Cost	-	-	*3.562*	-	-	*1.840*	-	-	*3.855*	-	-	*2.949*	-	-	*0.000*	-	-	*2.949*
Subtotal: Hardware - DCGS-N Increment 2 Ashore Cost	**-**	**-**	***3.562***	**-**	**-**	***1.840***	**-**	**-**	***3.855***	**-**	**-**	***2.949***	**-**	**-**	***0.000***	**-**	**-**	***2.949***
Hardware - Installation Cost																		
Recurring Cost																		
2.1.1) DCGS-N Increment 2 Hardware Installation (4)	-	-	1.781	-	-	0.333	-	-	0.739	-	-	0.546	-	-	0.000	-	-	0.546
Subtotal: Recurring Cost	-	-	*1.781*	-	-	*0.333*	-	-	*0.739*	-	-	*0.546*	-	-	*0.000*	-	-	*0.546*
Subtotal: Hardware - Installation Cost	**-**	**-**	***1.781***	**-**	**-**	***0.333***	**-**	**-**	***0.739***	**-**	**-**	***0.546***	**-**	**-**	***0.000***	**-**	**-**	***0.546***
Support - Support Costs Cost																		
3.1) Production Support	-	-	0.230	-	-	0.094	-	-	0.251	-	-	0.177	-	-	0.000	-	-	0.177
Subtotal: Support - Support Costs Cost	**-**	**-**	***0.230***	**-**	**-**	***0.094***	**-**	**-**	***0.251***	**-**	**-**	***0.177***	**-**	**-**	***0.000***	**-**	**-**	***0.177***
Gross/Weapon System Cost	**-**	**-**	**5.573**	**-**	**-**	**2.267**	**-**	**-**	**4.845**	**-**	**-**	**3.672**	**-**	**-**	**0.000**	**-**	**-**	**3.672**

Remarks:

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)	**Item Number / Title [DODIC]:** 4 / DCGS-N Increment 2 Ashore
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Distributed Common Ground System - Navy (DCGS-N) Increment 2 will field emergent, transformational Commercial Off-the-Shelf (COTS) and Government Off-the-Shelf (GOTS) technologies in order to streamline Sailor's analytical efforts and improve targeting solutions for the operator, optimizing and compressing the kill chain. DCGS-N Increment 2 will deliver all source fusion and analytical capabilities; provide Maritime Domain Awareness (MDA) capabilities and integrate Tasking, Collection, Processing, Exploitation, and Dissemination (TCPED) capabilities to optimize the use and analysis of sensor and platform data. DCGS-N Increment 2 leverages enterprise solutions to share information across commands, services, and agencies to promote shared situational awareness. DCGS-N Increment 2 consists of multiple releases that build upon capability over time and allow for ongoing fleet feedback as the software matures. DCGS-N Increment 2 will insert new technology enhancements via incremental software upgrades. Continued development of follow-on releases will be based on prioritized Fleet requirements. DCGS-N Increment 2 addresses a critical shortfall in TCPED capability and capacity to support operational, tactical planning, and execution across the full range of joint military operations. Existing TCPED shortfalls will be exacerbated by planned Navy, Joint, and Allied fielding of new Intelligence, Surveillance, and Reconnaissance (ISR) platforms. Currently fielded systems provide localized processing capabilities that will be overwhelmed in future years without a significant change in the way the Navy processes, exploits and disseminates intelligence data.

(†) indicates the presence of a P-5a

Footnotes:

(3) (1.1.1) DCGS-N Inc 2 Procurements (Ashore): FY 2024 decrease is attributed to the procurement of one (1) less system which aligns to current fielding plan.

(4) (2.1.1) DCGS-N Increment 2 Hardware Installation: FY 2024 decrease in installation costs is attributed to the decrease in procurements.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2914 / Distributed Common Ground System-Navy (DCGS-N)	Item Number / Title [DODIC]: 4 / DCGS-N Increment 2 Ashore

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) DCGS-N Inc 2 Procurements (Ashore)		2021	SAIC / San Diego, CA	C / FFP	San Diego	Dec 2020	May 2021	2	1,612.500	Y		
1.1.1) DCGS-N Inc 2 Procurements (Ashore)		2022	SAIC / San Diego, CA	C / FFP	San Diego	Dec 2021	May 2022	2	920.000	Y		
1.1.1) DCGS-N Inc 2 Procurements (Ashore)		2023	SAIC / San Diego, CA	C / CPFF	San Diego	Dec 2022	May 2023	4	963.750	Y		
1.1.1) DCGS-N Inc 2 Procurements (Ashore)		2024 (5)	SAIC / San Diego, CA	C / CPFF	San Diego	Dec 2023	May 2024	3	983.025	Y		

Footnotes:

(5) Ashore hardware procurements consist of Commercial off the Shelf (COTS) and Government off the Shelf (GOTS) build to print products which enable procurement and CONUS installations in the same FY.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)	**Modification Number / Title:** 1 / DCGS-N Increment 2 Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	13.582	11.290	7.460	10.147	0.000	10.147	11.104	10.135	11.643	10.673	168.616	254.650
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	13.582	11.290	7.460	10.147	0.000	10.147	11.104	10.135	11.643	10.673	168.616	254.650
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**13.582**	**11.290**	**7.460**	**10.147**	**0.000**	**10.147**	**11.104**	**10.135**	**11.643**	**10.673**	**168.616**	**254.650**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Distributed Common Ground System, Navy (DCGS-N) Increment 2 addresses a critical shortfall in Tasking, Collection, Processing, Exploitation, and Dissemination (TCPED) capability and capacity to support operational, tactical planning, and execution across the full range of joint military operations. Existing TCPED shortfalls will be exacerbated by planned Navy, Joint, and Allied fielding of new Intelligence, Surveillance and Reconnaissance (ISR) platforms. Currently fielded systems provide localized processing capabilities that will be overwhelmed in future years without a significant change in the way the Navy processes, exploits and disseminates intelligence data. DCGS-N Increment 2 will deliver all source fusion and analytical capabilities; provide Maritime Domain Awareness (MDA) capabilities; integrate TCPED capabilities to improve the use and analysis of sensor and platform data; based on an enterprise solution to share this information across commands, services, and agencies to promote shared situational awareness.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)	**Modification Number / Title:** 1 / DCGS-N Increment 2 Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0305208N, 0304785N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DCGS-N Increment 2 Afloat												
A Kits												
Recurring												
1.1.1) DCGS-N Inc 2 Procurement - NonOrganic [6]	12 / 6.439	4 / 2.160	4 / 2.258	7 / 4.031	- / -	7 / 4.031	4 / 2.349	7 / 4.193	4 / 2.444	7 / 4.363	- / 62.552	49 / 90.789
Subtotal: Recurring	*- / 6.439*	*- / 2.160*	*- / 2.258*	*- / 4.031*	*- / -*	*- / 4.031*	*- / 2.349*	*- / 4.193*	*- / 2.444*	*- / 4.363*	*- / 62.552*	*- / 90.789*
Subtotal: DCGS-N Increment 2 Afloat	*12 / 6.439*	*4 / 2.160*	*4 / 2.258*	*7 / 4.031*	*- / -*	*7 / 4.031*	*4 / 2.349*	*7 / 4.193*	*4 / 2.444*	*7 / 4.363*	*- / 62.552*	*49 / 90.789*
Subtotal: Procurement, All Modification Items	*- / 6.439*	*- / 2.160*	*- / 2.258*	*- / 4.031*	*- / -*	*- / 4.031*	*- / 2.349*	*- / 4.193*	*- / 2.444*	*- / 4.363*	*- / 62.552*	*- / 90.789*
Support *(All Modification Items)*												
2.1) Production Support	- / 0.491	- / 0.130	- / 0.145	- / 0.267	- / 0.000	- / 0.267	- / 0.152	- / 0.252	- / 0.160	- / 0.262	- / 4.066	- / 5.925
3.1) DSA	- / 2.452	- / 0.680	- / 0.719	- / 1.329	- / 0.000	- / 1.329	- / 0.821	- / 1.288	- / 0.771	- / 1.362	- / 11.209	- / 20.631
Subtotal: Support	*- / 2.943*	*- / 0.810*	*- / 0.864*	*- / 1.596*	*- / -*	*- / 1.596*	*- / 0.973*	*- / 1.540*	*- / 0.931*	*- / 1.624*	*- / 15.275*	*- / 26.556*
Installation												
Modification Item 1 of 1: DCGS-N Increment 2 Afloat	- / 4.200	- / 8.320	- / 4.338	- / 4.520	- / 0.000	- / 4.520	- / 7.782	- / 4.402	- / 8.268	- / 4.686	- / 90.789	- / 137.305
Subtotal: Installation	*- / 4.200*	*- / 8.320*	*- / 4.338*	*- / 4.520*	*- / -*	*- / 4.520*	*- / 7.782*	*- / 4.402*	*- / 8.268*	*- / 4.686*	*- / 90.789*	*- / 137.305*
Total												
Total Cost (Procurement + Support + Installation)	**13.582**	**11.290**	**7.460**	**10.147**	**0.000**	**10.147**	**11.104**	**10.135**	**11.643**	**10.673**	**168.616**	**254.650**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2914 / Distributed Common Ground System-Navy (DCGS-N)	**Modification Number / Title:** 1 / DCGS-N Increment 2 Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DCGS-N Increment 2 Afloat

Manufacturer Information

Manufacturer Name: NIWC PAC	Manufacturer Location: San Diego, CA
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 10

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023				
Delivery Dates	Oct 2022	Oct 2023	Oct 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: DCGS-N Inc 2 Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	4 / 4.200	8 / 8.320	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	12 / 12.520
FY 2022	- / -	- / -	4 / 4.338	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	4 / 4.338
FY 2023	- / -	- / -	- / -	4 / 4.520	0 / 0.000	4 / 4.520	- / -	- / -	- / -	- / -	0 / 0.000	4 / 4.520
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	7 / 7.782	- / -	- / -	- / -	0 / 0.000	7 / 7.782
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 4.402	- / -	- / -	0 / 0.000	4 / 4.402
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 8.268	- / -	0 / 0.000	7 / 8.268
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 4.686	0 / 0.000	4 / 4.686
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 90.789	7 / 90.789
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	4 / 4.200	8 / 8.320	4 / 4.338	4 / 4.520	0 / 0.000	4 / 4.520	7 / 7.782	4 / 4.402	7 / 8.268	4 / 4.686	7 / 90.789	49 / 137.305

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	4	2	3	1	2	-	2	2	-	1	1	1	1	1	2	2	2	-	1	1	2	-	1	1	5	-	1	1	2	7	49
Out	2	2	2	3	1	2	-	2	2	-	1	1	1	1	1	2	2	2	-	1	1	2	-	1	1	5	-	1	1	9	49

Footnotes:

(6) (1.1.1) DCGS-N Increment 2 Procurement: Increase from FY 2023 to FY 2024 is attributed to the procurement of (3) additional systems in alignment with the current fielding plan. Includes current and future iterations of the DCGS-N Inc 2 Sensor Rack (e.g. StarLord). CTC installation cost consists of continuing tech refreshes for DCGS-N Inc 2.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2915 / CANES

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0303138N

Line Item MDAP/MAIS Code: M417

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	3,029.699	412.002	402.550	467.587	0.000	467.587	410.053	575.777	597.300	610.525	2,528.432	9,033.925
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	3,029.699	412.002	402.550	467.587	0.000	467.587	410.053	575.777	597.300	610.525	2,528.432	9,033.925
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**3,029.699**	**412.002**	**402.550**	**467.587**	**0.000**	**467.587**	**410.053**	**575.777**	**597.300**	**610.525**	**2,528.432**	**9,033.925**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	6.300	10.702	20.440	-	20.440	14.962	28.067	24.672	28.706	15.492	149.341
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Consolidated Afloat Networks and Enterprise Services (CANES) is the Navy's Program of Record (POR) to replace and modernize existing afloat networks with a cyber-hardened, warfighting resilient hardware, software and enterprise services infrastructure to enable information warfare from and within the tactical domain to expand the Fleets digital competitive advantage. CANES provides complete network infrastructure including hardware, software, processing, storage, and end user devices for the Unclassified, Coalition, Secret and Sensitive Compartmented Information (SCI) enclaves to a wide variety of Navy surface combatants, submarines, Maritime Operations Centers, and Aegis Ashore sites. CANES services include application hosting, data transport and storage, system management, cyber security, email, web, chat, collaboration, and voice and video services. CANES is designed using commercial sector industry best practices of reducing the number of separate Fleet networks and drives affordability with a single engineered technical solution across the Fleet from patrol craft to aircraft carriers. As much as possible, CANES relies on Commercial Off-The-Shelf (COTS) hardware and software to reduce development time and cost, and leverages commercial Information Technology (IT) approaches to include Development, Security, and Operations (DevSecOps) to drive rapid upgrades. It allows for streamlined acquisition, contracting, sustainment, and significant lifecycle efficiencies through consolidation of multiple configuration management baselines, logistics, and training efforts into a single unified support structure.

The CANES Application Integration effort provides common software governance, testing, processes, and tools to application developers, and conducts integration testing to confirm compatibility for hosted applications prior to fielding. More than two hundred (200) hosted software applications and systems - including Command and Control, Intelligence, Surveillance and Reconnaissance, Information Operations, Logistics, and Business domains - require the CANES infrastructure to operate in the tactical environment. Specific programs, such as Distributed Common Ground System - Navy (DCGS-N), Global Command and Control System - Maritime (GCCS-M), Naval Tactical Command Support System (NTCSS), and Undersea Warfare Decision Support System (USW-DSS), no longer provide their own independent network hardware and now depend on CANES to field, host, and sustain their capabilities. CANES also provides a set of capabilities called Agile Core Services (ACS) which brings advanced data science capabilities and other common network services to allow hosted application developers to focus on the unique capabilities they provide.

CANES is funded and programmed to field regular technical updates in order to keep pace with rapidly evolving cyber security threats and meet emerging operational demands. CANES uses a DevSecOps framework to improve its engineering processes and speed the deployment of new cyber security, application hosting and technical updates. Future CANES systems will incorporate technologies such as Cloud computing, Machine learning, and Artificial Intelligence.

CANES is a mature program with an innovative Multi Award Contract (MAC) in place that has consistently proven capable of delivering on or ahead of schedule. Additionally, the program uses a robust Continuous Process Improvement (CPI) program to improve the delivery speed and quality of network capabilities to the Fleet.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2915 / CANES

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0303138N

Line Item MDAP/MAIS Code: M417

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Consolidated Prior Year Requirements				- / 179.317	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	1 / 5F010/5F777 CANES - Afloat Non-MIP (TBD)				- / 2,793.099	- / 406.212	- / 391.714	- / 432.815	- / 0.000	- / 432.815
P-3a	2 / 5F010/5F776 CANES - Ashore Non-MIP (TBD)				- / 57.283	- / 5.790	- / 10.836	- / 34.772	- / 0.000	- / 34.772
P-40	**Total Gross/Weapon System Cost**				**- / 3,029.699**	**- / 412.002**	**- / 402.550**	**- / 467.587**	**- / 0.000**	**- / 467.587**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Consolidated Prior Year Requirements				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / 5F010/5F777 CANES - Afloat Non-MIP (TBD)				- / 398.131	- / 570.063	- / 590.517	- / 605.839	- / 2,430.763	- / 8,619.153
P-3a	2 / 5F010/5F776 CANES - Ashore Non-MIP (TBD)				- / 11.922	- / 5.714	- / 6.783	- / 4.686	- / 97.669	- / 235.455
P-40	**Total Gross/Weapon System Cost**				**- / 410.053**	**- / 575.777**	**- / 597.300**	**- / 610.525**	**- / 2,528.432**	**- / 9,033.925**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY24 increase in the Consolidated Afloat Networks and Enterprise Services (CANES) funding profile supports the Navy's priority effort to modernize and protect tactical networks against increased cyber threats. The increased funding provides for the addition of four (4) new MSC platforms to the CANES inventory objective, and for an additional nine (9) Tech Refresh procurements to update existing afloat networks. All procurements align with available ship modernization windows and the program's capacity to procure and install the product. Sufficient funding ensures that CANES is deployed to the Fleet as quickly as possible to mitigate cyber security threats, keep pace with increased computing requirements for hosted applications, and support Department of Defense (DoD) directives to remove End of Life (EOL) Windows Operating Systems software from the Fleet as quickly as feasible. Obsolete Commercial Off-The-Shelf (COTS) legacy hardware and the termination of cyber security support for legacy versions of COTS software products (Microsoft, RedHat, Linux) drive increased sustainment costs, reduce operational availability and create critical cyber security vulnerabilities in Navy Tactical Networks. Replacing these older networks and modernizing the tactical environment with CANES is the foundation for all Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) investments.

FY24 - CANES funds are for the procurement of (4) Initial CANES units, (45) Technical Insertion units (11 Force Level, 24 Unit Level, 10 Subs) and (8) Ashore Technical Insertion units, with integration and associated costs for pre-installation design and the installation of (9) Afloat production units, (29) Afloat Technical Insertion units, and two (2) Ashore Technical Insertion units that were procured in FY23.

It is important to note that procurement quantities across the Future Year Defense Program (FYDP) are the same CANES end item products referenced in CANES INTELL, LI 2925. Installation quantities represent sites receiving CANES also referenced in LI 2925. The associated dollars in this exhibit represent the non-Intell portion of the investment in the CANES system.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Item Number / Title [DODIC]:** 1 / Consolidated Prior Year Requirements
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	179.317	0.000	0.000	0.000	0.000	0.000
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	179.317	0.000	0.000	0.000	0.000	0.000
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**179.317**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Flyaway - Consolidated Prior Year Requirements Cost																		
Non Recurring Cost																		
1.1.1) Consolidated Prior Year Requirements	-	-	179.317	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Non Recurring Cost	-	-	*179.317*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Flyaway - Consolidated Prior Year Requirements Cost	**-**	**-**	***179.317***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Gross/Weapon System Cost	**-**	**-**	**179.317**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**	**-**	**-**	**0.000**

Remarks:
Consolidated Prior Year Requirements consist of: 1) CANES European Reassurance Initiative, 2) Operation Rolling Tide, and 3) Automated Digital Network System.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 1 / 5F010/5F777 CANES - Afloat Non-MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	2,793.099	406.212	391.714	432.815	0.000	432.815	398.131	570.063	590.517	605.839	2,430.763	8,619.153
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	2,793.099	406.212	391.714	432.815	0.000	432.815	398.131	570.063	590.517	605.839	2,430.763	8,619.153
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**2,793.099**	**406.212**	**391.714**	**432.815**	**0.000**	**432.815**	**398.131**	**570.063**	**590.517**	**605.839**	**2,430.763**	**8,619.153**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The consolidation of existing Afloat Network programs of record is designed to provide an agile, responsive Common Computing Environment (CCE) and Agile Core Services (ACS) within and upon which application developers will host Command and Control, Warfare, Intelligence, Logistics, and business and education applications and services. Migration of Non-Classified Enclave (NCE) capabilities into the CANES baseline. CANES is a mature program required to mitigate heightened cyber security threats across Navy tactical networks.

The FY24 increase in CANES funds support the Navy's priority effort to modernize and protect tactical networks against increased cyber threats. FY24 funds are for the procurement of (4) Initial CANES units, (45) Technical Insertion units (11 Force Level, 24 Unit Level, 10 Subs) and (8) Ashore Technical Insertion units, with integration and associated costs for pre-installation design and the installation of (9) Afloat production units, (29) Afloat Technical Insertion units, and two (2) Ashore Technical Insertion units that were procured in FY23.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 1 / 5F010/5F777 CANES - Afloat Non-MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Consolidated Afloat Networks & Enterprise Services (CANES) Non-MIP	**Modification Type:** TBD	**Related RDT&E PEs:** 0303138N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: 5F010/5F777 CANES - Afloat Non-MIP												
B Kits												
Recurring												
1.1.1) CANES - Afloat 5F010/5F777 (Non-MIP) - NonOrganic (1)	158 / 964.318	13 / 74.458	9 / 51.518	4 / 23.197	- / -	4 / 23.197	- / -	- / -	- / -	- / -	- / -	184 / 1,113.491
1.1.2) CANES - Afloat Technical Insertion (Non-MIP) - NonOrganic (2)	76 / 370.844	28 / 146.257	29 / 150.986	45 / 236.288	- / -	45 / 236.288	49 / 256.549	74 / 392.361	63 / 337.388	71 / 384.343	99 / 1,868.872	534 / 4,143.888
1.1.3) CANES - Service Life Extension Program (SLEP) (Non-MIP) - NonOrganic	8 / 8.424	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 8.424
Subtotal: Recurring	*- / 1,343.586*	*- / 220.715*	*- / 202.504*	*- / 259.485*	*- / -*	*- / 259.485*	*- / 256.549*	*- / 392.361*	*- / 337.388*	*- / 384.343*	*- / 1,868.872*	*- / 5,265.803*
Non-Recurring												
1.2.1) CANES - Afloat First Articles (Non-MIP) - Organic (3)	14 / 92.293	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / 92.293
1.2.2) CANES - Non-Recurring Engineering (Non-MIP) - Organic	- / 26.907	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 26.907
Subtotal: Non-Recurring	*- / 119.200*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 119.200*
Subtotal: 5F010/5F777 CANES - Afloat Non-MIP	*256 / 1,462.786*	*41 / 220.715*	*38 / 202.504*	*49 / 259.485*	*- / -*	*49 / 259.485*	*49 / 256.549*	*74 / 392.361*	*63 / 337.388*	*71 / 384.343*	*99 / 1,868.872*	*740 / 5,385.003*
Subtotal: Procurement, All Modification Items	*- / 1,462.786*	*- / 220.715*	*- / 202.504*	*- / 259.485*	*- / -*	*- / 259.485*	*- / 256.549*	*- / 392.361*	*- / 337.388*	*- / 384.343*	*- / 1,868.872*	*- / 5,385.003*
Support *(All Modification Items)*												
2.1) CANES - Afloat Production Support (Non-MIP)	- / 67.379	- / 10.793	- / 9.805	- / 12.500	- / 0.000	- / 12.500	- / 11.905	- / 19.101	- / 16.442	- / 17.443	- / 49.230	- / 214.598
2.2) CANES - Afloat Design Service Agent (Non-MIP) (4)	- / 105.097	- / 15.459	- / 14.460	- / 14.488	- / 0.000	- / 14.488	- / 8.572	- / 11.637	- / 13.940	- / 15.041	- / 38.365	- / 237.059
Subtotal: Support	*- / 172.476*	*- / 26.252*	*- / 24.265*	*- / 26.988*	*- / -*	*- / 26.988*	*- / 20.477*	*- / 30.738*	*- / 30.382*	*- / 32.484*	*- / 87.595*	*- / 451.657*
Installation												
Modification Item 1 of 1: 5F010/5F777 CANES - Afloat Non-MIP	- / 1,157.837	- / 159.245	- / 164.945	- / 146.342	- / 0.000	- / 146.342	- / 121.105	- / 146.964	- / 222.747	- / 189.012	- / 474.296	- / 2,782.493
Subtotal: Installation	*- / 1,157.837*	*- / 159.245*	*- / 164.945*	*- / 146.342*	*- / -*	*- / 146.342*	*- / 121.105*	*- / 146.964*	*- / 222.747*	*- / 189.012*	*- / 474.296*	*- / 2,782.493*
Total												
Total Cost (Procurement + Support + Installation)	**2,793.099**	**406.212**	**391.714**	**432.815**	**0.000**	**432.815**	**398.131**	**570.063**	**590.517**	**605.839**	**2,430.763**	**8,619.153**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 1 / 5F010/5F777 CANES - Afloat Non-MIP

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: 5F010/5F777 CANES - Afloat Non-MIP

Manufacturer Information

Manufacturer Name: Multiple Vendors (CANES - Afloat 5F010/5F777) (5) | Manufacturer Location: Various

Administrative Leadtime *(in Months)*: 1 | Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2021	Nov 2022	Nov 2023				
Delivery Dates	May 2022	May 2023	May 2024				

Manufacturer Name: Multiple Vendors (CANES - Afloat Technical Insertion) | Manufacturer Location: Various

Administrative Leadtime *(in Months)*: 1 | Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2021	Nov 2022	Nov 2023				
Delivery Dates	May 2022	May 2023	May 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: CANES - Afloat 5F010/5F777 (Non-MIP)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	138 / 934.166	20 / 118.167	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	158 / 1,052.333
FY 2022	- / -	- / -	13 / 76.886	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	13 / 76.886
FY 2023	- / -	- / -	- / -	9 / 53.859	0 / 0.000	9 / 53.859	- / -	- / -	- / -	- / -	0 / 0.000	9 / 53.859
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	4 / 17.937	- / -	- / -	- / -	0 / 0.000	4 / 17.937
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	138 / 934.166	20 / 118.167	13 / 76.886	9 / 53.859	0 / 0.000	9 / 53.859	4 / 17.937	- / -	- / -	- / -	0 / 0.000	184 / 1,201.015

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 1 / 5F010/5F777 CANES - Afloat Non-MIP

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: 5F010/5F777 CANES - Afloat Non-MIP

Installation Information

Method of Implementation: [none specified]:: Installation Name: CANES - Afloat 5F010/5F777 (Non-MIP)

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	138	2	9	4	5	4	4	4	1	1	4	1	3	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	184
Out	132	6	2	9	3	6	4	4	4	1	1	4	1	3	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	184

Method of Implementation: [none specified]:: Installation Name: CANES - Afloat Technical Insertion (Non-MIP)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	63 / 216.472	13 / 41.078	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	76 / 257.550
FY 2022	- / -	- / -	28 / 88.059	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	28 / 88.059
FY 2023	- / -	- / -	- / -	29 / 92.483	0 / 0.000	29 / 92.483	- / -	- / -	- / -	- / -	0 / 0.000	29 / 92.483
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	45 / 103.168	- / -	- / -	- / -	0 / 0.000	45 / 103.168
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	49 / 146.964	- / -	- / -	0 / 0.000	49 / 146.964
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	74 / 222.747	- / -	0 / 0.000	74 / 222.747
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	63 / 189.012	0 / 0.000	63 / 189.012
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	71 / 136.224	71 / 136.224
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	99 / 338.072	99 / 338.072
Total	63 / 216.472	13 / 41.078	28 / 88.059	29 / 92.483	0 / 0.000	29 / 92.483	45 / 103.168	49 / 146.964	74 / 222.747	63 / 189.012	170 / 474.296	534 / 1,574.279

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	63	2	2	4	5	6	11	3	8	8	6	6	9	10	10	10	15	14	14	12	9	14	15	18	27	10	16	22	15	170	534
Out	58	5	2	2	4	5	6	11	3	8	8	6	6	9	10	10	10	15	14	14	12	9	14	15	18	27	10	16	22	185	534

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 1 / 5F010/5F777 CANES - Afloat Non-MIP

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: 5F010/5F777 CANES - Afloat Non-MIP

Installation Information

Method of Implementation: [none specified]:: Installation Name: CANES - Service Life Extension Program (SLEP) (Non-MIP)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	8 / 7.199	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	8 / 7.199
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	8 / 7.199	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	8 / 7.199

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Out	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8

Method of Implementation (Organic): CANES - Afloat First Articles (Non-MIP) - Not Installed **Installation Quantity:** 14

Footnotes:

(1) The procurement average unit cost fluctuation is due to variance in system configuration requirements for each CANES platform type. - A CANES unit level platform (DDG/CG/LSD) requires a smaller system, supporting fewer users and applications than force level platforms (CVN/LHD/LHA/LCC) with a greater number of users and applications. For example, a CANES DDG design consists of 18 equipment racks and ~400 workstations, while a CANES CVN system consists of 51 equipment racks and ~3000 workstations. The average procurement cost (hardware, software, integration, and engineering support) for a unit level ship ranges from $5.2M to $7.5M, while the average procurement cost for a force level platform ranges from $11.8M to $15.6M, and submarine unit procurement costs range from $2.7M to $4.6M. These costs include both the MIP and non-MIP components of the CANES units. - CANES Afloat installations are performed at several fleet concentration areas supported by six installation Multiple Award Contract (MAC) holders. The Naval Information Warfare Command (NAVWAR) Fleet Readiness Directorate (FRD) Installation Organization (FIO) has ensured sufficient Alteration Installation Teams (AIT) resources are available to meet the FY24 - 28 CANES installation plan. - CANES Afloat production units require an additional 5 months after delivery for integration, assembly and testing prior to installation start. Installations do not begin until 11 months after contract award (6 months production lead time (PLT) + 5 months integration). Total lead time, including admin lead time, is 12 months. - Installation cost fluctuations are attributed to and dependent on ship location, class, and variant of predecessor system the hull currently has installed. As an example of variant differences, if a CVN has an ISNS Delta variant

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 1 / 5F010/5F777 CANES - Afloat Non-MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

installed, a CANES installation is estimated to be $18.2M. If that same CVN had a legacy Asynchronous Transfer Mode Local Area Network (ATM LAN) the CANES installation is estimated to be $22.4M. This cost difference is driven by a number of issues such as the requirement for new or additional wiring, equipment, and configuration changes.

(2) CANES technical insertion installations are conducted across several fleet concentration areas supported by six installation Multiple Award Contract (MAC) holders. The NAVWAR Fleet Readiness Directorate (FRD) Installation Organization (FIO) has ensured sufficient Alteration Installation Teams (AIT) resources are available to meet the FY23 - 28 CANES installation plan. - CANES Afloat technical insertion units require an additional 5 months after delivery for operational integration, assembly and testing prior to installation start. Installations do not begin until 11 months after contract award (6 months production lead time (PLT) + 5 months integration). Total lead time, including admin lead time, is 12 months. - CANES Tech Insertion units procured in FY24 will be installed in FY25.

(3) CANES first articles are defined as necessary production design drawings, environmental (shock and vibration) qualifications, logistics and training artifacts as well as a certified tested baseline provided to the government for each platform first of its kind. CANES First Articles are not installed.

(4) DSA requirements must be funded one year prior to and completed before installations begin.

(5) CANES: Full Production Contract has 7 possible vendors on MAC award: Northrop Grumman Systems Corp, BAE Sytems Technology Solutions & Services, General Dynamics C4 Systems, Global Technical Systems, SERCO, Inc, CGI Federal Inc, DRS Laurel Technologies. Contract will be used for both production and tech refresh units

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 2 / 5F010/5F776 CANES - Ashore Non-MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	57.283	5.790	10.836	34.772	0.000	34.772	11.922	5.714	6.783	4.686	97.669	235.455
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	57.283	5.790	10.836	34.772	0.000	34.772	11.922	5.714	6.783	4.686	97.669	235.455
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**57.283**	**5.790**	**10.836**	**34.772**	**0.000**	**34.772**	**11.922**	**5.714**	**6.783**	**4.686**	**97.669**	**235.455**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The consolidation of existing Ashore Network programs of record is designed to provide a single, agile, responsive Common Computing Environment (CCE) hardware and software suite which will host Command and Control, Warfare, Intelligence, Logistics, Business, and Education/Training applications and services for Maritime Operation Centers (MOC), Aegis Ashore (AA), and Technical Training Equipment (TTE) sites. CANES will provide complete Local Area Network (LAN) infrastructure and services inclusive of hardware, software, processing, storage, workstations, and tablets for all basic network services (email, web, chat, collaboration) at these sites.

The FY24 increase in CANES funds support the Navy's priority effort to modernize and protect tactical networks against increased cyber threats. FY24 funds are for the procurement of (4) Initial CANES units, (45) Technical Insertion units (11 Force Level, 24 Unit Level, 10 Subs) and (8) Ashore Technical Insertion units, with integration and associated costs for pre-installation design and the installation of (9) Afloat production units, (29) Afloat Technical Insertion units, and two (2) Ashore Technical Insertion units that were procured in FY23.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 2 / 5F010/5F776 CANES - Ashore Non-MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Consolidated Afloat Networks & Enterprise Services (CANES) Non-MIP	**Modification Type:** TBD	**Related RDT&E PEs:** 0303138N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: 5F010/5F776 CANES - Ashore Non-MIP												
B Kits												
Recurring												
1.1.1) CANES - Ashore 5F010/5F776 (Non-MIP) - NonOrganic (6)	11 / 20.213	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 20.213
1.1.2) CANES - Ashore - Technical Insertion (Non-MIP) - NonOrganic (7)	2 / 3.939	1 / 3.474	2 / 6.922	8 / 28.020	- / -	8 / 28.020	- / -	1 / 3.478	1 / 3.478	- / -	24 / 55.849	39 / 105.160
Subtotal: Recurring	*- / 24.152*	*- / 3.474*	*- / 6.922*	*- / 28.020*	*- / -*	*- / 28.020*	*- / -*	*- / 3.478*	*- / 3.478*	*- / -*	*- / 55.849*	*- / 125.373*
Non-Recurring												
1.2.1) CANES - Ashore First Articles (Non-MIP) - Organic (8)	1 / 3.481	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 3.481
Subtotal: Non-Recurring	*- / 3.481*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 3.481*
Subtotal: 5F010/5F776 CANES - Ashore Non-MIP	*14 / 27.633*	*1 / 3.474*	*2 / 6.922*	*8 / 28.020*	*- / -*	*8 / 28.020*	*- / -*	*1 / 3.478*	*1 / 3.478*	*- / -*	*24 / 55.849*	*51 / 128.854*
Subtotal: Procurement, All Modification Items	*- / 27.633*	*- / 3.474*	*- / 6.922*	*- / 28.020*	*- / -*	*- / 28.020*	*- / -*	*- / 3.478*	*- / 3.478*	*- / -*	*- / 55.849*	*- / 128.854*
Support *(All Modification Items)*												
2.1) CANES - Ashore Production Support (Non-MIP)	- / 1.024	- / 0.166	- / 0.276	- / 1.358	- / -	- / 1.358	- / -	- / 0.139	- / 0.139	- / -	- / 1.154	- / 4.256
2.2) CANES - Ashore Design Services Agent (Non-MIP)	- / 2.570	- / 2.150	- / 2.470	- / 3.059	- / -	- / 3.059	- / 2.580	- / 2.097	- / 2.097	- / 3.617	- / 1.689	- / 22.329
Subtotal: Support	*- / 3.594*	*- / 2.316*	*- / 2.746*	*- / 4.417*	*- / -*	*- / 4.417*	*- / 2.580*	*- / 2.236*	*- / 2.236*	*- / 3.617*	*- / 2.843*	*- / 26.585*
Installation												
Modification Item 1 of 1: 5F010/5F776 CANES - Ashore Non-MIP	- / 26.056	- / 0.000	- / 1.168	- / 2.335	- / 0.000	- / 2.335	- / 9.342	- / 0.000	- / 1.069	- / 1.069	- / 38.977	- / 80.016
Subtotal: Installation	*- / 26.056*	*- / -*	*- / 1.168*	*- / 2.335*	*- / -*	*- / 2.335*	*- / 9.342*	*- / -*	*- / 1.069*	*- / 1.069*	*- / 38.977*	*- / 80.016*
Total												
Total Cost (Procurement + Support + Installation)	**57.283**	**5.790**	**10.836**	**34.772**	**0.000**	**34.772**	**11.922**	**5.714**	**6.783**	**4.686**	**97.669**	**235.455**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 2 / 5F010/5F776 CANES - Ashore Non-MIP

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: 5F010/5F776 CANES - Ashore Non-MIP

Manufacturer Information

Manufacturer Name: TBD (Competitive Procurement)

Manufacturer Location: TBD (Competitive Procurement)

Administrative Leadtime *(in Months)*: 1

Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2021	Nov 2022	Nov 2023				
Delivery Dates	May 2022	May 2023	May 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: CANES - Ashore 5F010/5F776 (Non-MIP)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	11 / 24.118	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	11 / 24.118
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	11 / 24.118	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	11 / 24.118

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
Out	10	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2915 / CANES	**Modification Number / Title:** 2 / 5F010/5F776 CANES - Ashore Non-MIP

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: 5F010/5F776 CANES - Ashore Non-MIP

Installation Information

Method of Implementation: [none specified]:: Installation Name: CANES - Ashore - Technical Insertion (Non-MIP)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	2 / 1.938	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 1.938
FY 2022	- / -	- / -	1 / 1.168	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 1.168
FY 2023	- / -	- / -	- / -	2 / 2.335	0 / 0.000	2 / 2.335	- / -	- / -	- / -	- / -	0 / 0.000	2 / 2.335
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	8 / 9.342	- / -	- / -	- / -	0 / 0.000	8 / 9.342
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.069	- / -	0 / 0.000	1 / 1.069
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.069	0 / 0.000	1 / 1.069
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	24 / 38.977	24 / 38.977
Total	2 / 1.938	- / -	1 / 1.168	2 / 2.335	0 / 0.000	2 / 2.335	8 / 9.342	- / -	1 / 1.069	1 / 1.069	24 / 38.977	39 / 55.898

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	2	-	-	-	-	-	1	-	-	2	-	-	-	2	-	2	4	-	-	-	-	-	1	-	-	1	-	-	-	24	39
Out	2	-	-	-	-	-	-	1	-	-	2	-	-	-	2	-	2	4	-	-	-	-	-	1	-	-	1	-	-	24	39

Method of Implementation (Organic): CANES - Ashore First Articles (Non-MIP) - Not Installed **Installation Quantity:** 1

Footnotes:

(6) Production Lead Time is 6 months for Ashore units. Total Ashore lead time, including 1 month Admin lead time and 5 months for integration, assembly and testing, is 12 months.

(7) Technical Insertion funds are for the procurement of programmed refresh units for previously installed Maritime Operation Centers (MOC). Units procured in FY24 will be installed in FY25.

(8) First Articles are defined as necessary production design drawings, environmental (shock and vibration) qualifications, logistics and training artifacts as well as a certified tested baseline provided to the government for each platform first of its kind. CANES First Articles are not installed.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2920 / RADIAC

ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B Items: 0708017N	Other Related Program Elements: 0603542N, 0702856N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	74.837	7.828	7.647	16.475	0.000	16.475	32.162	32.418	31.807	33.591	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	74.837	7.828	7.647	16.475	0.000	16.475	32.162	32.418	31.807	33.591	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**74.837**	**7.828**	**7.647**	**16.475**	**0.000**	**16.475**	**32.162**	**32.418**	**31.807**	**33.591**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Radiation Detection, Indication and Computation (RADIAC) Program is responsible for providing radiation monitoring instruments that detect and measure ionizing radiation. These instruments are used on all Navy, Coast Guard and Military Sealift Command vessels, and at every Navy shore installation, in order to ensure the safety of personnel, continuity of operations in radiological or nuclear contingencies, and protection of the environment.

[P40A / M2100 - Survey Meters]: M2100. Radiation survey meters, required by 10 CFR 20 and the Navy's mission, are used to detect, measure and monitor radiation levels in support of operations involving radioactive materials. Navy operations associated with radioactive materials include operation of nuclear reactors, maintenance on radioactive systems or components, testing of components for structural integrity (X-ray), research, and medical diagnostics and treatment. Additionally, radiation survey meters are used to search for, locate and intercept radioactive material, and in responding to casualties involving radioactive materials. Where radiation survey meters are used to support operations involving radioactive material, they provide real-time information used to control personnel radiation exposure and to identify and control the spread of radioactivity. When used to search for radioactive material, they provide an extremely reliable method of identifying radioactive material while minimizing the risk to personnel conducting these operations.

[P40A / Radiological Detection System]: M2100, Radiological Detection System (RDS): This is a basic RADIAC instrument used in Consequence Management and Occupational Safety and Health applications by all ships (U.S. Navy, U.S. Coast Guard and Military Sealift Command) and shore commands. It is used to survey for radioactive surface contamination pursuant to nuclear plant operations or nuclear plant maintenance; following medical

procedures involving radioactive isotopes; or casualties and events that release radioactivity into the environment such as after a nuclear reactor accident or the use of weapons involving nuclear devices or radioactivity. It is also used to perform surveys for various types of radiation in order to monitor environmental conditions in areas and spaces immediately adjacent to where radioactive material is stored or used during routine operations; where nuclear plant operations occur; and where radioisotopes are used for maintenance, such as during industrial radiography operations.

The RDS consists of a Control Unit and a suite of probes that survey for different types of radioactivity (Alpha, Beta, Gamma, Neutron). Also part of the procurement will be various types of connecting cables; carrying cases; telescoping handles; and three specialty probes. The Control Unit is necessary for all applications while the probes are used for different applications. That means the Control Unit will have the highest procurement objective and the probes and ancillary equipment will be bought in varying quantities.

This instrument will replace the Navy's 30-year old IM-265/PDQ Multi-Function RADIAC Control Unit and its probes. The RDS is being developed by the Joint Product Leader for Radiological and Nuclear Defense (JPdL-RND) in order that the Army, Navy, Marine Corps, Air Force (and some NATO allies) will all have a Joint instrument that will enable interoperability and surge support of assets from all the components to forward deployed units in a theater of operations where a radiological event arises.

[P40A / M2100 - Survey Meters]: M2100. Radiation survey meters, required by 10 CFR 20 and the Navy's mission, are used to detect, measure and monitor radiation levels in support of operations involving radioactive materials. Navy operations associated with radioactive materials include operation of nuclear reactors, maintenance on radioactive systems or components, testing of components for structural

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2920 / RADIAC	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** 0708017N	**Other Related Program Elements:** 0603542N, 0702856N
Line Item MDAP/MAIS Code: N/A		

integrity (X-ray), research, and medical diagnostics and treatment. Additionally, radiation survey meters are used to search for, locate and intercept radioactive material, and in responding to casualties involving radioactive materials. Where radiation survey meters are used to support operations involving radioactive material, they provide real-time information used to control personnel radiation exposure and to identify and control the spread of radioactivity. When used to search for radioactive material, they provide an extremely reliable method of identifying radioactive material while minimizing the risk to personnel conducting these operations.

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The RDS consists of a Control Unit and a suite of probes that survey for different types of radioactivity (Alpha, Beta, Gamma, Neutron). Also part of the procurement will be various types of connecting cables; carrying cases; telescoping handles; and three specialty probes. The Control Unit is necessary for all applications while the probes are used for different applications. That means the Control Unit will have the highest procurement objective and the probes and ancillary equipment will be bought in varying quantities.

This instrument will replace the Navy's 30-year old IM-265/PDQ Multi-Function RADIAC Control Unit and its probes. The RDS is being developed by the Joint Product Leader for Radiological and Nuclear Defense (JPdL-RND) in order that the Army, Navy, Marine Corps, Air Force (and some NATO allies) will all have a Joint instrument that will enable interoperability and surge support of assets from all the components to forward deployed units in a theater of operations where a radiological event arises.

[P40A / Near Background Survey Meter Data]: M2100, Near Background Survey Meter Data: Test reports, Technical Manuals, Technical Repair Standards.

[P40A / M2100 NWCF Contract Fee]: M1200 NWCF Contract Service Fee: The contract office for hardware acquisitions is a Navy Working Capital Fund (NWCF)activity that charges a set fee for each contract award and modification. The applicable fee(s) for a given year are applied to the total value of the Cost Code hardware acquisitions. Fees vary from year to year.

[P40A / M2200 - Dosimetry]: M2200. Dosimetry consists of radiation sensitive materials that are used for detecting and measuring an individual's exposure to ionizing radiation and to aid in minimizing this exposure. Dosimetry is required to be worn by personnel who work with sources of radioactivity or by personnel responding to casualties involving radioactivity. Most dosimeters are small devices that are worn on the belt, on a lanyard around the neck or attached to a shirt. Some dosimeters provide direct readout enabling the wearer to monitor and control radiation exposure. Other types of dosimeters must be removed from the wearer to be evaluated in special dosimeter readers that extract the recorded radiation exposure value from the dosimeter. Radiation exposure measured by dosimetry is recorded in individual medical records when formal tracking of the radiation exposure is required.

In accordance with 10 CFR 20, dosimetry is required to be worn by personnel who work with sources of radioactivity. In the Navy this includes personnel in the Nuclear Propulsion, Nuclear Weapons, and Medical and Radiological Affairs Support programs. In these programs radiation exposure is measured by dosimetry and recorded in individual medical records for tracking purposes. Dosimetry is also worn by personnel responding to casualties involving radioactivity to control their exposure within acceptable levels.

[P40A / DT-702 Card Holder]: M2200, DT-702 Card Holder: A plastic case into which the DT-702 card is placed for the card's protection and so it can be worn on a lanyard or on a belt. It has four circular windows made of specific materials of various thickness to allow the proper filtration of radiation to the dosimeter elements under each of the windows.

[P40A / Near Background Survey Meter]: M2100, Near Background Survey Meter: This is a specialized RADIAC instrument used in an Occupational Safety application on forward-deployed nuclear powered vessels. It is used to survey areas for radiation levels slightly above background levels. Surveys ensure foreign nationals do not receive radiation doses from sources associated with the nuclear propulsion plant that are distinguishable from natural background. Changes in radiation level must be measured in less than two seconds. Currently, foreign nationals are not permitted in areas which may contain elevated radiation levels. Two devices are currently in use; both are obsolete with the vendor discontinuing support in the near future. The new meter combines the functionality of both instruments.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2920 / RADIAC	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** 0708017N	**Other Related Program Elements:** 0603542N, 0702856N
Line Item MDAP/MAIS Code: N/A		

[P40A / Extremity Dosimeter]: M2200, Extremity Dosimeter: An extremity dosimeter is used to measure concentrated exposure to the hands when a radiation worker is reaching into a glove box or medical personnel are performing fluoroscopy tasks. This item is composed of three inexpensive pieces: 1) a plastic ring (~$2) to wear on a finger; 2) a dosimeter (~$36) that measures exposure; and 3) a cap (~$3) that secures the dosimeter to the ring. The cap is made to a specific thickness depending on the type of radiation the dosimeter is intended to measure. These items will be procured in quantities of 3,000 each. An average unit cost for the three items is used and all 9,000 components are shown on this one Cost Element.

[P40A / Accident Dosimeter]: M2200, Accident Dosimeter: The Accident Dosimeter is a passive type nuclear dosimeter capable of detecting and recording fast neutron radiation exposures. These dosimeters are used to determine radiation dose to the crew in the event of an accident affecting operation of a nuclear reactor. These dosimeters are fastened near or adjacent to reactor compartments on all Navy submarines and carriers.

[P40A / Accident Dosimeter Data & Training]: M2200, Accident Dosimeter Data & Training: The Naval Dosimetry Center staff will be trained on how to evaluate the dosimeter. The vendor will supply Technical Manuals, Technical Repair Standards and Standard Calibration Procedure documentation in order for the detectors purchased to be maintained by Navy Radiation Calibration Laboratories.

[P40A / Battlefield Dosimeter]: M2200, Battlefield Dosimeter: A dosimeter designed for use during nuclear or radiological events involving high energy gamma and neutron irradiation. An "event" can be a nuclear reactor accident, such as the Fukushima disaster in 2011, or an attack on, e.g., a Carrier Strike Group using a nuclear or radiological (dirty bomb) weapon. The concept of operations for such a dosimeter is that it is issued at MOP (Military Operational Posture) III to allow the commander to manage the exposure received by members of recovery teams who would be deployed in order to maintain continuity of operations. It is also used to perform triage on casualties, allowing medical personnel to most effectively allocate their resources.

[P40A / Battlefield Dosimeter Cases]: M2200, Battlefield Dosimeter Cases: The Battlefield Dosimeter will spend much of its time aboard ships stored in Damage Control Lockers. The instrument will also have to be shipped to and from a RADIAC Calibration Laboratory to undergo periodic calibrations. Because allowances for the instruments on the various ship classes range from 12 on an LCS to 700 each on a CVN, cases configured to hold different quantities (25, 50, 100) will be procured to afford the necessary protection for storage and shipping while maximizing shipboard storage space efficiency.

[P40A / M2200 NWCF Contract Service Fee]: M2200 NWCF Contract Service Fee: The contract officer for hardware acquisitions is a Navy Working Capital Fund (NWCF)activity that charges a set fee for each contract award and modification. The applicable fee(s) for a given year are applied to the total value of the Cost Code hardware acquisitions. Fees vary from year to year.

[P40A / Electronic Personnel Dosimeter]: M2200, Electronic Personnel Dosimeter (EPD): This procurement will purchase 30,000 dosimeters ranging in cost from $650 in FY24 to $732 in FY28 P40A / Electronic Personnel Dosimeter]: M2200, Electronic Personnel Dosimeter (EPD): The Navy's current EPD has been fielded since 2007. However, the current EPD is no longer manufactured. EPD units ready for issue will be depleted 25% by 2024 and will drop to zero by the end of 2027. To ensure continued EPD use, the Navy's next EPD procurement of 30,000 EPDs is planned for FY2024 through FY2028. Therefore, as use and availability of the current EPD ramps down, use and availability of the next EPD will ramp up.

[P40A / Navy Occupational Dosimeter System]: Navy Occupational Dosimeter System]: M2200, Navy Occupational Dosimeter System (NODS): The DT-702/PD system was designed in the 1990s and fielded in 2000, and is approaching the end of its useful life due to obsolete parts and because the vendor has not successfully addressed several other obsolescence issues. The system will not be logistically supportable after 2030. The NODS will replace it while providing improved dosimetry capabilities and the ability to consolidate legacy records currently spread across several databases. NODS will improve the Navy's capability to detect, transmit, record, and report the dose received by Navy radiation workers at occupational and accident levels, enhancing the health and safety of personnel.

[P40A / M2400 - Other RADIAC]: M2400. Other RADIAC. The RADIAC Program fields 70 different families of instruments, consisting of a total of almost 43,000 instruments and 400,000 dosimeters. Those families that fall into similar functionality have been grouped here into the M2100, M2200, M2500 and M2600 Cost Codes. The M2400 Cost Code consists of instruments that have specialized functions that only they perform, and therefore would require an unmanageable and meaningless number of additional Cost Codes if each were addressed individually. In the context of the family metaphor used here, these instruments are no less important but are orphans in the sense there are not many of similar functionality with which they could be grouped.

This Cost Code also supports replenishment of Ready for Issue (RFI) stocks when instruments in any Cost Code fall below stock levels sufficient to meet quarterly demand. This Cost Element (Spares) is a Continuing element that varies year-to-year based on emergent requirements and the quantity and unit cost of the item(s) being replenished.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2920 / RADIAC	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** 0708017N	**Other Related Program Elements:** 0603542N, 0702856N
Line Item MDAP/MAIS Code: N/A		

[P40A / Spares]: M2400, Spares: Purchase of additional quantities of existing models of RADIACs to replenish or supplement stocks of items due to minor increases in program allowances, inventory losses, or due to assets being beyond economical repair.

[P40A / M2500 - Air Sampling Systems]: M2500. Monitoring for airborne radioactivity is done to detect leaks from nuclear reactors or associated systems to ensure that radioactivity is not inadvertently released to the environment from these operations. Additionally, monitoring for airborne radioactivity is performed during maintenance on radioactive components or during events that might cause radioactivity to be released to the air. Monitoring for airborne radioactivity is normally done by drawing air across filter paper to collect airborne radioactive particles. This filter paper is then evaluated by radiation detectors and the concentration of airborne radioactivity is calculated. The types of airborne radioactivity monitoring systems include fixed systems and portable systems.
Fixed systems sample air from pre-determined locations and normally include built-in radiation detectors for determining the airborne radioactivity concentration. Portable systems can be used to sample air at any desired location, but normally require the use of separate radiation detection instruments to measure the radioactive particles deposited on the filter paper to determine the airborne radioactivity concentration.

Congressional reduction of $1.2M in FY22 for APD contract delay in FY18.

[P40A / APD Ship Frames]: M2500, Air Particle Detector (APD), Ship, Frames: In accordance with the referenced standard, the currently fielded IM-239/WDQ frames and some specific components are Restored, which is defined in the reference as making the equipment ". . . conform to the current technical specifications for the item . . . and the restoration of the equipment's physical appearance to the manufacturer's original condition (like new)." The Government provides these units as Government Furnished Property (GFP) to the vendor building the IM-272/WDQ APD, into which they build and install modern components.

[P40A / APD Ship]: M2500, Air Particle Detector, Ship: Airborne radioactivity monitoring system that is required for use on CVNs and all submarines. This system (IM-272A/WDQ) is a replacement for the existing IM-239/WDQ used on all Navy submarines and carriers. The IM-272A/WDQ incorporates significant technology enhancements that will reduce spurious false alarms and reduce operator maintenance.

[P40A / APD Ship Conversion]: M2500, APD Ship Conversion: Under the new contract awarded in September 2019, 10 of the 30 IM-272/WDQ units procured in FY17 will be converted to the IM-272A/WDQ to enable them to be fielded.

[P40A / APD Ship GFP Repair by Contractor]: M2500, Air Particle Detector, Ship GFP Repair by Contractor: The APD Ship utilizes GFP in its design. The Government prepares the GFP prior to shipment to the contractor. Certain pieces require additional repair work by the contractor. The Government will fund the contractor to repair GFP as needed in order to mitigate risks to cost and schedule.

[P40A / M2500 NWCF Contract Service Fee]: M2500 NWCF Contract Service Fee: The contract officer for hardware acquisitions is a Navy Working Capital Fund (NWCF)activity that charges a set fee for each contract award and modification. The applicable fee(s) for a given year are applied to the total value of the Cost Code hardware acquisitions. Fees vary from year to year.

[P40A / M2600 - Laboratory Test Equipment]: M2600. This Cost Code supports specialized equipment usually found in laboratories, hospitals and test facilities. This kind of equipment is distinct enough to warrant separating it for management purposes from the M2400 Cost Code.

[P40A / Calibrators]: M2600, Calibrators: Calibrators (also known as irradiators) are the basic tool used to calibrate all Navy radiological detection equipment. They consist of a high energy radiological source (Cs-137) in a shielded container that is located in a specially constructed and shielded room, or "range." A technician places the instrument to be calibrated at a specific calibration point in the range and remotely operates the calibrator by raising the source out of its container so that the radiological source becomes exposed and it irradiates the instrument. The instrument's response to the radiation is measured so that it can be calibrated to specific tolerances.

[P40A / Calibrator Initial Spare Parts, Installation & Training]: M2600, Calibrator Initial Spare Parts, Installation & Training: Initial spare parts and vendor training at each of the seven RADIAC Calibration Laboratories where the equipment will be installed. The vendor will ship and install the calibrators at each of the seven Navy RADIAC Calibration Laboratories. Costs in FY 2020 and FY2021 includes initial spare parts and training at various sites in addition to installation of three calibrators each year.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2920 / RADIAC	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** 0708017N	**Other Related Program Elements:** 0603542N, 0702856N
Line Item MDAP/MAIS Code: N/A		

[P40A / TS-4575/FDM Calibrator]: M2600, TS-4575/FDM Calibrator: This system will be used to calibrate the IM-276/PD and IM-276A/PD Battlefield Dosimeters. In 2021, two new units will be procured. In 2022, the unit procured in 2019 as an RDT&E article for testing and further development of the device will be back-fitted as necessary in order to convert it into an updated, operational unit. The calibrators will be fielded to a Navy RCL on each coast, and the third to the Pearl Harbor RCL.

[P40A / TS-4575/FDM Parts & Training]: M2600, TS-4575/FDM Parts & Training: Initial spare parts and training of RADIAC calibration technicians at the seven Navy RCLs on its operation and preventive maintenance.

[P40A / M2600 NWCF Contract Service Fee]: M2600 NWCF Contract Service Fee: The contract officer for hardware acquisitions is a Navy Working Capital Fund (NWCF)activity that charges a set fee for each contract award and modification. The applicable fee(s) for a given year are applied to the total value of the Cost Code hardware acquisitions. Fees vary from year to year.

[P40A / M2830 - Support - Production Engineering]: M2830, Production Engineering: Labor cost of the government and contractor personnel who prepare the acquisitions.

[P40A / Production Engineering Carderock]: M2830, Production Engineering: Labor cost of the government Engineers, Health Physicists, Scientists and others who prepare the acquisitions.

[P40A / M2830 NWCF Contract Service Fee]: M2830 NWCF Contract Service Fee: The contract officer for service contracts is a Navy Working Capital Fund (NWCF)activity that charges a set fee for each contract award and modification. The applicable fee for a given year is applied to the total value of the contract action. Fees vary from year to year.

[P40A / Production Engineering In Service Engineering Agent]: M2830, Production Engineering In Service Engineering Agent (ISEA): Labor cost of the contractor Engineers, Logisticians, Technical Writer, Program Analyst, and Systems Analysts who help prepare the acquisitions.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2920 / RADIAC	
ID Code (A=Service Ready, B=Not Service Ready): B	**Program Elements for Code B Items:** 0708017N	**Other Related Program Elements:** 0603542N, 0702856N
Line Item MDAP/MAIS Code: N/A		

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	RADIAC	P-5a			- / 74.837	- / 7.828	- / 7.647	- / 16.475	- / -	- / 16.475
P-40	**Total Gross/Weapon System Cost**				**- / 74.837**	**- / 7.828**	**- / 7.647**	**- / 16.475**	**- / 0.000**	**- / 16.475**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
Title 10 of the Code of Federal Regulations, Part 20 (10 CFR 20) requires RADIAC instruments be used to ensure the safety of personnel who work with or who are exposed to radioactive materials in their work. Additionally, the Navy's mission requires personnel and ships to have the ability to operate in radiological environments and the ability to identify and interdict radiological Weapons of Mass Destruction (WMD). Navy programs that require RADIAC instruments for Occupational Safety & Health (OSH) reasons under the provisions of 10 CFR 20 include Naval Nuclear Propulsion, Nuclear Weapons, Medical, and Radiological Affairs Support. Non-OSH programs include Radiological Defense, Consequence Management, Training, Technical (RADIAC calibration, shielding evaluation, research) and Radiological Search (maritime interdiction to locate or intercept WMD).
FY23 budget was $9.062, but was reduced by $1.415M due to a congressional mark. The increase from FY23 to FY24 adds $4.4M to RDS, $1.43M to DT-702 and funds the new procurement (Electronic Personnel Dosimeter) with $1.3M budgeted for contract award in FY24.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2920 / RADIAC	Aggregated Items Title: RADIAC

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) M2100 - Survey Meters																				
1.1) Radiological Detection System (1)(†)	B		-	-	-	-	-	-	1,106.75	1,480	1.638	2,272.41	4,372	9.935	-	-	-	2,272.41	4,372	9.935
1.2) Near Background Survey Meter Data	A		-	-	-	-	-	0.170	-	-	0.026	-	-	0.027	-	-	-	-	-	0.027
1.3) M2100 NWCF Contract Fee	A		-	-	-	-	-	0.039	-	-	0.047	-	-	0.043	-	-	-	-	-	0.043
Subtotal: 1) M2100 - Survey Meters			**-**	**-**	***0.000***	**-**	**-**	***0.209***	**-**	**-**	***1.711***	**-**	**-**	***10.005***	**-**	**-**	**-**	**-**	**-**	***10.005***
2) M2200 - Dosimetry																				
2.1) DT-702 Card Holder(†)	A		19.03	60,000	1.142	24.00	25,000	0.600	-	-	-	69.69	20,520	1.430	-	-	-	69.69	20,520	1.430
2.2) Near Background Survey Meter(†)	A		-	-	-	16,666.67	6	0.100	18,331.00	25	0.458	19,247.00	25	0.481	-	-	-	19,247.00	25	0.481
2.3) Extremity Dosimeter (2)(†)	A		13.30	30,000	0.399	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4) Accident Dosimeter (3)(†)	A		165.52	1,160	0.192	174.00	1,080	0.188	-	-	-	-	-	-	-	-	-	-	-	-
2.5) Accident Dosimeter Data & Training	A		-	-	0.064	-	-	0.068	-	-	-	-	-	-	-	-	-	-	-	-
2.6) Battlefield Dosimeter (4)(†)	A		241.02	76,488	18.435	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.7) Battlefield Dosimeter Cases (5)(†)	A		399.82	1,083	0.433	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.8) M2200 NWCF Contract Service Fee	A		-	-	1.314	-	-	0.068	-	-	-	-	-	0.205	-	-	-	-	-	0.205
2.9) Electronic Personnel Dosimeter (6)	A		-	-	-	-	-	-	-	-	-	650.00	2,000	1.300	-	-	-	650.00	2,000	1.300
Subtotal: 2) M2200 - Dosimetry			**-**	**-**	***21.979***	**-**	**-**	***1.024***	**-**	**-**	***0.458***	**-**	**-**	***3.416***	**-**	**-**	**-**	**-**	**-**	***3.416***
3) M2400 - Other RADIAC																				
3.1) Spares	A		-	-	7.614	-	-	0.020	-	-	0.011	-	-	0.059	-	-	-	-	-	0.059
Subtotal: 3) M2400 - Other RADIAC			**-**	**-**	***7.614***	**-**	**-**	***0.020***	**-**	**-**	***0.011***	**-**	**-**	***0.059***	**-**	**-**	**-**	**-**	**-**	***0.059***
4) M2500 - Air Sampling Systems																				
4.1) APD Ship Frames (7)(†)	A		9,391.46	281	2.639	9,156.00	93	0.852	9,745.00	53	0.516	-	-	-	-	-	-	-	-	-
4.2) APD Ship (8)(†)	A		55,714.29	147	8.190	38,126.39	80	3.050	41,580.00	53	2.204	-	-	-	-	-	-	-	-	-
4.3) APD Ship Conversion(†)	A		30,800.00	10	0.308	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2920 / RADIAC	Aggregated Items Title: RADIAC

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
4.4) APD Ship GFP Repair by Contractor (9)	A		-	-	0.100	-	-	0.100	-	-	0.100	-	-	-	-	-	-	-	-	-
4.5) M2500 NWCF Contract Service Fee	A		-	-	1.722	-	-	0.130	-	-	0.156	-	-	-	-	-	-	-	-	-
Subtotal: 4) M2500 - Air Sampling Systems			**-**	**-**	***12.959***	**-**	**-**	***4.132***	**-**	**-**	***2.976***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
5) M2600 - Laboratory Test Equipment																				
5.1) Calibrators (10)(†)	A		330,333.33	3	0.991	340,566.00	3	1.022	355,673.00	3	1.067	369,851.00	4	1.479	-	-	-	369,851.00	4	1.479
5.2) Calibrator Initial Spare Parts, Installation & Training (11)	A		-	-	0.510	-	-	0.072	-	-	0.074	-	-	0.118	-	-	-	-	-	0.118
5.3) TS-4575/FDM Calibrator (12)(†)	A		203,500.00	2	0.407	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.4) TS-4575/FDM Parts & Training	A		-	-	0.040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.5) M2600 NWCF Contract Service Fee	A		-	-	0.220	-	-	0.110	-	-	0.087	-	-	0.108	-	-	-	-	-	0.108
Subtotal: 5) M2600 - Laboratory Test Equipment			**-**	**-**	***2.168***	**-**	**-**	***1.204***	**-**	**-**	***1.228***	**-**	**-**	***1.705***	**-**	**-**	**-**	**-**	**-**	***1.705***
6) M2830 - Support - Production Engineering																				
6.1) Production Engineering Carderock (13)	A		-	-	17.531	-	-	0.796	-	-	0.812	-	-	0.829	-	-	-	-	-	0.829
6.2) M2830 NWCF Contract Service Fee	A		-	-	0.055	-	-	0.019	-	-	0.019	-	-	0.020	-	-	-	-	-	0.020
6.3) Production Engineering In Service Engineering Agent	A		-	-	12.531	-	-	0.424	-	-	0.432	-	-	0.441	-	-	-	-	-	0.441
Subtotal: 6) M2830 - Support - Production Engineering			**-**	**-**	***30.117***	**-**	**-**	***1.239***	**-**	**-**	***1.263***	**-**	**-**	***1.290***	**-**	**-**	**-**	**-**	**-**	***1.290***
Total			**-**	**-**	**74.837**	**-**	**-**	**7.828**	**-**	**-**	**7.647**	**-**	**-**	**16.475**	**-**	**-**	**-**	**-**	**-**	**16.475**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) M2100, Radiological Detection System (RDS): This procurement will involve 17 different line items, ranging in cost from $34 for a power cord to $4,546 for a Control Unit plus Neutron Probe, which is just one of eight configurations in which a Control Unit will be bought with a different type of probe (Alpha, Beta, Neutron, Photon, Scintillation, and Field Instrument for the Detection of Low Energy Radiation (FIDLER)). Quantities required for each of the line items will also vary widely, from five Scintillation Probes to approximately 9,681 Control Units. To keep this exhibit simple, the quantities provided in each year will be a combination of several of the line items in various configurations. This also means that the unit cost year-to-year is not based on inflation of any specific end item, but rather a reflection of the various line items being procured that year in their various quantities and widely varying costs.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2920 / RADIAC	**Aggregated Items Title:** RADIAC

(2) M2200, Extremity Dosimeter: Additional resupply of dosimeters are periodically required to replace fielded equipment that is damaged, lost or worn out from normal use.

(3) M2200, Accident Dosimeter: The current DT-518/PD has been found to be in degraded condition in both the supply system and in deployed assets.

(4) M2200, Battlefield Dosimeter (BD): Subsequent to the Fukushima Daiichi nuclear plant incident in 2011, a capability gap was identified wherein ships in the deployed Battle Group were exposed to the lower levels of radiation normally associated with occupational radiological workers. To fill the gap, specifications for a new BD included dose received at occupational levels and real-time feedback for the wearer's situational awareness and protection.

(5) M2200, Battlefield Dosimeter Cases. The unit price of the cases will vary with their size. Since all three configurations are consolidated into one Cost Element and will be purchased in varying quantities in each year, the Total Cost year-to-year will not conform to inflation indices.

(6) Electronic Personnel Dosimeter]: M2200, Electronic Personnel Dosimeter (EPD): The Navy's current EPD has been fielded since 2007. However, the current EPD is no longer manufactured. EPD units ready for issue will be depleted 25% by 2024 and will drop to zero by the end of 2027. To ensure continued EPD use, the Navy's next EPD procurement of 30,000 EPDs is planned for FY2024 through FY2028. Therefore, as use and availability of the current EPD ramps down, use and availability of the next EPD will ramp up.

(7) M2500, Air Particle Detector (APD) Ship, Frames: Work is accomplished in accordance with MIL-STD-2110(EC), Restoration, Overhaul and Repair of Electronic Equipment. Due to Depot workload backlog, only 21 units could be accommodated in FY 2020. In order to stay on schedule, the 29 units not converted in FY 2020 have been rescheduled for FY 2022. Unit cost has also been updated to accommodate design changes.

(8) M2500, Air Particle Detector (APD), Ship: A new, competitive, build-to-print contract for the IM-272A/WDQ was awarded in September 2019. The unit cost came in significantly lower than the pricing previously being used to project cost. This contract also contained six levels of stepladder pricing from 25 to a maximum of 80 units per CLIN; unit costs updated accordingly. Both outcomes provided the ability to allow procurement to complete within the term of the new contract in 2023, thereby regaining the original procurement schedule after a two-year production hiatus for an engineering change request to accommodate COLUMBIA class submarine noise reduction requirements, and technical issues with a supplier of pumps for the unit.

(9) M2500, Air Particle Detector, Ship Government Furnished Property (GFP) Repair by Contractor: With the new contract awarded in September 2019, a contract line item was included for the contractor to be able to repair GFP.

(10) M2600, Calibrators: The current suite of AN/UDM-1B calibrators is over 30 years old, and the natural decay of the strength of the radioactive source over time restricts calibration effectiveness by limiting the scale of calibration points below American National Standards Institute (ANSI) requirements that are followed in accordance with Navy policy. Also, due to the age of the calibrators, there are several parts no longer supported by the manufacturer, and a malfunctioning calibrator (e.g., where the radioactive source gets stuck in the exposed position) poses a very high safety risk. Unit prices updated based on contract awarded 30 March 2020.

(11) M2600, Calibrator Initial Spare Parts, Installation & Training: Calibrators must be installed at each of the seven RADIAC Calibration Laboratories (RCL) by specially trained and licensed personnel. Initial spares will be procured, and the vendor will provide instruction to RCL technicians who will be operating the equipment. Costs in FY20 and FY21 also include initial spare parts and training. Costs updated based on contract awarded 30 March 2020.

(12) M2600, TS-4575/FDM Calibrator: This is an irradiator designed specifically to verify specification compliance and calibration of the IM-276/PD and IM-276A/PD Battlefield Dosimeter. The dosimeter must be checked and calibrated every three years in order to ensure it is operating within specifications. Because there will be over 58,000 dosimeters fielded, a device that can service them efficiently is needed in order to ensure the throughput at the servicing RADIAC Calibration Laboratory (RCL) can keep up with the operational tempo, and to reduce total ownership costs by automating the entire process and therefore reducing labor costs. This device will be able to process 200 units per eight hour shift, as opposed to a manual process that would involve irradiating at most 30 units at a time, but then requiring a technician to hook up each unit individually to a computer for verification and other testing, which would equate to a throughput of at most two batches (60 units) during the same eight hour work shift, and more likely only one batch of 30 completed and half the process completed for the second batch.

(13) M2830, Production Engineering: Navy Working Capital Fund pay raise effective in FY 2021 raised cost beyond inflation beginning in that year.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2920 / RADIAC	Aggregated Items: RADIAC

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) M2100 - Survey Meters												
1.1) Radiological Detection System (1)		2023	VPI Technology Group / Draper, UT	C / CPIF	Aberdeen	Aug 2023	Feb 2024	1,480	1,106.75	Y		Jan 2016
1.1) Radiological Detection System (1)		2024	VPI Technology Group / Draper, UT	C / CPIF	** NO PCO **	Aug 2024	Feb 2025	4,372	2,272.41	N		
2) M2200 - Dosimetry												
2.1) DT-702 Card Holder		2022	Thermo Fisher Scientific / Franklin, MA / UNKNOWN	SS / FFP	NSWC Carderock	Mar 2022	Jun 2022	25,000	24.00	Y		Jun 2021
2.1) DT-702 Card Holder		2024	Thermo Fisher Scientific / Franklin, MA / UNKNOWN	SS / FFP	NSWC Carderock	Mar 2024	Mar 2024	20,520	69.69	N		
2.2) Near Background Survey Meter		2022	TBD / TBD	C / FFP	NSWC Carderock	Apr 2022	Nov 2022	6	16,666.67	N	Nov 2021	Jan 2022
2.2) Near Background Survey Meter		2023	TBD / TBD	C / FFP	NSWC Carderock	Sep 2023	Mar 2024	25	18,331.00	N	Nov 2021	Jan 2022
2.3) Extremity Dosimeter (2)		2021	Thermo Fisher Scientific / Franklin, MA / Bedford, MA	SS / FFP	NSWC Carderock	Jul 2021	Oct 2021	9,000	15.00	Y		Jun 2021
2.4) Accident Dosimeter (3)		2020	TBD / TBD	C / FFP	NSWC Carderock	Aug 2021	Dec 2021	580	160.00	Y		Jun 2021
2.4) Accident Dosimeter (3)		2021	TBD / TBD	C / FFP	NSWC Carderock	Aug 2022	Dec 2022	580	170.00	Y		Jun 2021
2.4) Accident Dosimeter (3)		2022	TBD / TBD	C / FFP	NSWC Carderock	Aug 2023	Dec 2023	1,080	174.00	Y		Jun 2021
2.6) Battlefield Dosimeter (4)		2020	Radiation Safety & Control Services / Stratham, NH	SS / IDIQ	NSWC Carderock	Mar 2020	Sep 2020	5,045	227.25	Y		May 2017
2.6) Battlefield Dosimeter (4)		2021	Radiation Safety & Control Services / UNKNOWN	C / FFP	NSWC Carderock	May 2021	Dec 2021	8,900	250.00	Y		Mar 2020
2.7) Battlefield Dosimeter Cases (5)		2020	Radiation Safety & Control Services / UNKNOWN	SS / IDIQ	NSWC Carderock	Mar 2020	Sep 2020	114	403.51	Y		May 2017
2.7) Battlefield Dosimeter Cases (5)		2021	Radiation Safety & Control Services / Stratham, NH	C / FFP	NSWC Carderock	May 2021	Dec 2021	105	419.05	Y		Mar 2020
4) M2500 - Air Sampling Systems												
4.1) APD Ship Frames (7)		2020	Puget Sound NSY / Bremerton, WA	WR	** NO PCO **	Nov 2019	Mar 2020	21	8,800.00	Y		
4.1) APD Ship Frames (7)		2021	Puget Sound NSY / Bremerton, WA	WR	** NO PCO **	Dec 2020	Apr 2021	60	12,970.00	Y		
4.1) APD Ship Frames (7)		2022	Puget Sound NSY / Bremerton, WA	WR	** NO PCO **	Dec 2021	Apr 2022	93	9,156.00	Y		
4.1) APD Ship Frames (7)		2023	Puget Sound NSY / Bremerton, WA	WR	** NO PCO **	Dec 2022	Apr 2023	53	9,745.00	Y		
4.2) APD Ship (8)		2019	Spectral Labs, Inc. / San Diego, CA	C / FFP	NSWC Carderock	Sep 2019	Oct 2021	26	44,571.31	Y		Jun 2019
4.2) APD Ship (8)		2020	Spectral Labs, Inc. / San Diego, CA	C / FFP	NSWC Carderock	Sep 2020	Sep 2021	15	42,810.04	Y		Jun 2019

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2920 / RADIAC	Aggregated Items: RADIAC

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
4.2) APD Ship (8)		2021	Spectral Labs, Inc. / San Diego, CA	C / FFP	NSWC Carderock	Jun 2021	Jun 2022	80	37,382.67	Y		Jun 2019
4.2) APD Ship (8)		2022	Spectral Labs, Inc. / San Diego, CA	C / FFP	NSWC Carderock	Mar 2022	Mar 2023	80	38,126.39	Y		Jun 2019
4.2) APD Ship (8)		2023	Spectral Labs, Inc. / San Diego, CA	C / FFP	NSWC Carderock	Mar 2023	Mar 2024	53	41,580.00	Y		Jun 2019
4.3) APD Ship Conversion		2021	Spectral Labs, Inc. / San Diego, CA	C / FFP	NSWC Carderock	Mar 2021	Sep 2021	10	30,790.00	Y		Jun 2019
5) M2600 - Laboratory Test Equipment												
5.1) Calibrators (10)		2021	Hopewell Designs, Inc. / Augusta, GA	C / FFP	NSWC Carderock	Dec 2020	Dec 2021	3	330,441.00	Y		Oct 2019
5.1) Calibrators (10)		2022	Hopewell Designs, Inc. / Augusta, GA	C / FFP	NSWC Carderock	Nov 2021	Mar 2022	3	340,566.00	Y		Oct 2019
5.1) Calibrators (10)		2023	Hopewell Designs, Inc. / Augusta, GA	C / FFP	NSWC Carderock	Nov 2022	Mar 2023	3	355,673.00	Y		Oct 2019
5.3) TS-4575/FDM Calibrator (12)		2021	Hopewell Designs, Inc. / Augusta, GA	SS / FFP	NSWC Carderock	Apr 2021	Oct 2021	2	203,625.00	Y		Dec 2018

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2925 / CANES Intell

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0303138N

Line Item MDAP/MAIS Code: M417

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	471.180	51.593	48.665	48.207	0.000	48.207	51.256	52.815	55.499	56.617	312.545	1,148.377
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	471.180	51.593	48.665	48.207	0.000	48.207	51.256	52.815	55.499	56.617	312.545	1,148.377
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**471.180**	**51.593**	**48.665**	**48.207**	**0.000**	**48.207**	**51.256**	**52.815**	**55.499**	**56.617**	**312.545**	**1,148.377**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.796	-	0.133	-	0.133	0.196	0.250	-	-	-	1.375
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Consolidated Afloat Networks and Enterprise Services (CANES) is the Navy's Program of Record (POR) to replace and modernize existing afloat networks with a cyber-hardened, warfighting resilient hardware, software and enterprise services infrastructure to enable information warfare from and within the tactical domain to expand the Fleets digital competitive advantage. CANES provides complete network infrastructure including hardware, software, processing, storage, and end user devices for the Unclassified, Coalition, Secret and Sensitive Compartmented Information (SCI) enclaves to a wide variety of Navy surface combatants, submarines, Maritime Operations Centers, and Aegis Ashore sites. CANES services include application hosting, data transport and storage, system management, cyber security, email, web, chat, collaboration, and voice and video services. CANES is designed using commercial sector industry best practices of reducing the number of separate Fleet networks and drives affordability with a single engineered technical solution across the Fleet from patrol craft to aircraft carriers. As much as possible, CANES relies on Commercial Off-The-Shelf (COTS) hardware and software to reduce development time and cost, and leverages commercial Information Technology (IT) approaches to include Development, Security, and Operations (DevSecOps) to drive rapid upgrades. It allows for streamlined acquisition, contracting, sustainment, and significant lifecycle efficiencies through consolidation of multiple configuration management baselines, logistics, and training efforts into a single unified support structure.

The CANES Application Integration effort provides common software governance, testing, processes, and tools to application developers, and conducts integration testing to confirm compatibility for hosted applications prior to fielding. More than two hundred (200) hosted software applications and systems - including Command and Control, Intelligence, Surveillance and Reconnaissance, Information Operations, Logistics, and Business domains - require the CANES infrastructure to operate in the tactical environment. Specific programs, such as Distributed Common Ground System - Navy (DCGS-N), Global Command and Control System - Maritime (GCCS-M), Naval Tactical Command Support System (NTCSS), and Undersea Warfare Decision Support System (USW-DSS), no longer provide their own independent network hardware and now depend on CANES to field, host, and sustain their capabilities. CANES also provides a set of capabilities called Agile Core Services (ACS) which brings advanced data science capabilities and other common network services to allow hosted application developers to focus on the unique capabilities they provide.

CANES is funded and programmed to field regular technical updates in order to keep pace with rapidly evolving cyber security threats and meet emerging operational demands. CANES uses a DevSecOps framework to improve its engineering processes and speed the deployment of new cyber security, application hosting and technical updates. Future CANES systems will incorporate technologies such as Cloud computing, Machine learning, and Artificial Intelligence.

CANES is a mature program with an innovative Multi Award Contract (MAC) in place that has consistently proven capable of delivering on or ahead of schedule. Additionally, the program uses a robust Continuous Process Improvement (CPI) program to improve the delivery speed and quality of network capabilities to the Fleet.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2925 / CANES Intell

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0303138N

Line Item MDAP/MAIS Code: M417

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / CANES Intell	P-5a			- / 13.952	- / 0.377	- / 0.856	- / 2.830	- / 0.000	- / 2.830
P-3a	1 / CANES-Afloat 5G010/5G777 MIP (TBD)				- / 457.228	- / 51.216	- / 47.809	- / 45.377	- / 0.000	- / 45.377
P-40	**Total Gross/Weapon System Cost**				**- / 471.180**	**- / 51.593**	**- / 48.665**	**- / 48.207**	**- / 0.000**	**- / 48.207**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / CANES Intell	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / CANES-Afloat 5G010/5G777 MIP (TBD)				- / 49.716	- / 52.522	- / 54.972	- / 56.101	- / 302.676	- / 1,117.617
P-40	**Total Gross/Weapon System Cost**				**- / 51.256**	**- / 52.815**	**- / 55.499**	**- / 56.617**	**- / 312.545**	**- / 1,148.377**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

The FY24 decrease in the Consolidated Afloat Networks and Enterprise Services (CANES) INTELL funding profile supports the Navy's priority effort to modernize and protect tactical networks against increased cyber threats. All procurements align with available ship modernization windows and the program's capacity to procure and install the product. Sufficient funding ensures that CANES is deployed to the Fleet as quickly as possible to mitigate cyber security threats, keep pace with increased computing requirements for hosted applications, and support Department of Defense (DoD) directives to remove End of Life (EOL) Windows Operating Systems software from the Fleet as quickly as feasible. Obsolete Commercial Off-The-Shelf (COTS) legacy hardware and the termination of cyber security support for legacy versions of COTS software products (Microsoft, RedHat, Linux) drive increased sustainment costs, reduce operational availability and create critical cyber security vulnerabilities in Navy Tactical Networks. Replacing these older networks and modernizing the tactical environment with CANES is the foundation for all Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) investments.

FY24 - CANES funds are for the procurement of (4) Initial CANES units, (45) Technical Insertion units (11 Force Level, 24 Unit Level, 10 Subs) and (8) Ashore Technical Insertion units, with integration and associated costs for pre-installation design and the installation of (9) Afloat production units, (29) Afloat Technical Insertion units, and two (2) Ashore Technical Insertion units that were procured in FY23.

It is important to note that procurement quantities across the Future Year Defense Program (FYDP) are the same CANES end item products referenced in CANES LI 2915. Installation quantities represent sites receiving CANES are also referenced in LI 2915. The associated dollars in this exhibit represent the Intell investment portion of the CANES system.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2925 / CANES Intell	Item Number / Title [DODIC]: 1 / CANES Intell
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	13.952	0.377	0.856	2.830	0.000	2.830
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	13.952	0.377	0.856	2.830	0.000	2.830
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**13.952**	**0.377**	**0.856**	**2.830**	**0.000**	**2.830**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - CANES Intell Procurement Cost																		
Recurring Cost																		
1.1.1) CANES-Ashore Production Units MIP (1)	-	-	5.284	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.2) CANES - Ashore Technical Insertion - MIP(†) (2)	278.000	2	0.556	282.000	1	0.282	283.000	2	0.566	283.375	8	2.267	-	-	0.000	283.375	8	2.267
1.1.3) Consolidated Prior Year Requirements (3)	-	-	4.314	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*10.154*	-	-	*0.282*	-	-	*0.566*	-	-	*2.267*	-	-	*0.000*	-	-	*2.267*
Subtotal: Hardware - CANES Intell Procurement Cost	**-**	**-**	***10.154***	**-**	**-**	***0.282***	**-**	**-**	***0.566***	**-**	**-**	***2.267***	**-**	**-**	***0.000***	**-**	**-**	***2.267***
Hardware - CANES Intell Installations Cost																		
Recurring Cost																		
2.1.1) CANES - Ashore Technical Insertion Install - MIP (4)	-	-	0.144	-	-	0.000	-	-	0.174	-	-	0.348	-	-	0.000	-	-	0.348
2.1.2) CANES - Ashore Production Units Install - MIP	-	-	3.209	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*3.353*	-	-	*0.000*	-	-	*0.174*	-	-	*0.348*	-	-	*0.000*	-	-	*0.348*

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2925 / CANES Intell	Item Number / Title [DODIC]: 1 / CANES Intell
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Subtotal: Hardware - CANES Intell Installations Cost	**-**	**-**	***3.353***	**-**	**-**	***0.000***	**-**	**-**	***0.174***	**-**	**-**	***0.348***	**-**	**-**	***0.000***	**-**	**-**	***0.348***
Support - CANES Intell Support Cost																		
3.1) CANES - Ashore Production Support (MIP)	-	-	0.276	-	-	0.012	-	-	0.028	-	-	0.111	-	-	0.000	-	-	0.111
3.2) CANES - Ashore Design Service Agent (MIP)	-	-	0.169	-	-	0.083	-	-	0.088	-	-	0.104	-	-	0.000	-	-	0.104
Subtotal: Support - CANES Intell Support Cost	**-**	**-**	***0.445***	**-**	**-**	***0.095***	**-**	**-**	***0.116***	**-**	**-**	***0.215***	**-**	**-**	***0.000***	**-**	**-**	***0.215***
Gross/Weapon System Cost	**-**	**-**	**13.952**	**-**	**-**	**0.377**	**-**	**-**	**0.856**	**-**	**-**	**2.830**	**-**	**-**	**0.000**	**-**	**-**	**2.830**

Remarks:
[Hardware/Recurring] - CANES units procured in FY24 will be installed in FY25.

(†) indicates the presence of a P-5a

Footnotes:
(1) CANES units require a Production Lead Time of 6 months. Total Lead time, including 1 month Admin lead time and 5 months for integration, assembly and testing, is 12 months. Prior year costs of $5.284M represent at total of 11 prior procured units.
(2) Technical Insertion funds are for the procurement of programmed refresh units for previously installed Maritime Operation Centers (MOC).
(3) Consolidated Prior Year requirements consists of Cooperative Maritime Forces Pacific (CMFP) and represents 1 total unit procured for $4,314K.
(4) FY24 procurements will install in FY25.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2925 / CANES Intell	Item Number / Title [DODIC]: 1 / CANES Intell

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.2) CANES - Ashore Technical Insertion - MIP		2022	Various (5) / Various	C / FFP	** NO PCO **	Nov 2021	May 2022	1	282.000	Y		Aug 2021
1.1.2) CANES - Ashore Technical Insertion - MIP		2023	Various (5) / Various	C / FFP	** NO PCO **	Nov 2022	May 2023	2	283.000	Y		Aug 2022
1.1.2) CANES - Ashore Technical Insertion - MIP		2024	Various (5) / Various	C / FFP	** NO PCO **	Nov 2023	May 2024	8	283.375	Y		Aug 2023

Footnotes:

(5) CANES Full Production Contract has 7 possible vendors on a MAC award: Northrop Grumman Systems, BAE Systems Technology Solutions & SErvices, General Dynamics C4 Systems, Global Technical Systems, SERCO, CGI Federal, and DRS Laurel Technologies.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2925 / CANES Intell	**Modification Number / Title:** 1 / CANES-Afloat 5G010/5G777 MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	457.228	51.216	47.809	45.377	0.000	45.377	49.716	52.522	54.972	56.101	302.676	1,117.617
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	457.228	51.216	47.809	45.377	0.000	45.377	49.716	52.522	54.972	56.101	302.676	1,117.617
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**457.228**	**51.216**	**47.809**	**45.377**	**0.000**	**45.377**	**49.716**	**52.522**	**54.972**	**56.101**	**302.676**	**1,117.617**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The consolidation of existing Afloat Network programs of record designed to provide an agile, responsive Common Computing Environment (CCE) and Agile Core Services (ACS) within and upon which application developers will host Command and Control, Warfare, Intelligence, Logistics, and business and education applications and services. Migration of Non-Classified Enclave (NCE) capabilities into the CANES baseline.

FY24 CANES funds are for the procurement of (4) Initial CANES units, (45) Technical Insertion units (11 Force Level, 24 Unit Level, 10 Subs) and (8) Ashore Technical Insertion units, with integration and associated costs for pre-installation design and the installation of (9) Afloat production units, (29) Afloat Technical Insertion units, and two (2) Ashore Technical Insertion units that were procured in FY23.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2925 / CANES Intell	**Modification Number / Title:** 1 / CANES-Afloat 5G010/5G777 MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Consolidated Afloat Networks & Enterprise Services (CANES) MIP	**Modification Type:** TBD	**Related RDT&E PEs:** 0303238N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: CANES-Afloat 5G010/5G777 MIP												
B Kits												
Recurring												
1.1.1) CANES - Afloat Production Units - MIP - NonOrganic (6)	158 / 198.256	13 / 10.435	9 / 7.199	4 / 2.600	- / -	4 / 2.600	- / -	- / -	- / -	- / -	- / -	184 / 218.490
1.1.2) CANES Afloat Technical Insertion - MIP - NonOrganic (7)	76 / 42.005	28 / 21.438	29 / 23.168	45 / 28.602	- / -	45 / 28.602	49 / 36.131	74 / 37.505	63 / 33.615	71 / 36.314	99 / 208.484	534 / 467.262
Subtotal: Recurring	*- / 240.261*	*- / 31.873*	*- / 30.367*	*- / 31.202*	*- / -*	*- / 31.202*	*- / 36.131*	*- / 37.505*	*- / 33.615*	*- / 36.314*	*- / 208.484*	*- / 685.752*
Non-Recurring												
1.2.1) CANES - Afloat First Articles - MIP - Organic (8)	14 / 37.319	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	14 / 37.319
1.2.2) CANES-Non-Recurring Engineering (MIP) - Organic	- / 4.732	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4.732
Subtotal: Non-Recurring	*- / 42.051*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 42.051*
Subtotal: CANES-Afloat 5G010/5G777 MIP	*248 / 282.312*	*41 / 31.873*	*38 / 30.367*	*49 / 31.202*	*- / -*	*49 / 31.202*	*49 / 36.131*	*74 / 37.505*	*63 / 33.615*	*71 / 36.314*	*99 / 208.484*	*732 / 727.803*
Subtotal: Procurement, All Modification Items	*- / 282.312*	*- / 31.873*	*- / 30.367*	*- / 31.202*	*- / -*	*- / 31.202*	*- / 36.131*	*- / 37.505*	*- / 33.615*	*- / 36.314*	*- / 208.484*	*- / 727.803*
Support *(All Modification Items)*												
2.1) CANES - Afloat Production Support (MIP)	- / 12.159	- / 1.293	- / 1.444	- / 1.351	- / 0.000	- / 1.351	- / 1.720	- / 1.620	- / 1.620	- / 1.720	- / 10.342	- / 33.269
2.2) CANES - Afloat Design Service Agent (MIP)	- / 16.429	- / 1.148	- / 0.360	- / 0.686	- / 0.000	- / 0.686	- / 1.034	- / 2.251	- / 2.659	- / 3.385	- / 8.643	- / 36.595
Subtotal: Support	*- / 28.588*	*- / 2.441*	*- / 1.804*	*- / 2.037*	*- / -*	*- / 2.037*	*- / 2.754*	*- / 3.871*	*- / 4.279*	*- / 5.105*	*- / 18.985*	*- / 69.864*
Installation												
Modification Item 1 of 1: CANES-Afloat 5G010/5G777 MIP	- / 146.328	- / 16.902	- / 15.638	- / 12.138	- / 0.000	- / 12.138	- / 10.831	- / 11.146	- / 17.078	- / 14.682	- / 75.207	- / 319.950
Subtotal: Installation	*- / 146.328*	*- / 16.902*	*- / 15.638*	*- / 12.138*	*- / -*	*- / 12.138*	*- / 10.831*	*- / 11.146*	*- / 17.078*	*- / 14.682*	*- / 75.207*	*- / 319.950*
Total												
Total Cost (Procurement + Support + Installation)	**457.228**	**51.216**	**47.809**	**45.377**	**0.000**	**45.377**	**49.716**	**52.522**	**54.972**	**56.101**	**302.676**	**1,117.617**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2925 / CANES Intell	**Modification Number / Title:** 1 / CANES-Afloat 5G010/5G777 MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CANES-Afloat 5G010/5G777 MIP

Manufacturer Information

Manufacturer Name: Multiple Vendors (CANES - Afloat Production Units - MIP) (9)	Manufacturer Location: Various
Administrative Leadtime *(in Months)*: 1	Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2021	Nov 2022	Nov 2023				
Delivery Dates	May 2022	May 2023	May 2024				

Manufacturer Name: Multiple Vendors (CANES Afloat Technical Insertion - MIP)	Manufacturer Location: Various
Administrative Leadtime *(in Months)*: 1	Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2021	Nov 2022	Nov 2023				
Delivery Dates	May 2022	May 2023	May 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: CANES - Afloat Production Units - MIP

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	138 / 132.427	20 / 13.815	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	158 / 146.242
FY 2022	- / -	- / -	13 / 8.962	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	13 / 8.962
FY 2023	- / -	- / -	- / -	9 / 5.691	0 / 0.000	9 / 5.691	- / -	- / -	- / -	- / -	0 / 0.000	9 / 5.691
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	4 / 2.229	- / -	- / -	- / -	0 / 0.000	4 / 2.229
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	138 / 132.427	20 / 13.815	13 / 8.962	9 / 5.691	0 / 0.000	9 / 5.691	4 / 2.229	- / -	- / -	- / -	0 / 0.000	184 / 163.124

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2925 / CANES Intell	**Modification Number / Title:** 1 / CANES-Afloat 5G010/5G777 MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: CANES-Afloat 5G010/5G777 MIP

Installation Information

Method of Implementation: [none specified]:: Installation Name: CANES - Afloat Production Units - MIP

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	138	2	9	4	5	4	4	4	1	1	4	1	3	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	184
Out	132	6	2	9	3	6	4	4	4	1	1	4	1	3	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	184

Method of Implementation: [none specified]:: Installation Name: CANES Afloat Technical Insertion - MIP

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	63 / 13.901	13 / 3.087	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	76 / 16.988
FY 2022	- / -	- / -	28 / 6.676	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	28 / 6.676
FY 2023	- / -	- / -	- / -	29 / 6.447	0 / 0.000	29 / 6.447	- / -	- / -	- / -	- / -	0 / 0.000	29 / 6.447
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	45 / 8.602	- / -	- / -	- / -	0 / 0.000	45 / 8.602
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	49 / 11.146	- / -	- / -	0 / 0.000	49 / 11.146
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	74 / 17.078	- / -	0 / 0.000	74 / 17.078
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	63 / 14.682	0 / 0.000	63 / 14.682
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	71 / 31.683	71 / 31.683
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	112 / 43.524	112 / 43.524
Total	63 / 13.901	13 / 3.087	28 / 6.676	29 / 6.447	0 / 0.000	29 / 6.447	45 / 8.602	49 / 11.146	74 / 17.078	63 / 14.682	183 / 75.207	547 / 156.826

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	63	2	2	4	5	6	11	3	8	8	6	6	9	10	10	10	15	14	14	12	9	14	15	18	27	10	16	22	15	170	534
Out	58	5	2	2	4	5	6	11	3	8	8	6	6	9	10	10	10	15	14	14	12	9	14	15	18	27	10	16	22	185	534

Method of Implementation (Organic): CANES - Afloat First Articles - MIP - Not Installed	**Installation Quantity:** 14

Footnotes:

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2925 / CANES Intell	**Modification Number / Title:** 1 / CANES-Afloat 5G010/5G777 MIP
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(6) The procurement average unit cost fluctuation is due to variance in system configuration requirements for each CANES platform type. - A CANES unit level platform (DDG/CG/LSD) requires a smaller system, supporting fewer users and applications than force level platforms (CVN/LHD/LHA/LCC) with a greater number of users and applications. For example, a CANES DDG design consists of 18 equipment racks and ~400 workstations, while a CANES CVN system consists of 51 equipment racks and ~3000 workstations. The average procurement cost (hardware, software, integration, and engineering support) for a unit level ship ranges from $5.2M to $7.5M, while the average procurement cost for a force level platform ranges from $11.8M to $15.6M, and submarine unit procurement costs range from $2.7M to $4.6M. These costs include both the MIP and non-MIP components of the CANES units. - CANES Afloat installations are performed at several fleet concentration areas supported by six installation Multiple Award Contract (MAC) holders. The Naval Information Warfare Command (NAVWAR) Fleet Readiness Directorate (FRD) Installation Organization (FIO) has ensured sufficient Alteration Installation Teams (AIT) resources are available to meet the FY22 - 26 CANES installation plan. - CANES Afloat production units require an additional 5 months after delivery for integration, assembly and testing prior to installation start. Installations do not begin until 11 months after contract award (6 months production lead time (PLT) + 5 months integration). Total lead time, including admin lead time, is 12 months. - Installation cost fluctuations are attributed to and dependent on ship location, class, and variant of predecessor system the hull currently has installed. As an example of variant differences, if a CVN has an ISNS Delta variant installed, a CANES installation is estimated to be $18.2M. If that same CVN had a legacy Asynchronous Transfer Mode Local Area Network (ATM LAN) the CANES installation is estimated to be $22.4M. This cost difference is driven by a number of issues such as the requirement for new or additional wiring, equipment, and configuration changes. - CANES units procured in FY23 will be installed in FY24.

(7) CANES technical insertion installations are conducted across several fleet concentration areas supported by six installation Multiple Award Contract (MAC) holders. The NAVWAR Fleet Readiness Directorate (FRD) Installation Organization (FIO) has ensured sufficient Alteration Installation Teams (AIT) resources are available to meet the FY22 - 27 CANES installation plan. - CANES Afloat technical insertion units require an additional 5 months after delivery for operational integration, assembly and testing prior to installation start. Installations do not begin until 11 months after contract award (6 months production lead time (PLT) + 5 months integration). Total lead time, including admin lead time, is 12 months. - CANES Tech Insertion units procured in FY24 will be installed in FY25.

(8) First articles are defined as necessary production design drawings, environmental (shock and vibration) qualifications, logistics and training artifacts as well as a certified tested baseline provided to the government for each platform first of its kind. CANES First Articles are not installed.

(9) CANES: Full Production Contract has 7 possible vendors on MAC award: Northrop Grumman Systems Corp, BAE Sytems Technology Solutions & Services, General Dynamics C4 Systems, Global Technical Systems, SERCO, Inc, CGI Federal Inc, DRS Laurel Technologies. This contract will be used for both production and tech refresh units.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2940 / Gen Purp Elec Test Equip (GPETE)

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	33.193	23.930	23.479	25.761	0.000	25.761	27.477	28.103	28.126	28.788	161.595	380.452
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	33.193	23.930	23.479	25.761	0.000	25.761	27.477	28.103	28.126	28.788	161.595	380.452
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**33.193**	**23.930**	**23.479**	**25.761**	**0.000**	**25.761**	**27.477**	**28.103**	**28.126**	**28.788**	**161.595**	**380.452**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

General Purpose Electronic Test Equipment (GPETE) funding is provided to execute a detailed, multi-year sustainment and modernization plan for intermediate and organizational maintenance activities. GPETE is the equipment employed to ensure the accuracy of installation, alignment, and maintenance (preventative and routine) of all navy weapons systems ashore and afloat. The GPETE procured must meet rigid technical requirements, be cost effective, and satisfy valid deficiencies in authorized allowance. Within the TMDE program, GPETE is classified under 4 functional groups: Fiber Optics (M6000), Signal Generators (M6001), Oscilloscopes & Meters (M6002), and Passive/Ancillary/Mechanical (M6004). The program also breaks out a fifth cost code (M6003) for non-equipment (i.e. labor) tasks including engineering, procurement and integrated logistics support. The Test, Measurement, and Diagnostic Equipment (TMDE) program procures Commercial-off-the-Shelf (COTS; i.e. non-government manufactured test equipment that is available to the general public) GPETE to address the maintenance requirements across shipboard/shore- based activities and programs. Approximately 90% of the annual test equipment requirements are procured through the DOD Supply System, or MILSTRIP, process. When the program procures through MILSTRIP, the Defense Logistics Agency (DLA) or Naval Supply Systems Command Weapon Systems Support (NAVSUP WSS) fills the requisition. The remaining 10% of procurements are Simplified Acquisition Purchase (SAP) contracts or purchase card buys. SAP and purchase card requisitions are utilized only for obsolete test equipment that is no longer available for procurement through MILSTRIP. Any variance in unit costs and quantity across fiscal years is attributable to the diversity and varying complexity of the Commercial-off-the-Shelf GPETE to be procured from year to year to address the maintenance requirements across shipboard/shore- based activities and programs. A portion of the cost growth from FY to FY within the cost codes can be attributed to an average industry cost growth. Any average unit cost code growth beyond 2% would be the result of planned procurements of larger quantities of more complex/capable GPETE and/or modernization to more complex/capable GPETE, which tend to be more expensive. The Navy's inventory of GPETE is approaching obsolescence and requires modernization to avoid deterioration in the accuracy of our weapons systems. Many models are no longer in production, so replacement equipment must be purchased from newer model inventory, some of which have a greater unit cost. Failure to maintain accurate test equipment will cause our weapons systems to perform below expectations. The impacts would range from premature mechanical failures due to incorrectly installed mechanical components, to radar and missile operational inaccuracies due to improperly set components. A defined, multi-year modernization plan for test equipment is in place.

The Calibration Standards funding is provided to execute a detailed, multi-year sustainment and modernization plan for Calibration Standards employed at intermediate, organizational, and depot level maintenance activities. Calibration Standards are equipment employed to ensure the accuracy of test equipment used to install, align, and maintain all navy weapons systems ashore and afloat. The Navy's inventory of Calibration Standards are approaching obsolescence and require modernization to avoid deterioration in the accuracy and calibration of our weapons systems. Many of the original standards are no longer in production, so replacement standards must be purchased from newer model inventory, some of which have a greater unit cost. A defined, multi-year modernization plan for Calibration Standards is in place. Several multi-year contracts requirements have been initiated and several more packages are in process. Procuring the planned calibration standards supports the performance of every Naval Sea Systems Command (NAVSEA) weapon system including Nuclear Reactor Program maintenance, the Aegis Weapon System afloat and Aegis Ashore Romania/Poland, AN/APX-72 IFF transponder, AN/BRD-7 ECM Intercept System, AN/SQQ-34 ASW Module, and all afloat radio systems.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2940 / Gen Purp Elec Test Equip (GPETE)	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Increase of $2.3M from FY23 to FY24 is due to the increased FY24 quantities procured in M6005 CALIBRATION STANDARDS.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2940 / Gen Purp Elec Test Equip (GPETE)

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Gen Purp Elec Test Equip (GPETE)	P-5a, P-21			- / 33.193	- / 23.930	- / 23.479	- / 25.761	- / -	- / 25.761
P-40	**Total Gross/Weapon System Cost**				**- / 33.193**	**- / 23.930**	**- / 23.479**	**- / 25.761**	**- / 0.000**	**- / 25.761**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
Increase of $2.3M from FY23 to FY24 is due to the increased FY24 quantities procured in M6005 CALIBRATION STANDARDS.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2940 / Gen Purp Elec Test Equip (GPETE)	Aggregated Items Title: Gen Purp Elec Test Equip (GPETE)

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) M6000 FIBER OPTICS																				
1.1) FIBER OPTICS AND DATA COMM(†)	A		6,643.48	230	1.528	6,960.79	51	0.355	7,280.00	54	0.393	7,357.04	54	0.397	-	-	-	7,357.04	54	0.397
Subtotal: 1) M6000 FIBER OPTICS			-	-	***1.528***	-	-	***0.355***	-	-	***0.393***	-	-	***0.397***	-	-	-	-	-	***0.397***
2) M6001 SIGNAL GENERATORS																				
2.1) SIGNAL GENERATORS & ANALYZERS(†)	A		12,540.37	322	4.038	13,111.12	117	1.534	13,650.00	108	1.474	13,790.44	108	1.489	-	-	-	13,790.44	108	1.489
Subtotal: 2) M6001 SIGNAL GENERATORS			-	-	***4.038***	-	-	***1.534***	-	-	***1.474***	-	-	***1.489***	-	-	-	-	-	***1.489***
3) M6002 OSCILLSCPS, METERS																				
3.1) OSCILLSCPS, METERS&COUNTERS(†)	A		3,397.79	4,804	16.323	3,459.64	1,412	4.885	3,695.87	1,303	4.816	3,729.70	1,306	4.871	-	-	-	3,729.70	1,306	4.871
Subtotal: 3) M6002 OSCILLSCPS, METERS			-	-	***16.323***	-	-	***4.885***	-	-	***4.816***	-	-	***4.871***	-	-	-	-	-	***4.871***
4) M6003 PROC ENGR AND DOCUMENTATION																				
4.1) PROC ENG AND DOCUMENTATION	A		-	-	2.843	-	-	0.710	-	-	0.688	-	-	0.561	-	-	-	-	-	0.561
Subtotal: 4) M6003 PROC ENGR AND DOCUMENTATION			-	-	***2.843***	-	-	***0.710***	-	-	***0.688***	-	-	***0.561***	-	-	-	-	-	***0.561***
5) M6004 PASSIVE ANCILLARY AND MECHANICAL																				
5.1) PASSIVE ANCILLARY AND MECHANICAL(†)	A		1,681.44	5,032	8.461	2,101.67	1,200	2.522	1,790.82	1,372	2.457	1,827.08	1,359	2.483	-	-	-	1,827.08	1,359	2.483
Subtotal: 5) M6004 PASSIVE ANCILLARY AND MECHANICAL			-	-	***8.461***	-	-	***2.522***	-	-	***2.457***	-	-	***2.483***	-	-	-	-	-	***2.483***
6) M6005 CALIBRATION STANDARDS																				
6.1) M6005 CALIBRATION STANDARDS(†)	A		-	-	-	24,864.29	560	13.924	25,326.53	539	13.651	25,783.17	619	15.960	-	-	-	25,783.17	619	15.960
Subtotal: 6) M6005 CALIBRATION STANDARDS			-	-	***0.000***	-	-	***13.924***	-	-	***13.651***	-	-	***15.960***	-	-	-	-	-	***15.960***
Total			-	-	**33.193**	-	-	**23.930**	-	-	**23.479**	-	-	**25.761**	-	-	-	-	-	**25.761**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2940 / Gen Purp Elec Test Equip (GPETE)	Aggregated Items: Gen Purp Elec Test Equip (GPETE)

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) M6000 FIBER OPTICS												
1.1) FIBER OPTICS AND DATA COMM		2018	NSWC/CHINA LAKE / CHINA LAKE	WR	CHINA LAKE	Nov 2017	Mar 2018	37	6,594.59	Y		
1.1) FIBER OPTICS AND DATA COMM		2019	NSWC/CHINA LAKE / CHINA LAKE	WR	CHINA LAKE	Nov 2018	Mar 2019	32	6,639.61	Y		
1.1) FIBER OPTICS AND DATA COMM		2020	NSWC/CHINA LAKE / CHINA LAKE	WR	CHINA LAKE	Nov 2019	Mar 2020	118	6,635.59	Y		
1.1) FIBER OPTICS AND DATA COMM		2021	NSWC/CHINA LAKE / CHINA LAKE	WR	CHINA LAKE	Nov 2020	Mar 2021	43	6,720.93	Y		
1.1) FIBER OPTICS AND DATA COMM		2022	NSWC/CHINA LAKE / CHINA LAKE	WR	CHINA LAKE	Nov 2021	Mar 2022	51	6,960.79	Y		
1.1) FIBER OPTICS AND DATA COMM		2023	NSWC/CHINA LAKE / CHINA LAKE	WR	CHINA LAKE	Nov 2022	Mar 2023	54	7,280.00	Y		
1.1) FIBER OPTICS AND DATA COMM		2024	NSWC/CHINA LAKE / CHINA LAKE	WR	CHINA LAKE	Oct 2023	Feb 2024	54	7,357.04	Y		
2) M6001 SIGNAL GENERATORS												
2.1) SIGNAL GENERATORS & ANALYZERS		2018	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2017	Mar 2018	60	12,400.00	Y		
2.1) SIGNAL GENERATORS & ANALYZERS		2019	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2018	Mar 2019	52	12,476.42	Y		
2.1) SIGNAL GENERATORS & ANALYZERS		2020	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2019	Mar 2020	122	12,483.61	Y		
2.1) SIGNAL GENERATORS & ANALYZERS		2021	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2020	Mar 2021	88	12,750.00	Y		
2.1) SIGNAL GENERATORS & ANALYZERS		2022	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2021	Mar 2022	117	13,111.12	Y		
2.1) SIGNAL GENERATORS & ANALYZERS		2023	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2022	Mar 2023	108	13,650.00	Y		
2.1) SIGNAL GENERATORS & ANALYZERS		2024	NSWC / CHINA LAKE	WR	CHINA LAKE	Oct 2023	Feb 2024	108	13,790.44	Y		
3) M6002 OSCILLSCPS, METERS												
3.1) OSCILLSCPS, METERS&COUNTERS		2018	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2017	Mar 2018	991	3,383.45	Y		
3.1) OSCILLSCPS, METERS&COUNTERS		2019	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2018	Mar 2019	865	3,381.35	Y		
3.1) OSCILLSCPS, METERS&COUNTERS		2020	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2019	Mar 2020	1,795	3,381.62	Y		
3.1) OSCILLSCPS, METERS&COUNTERS		2021	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2020	Mar 2021	1,153	3,447.53	Y		

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2940 / Gen Purp Elec Test Equip (GPETE)	Aggregated Items: Gen Purp Elec Test Equip (GPETE)

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
3.1) OSCILLSCPS, METERS&COUNTERS		2022	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2021	Mar 2022	1,412	3,459.64	Y		
3.1) OSCILLSCPS, METERS&COUNTERS		2023	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2022	Mar 2023	1,303	3,695.87	Y		
3.1) OSCILLSCPS, METERS&COUNTERS		2024	NSWC / CHINA LAKE	WR	CHINA LAKE	Oct 2023	Feb 2024	1,306	3,729.70	Y		
5) M6004 PASSIVE ANCILLARY AND MECHANICAL												
5.1) PASSIVE ANCILLARY AND MECHANICAL		2018	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2017	Mar 2018	1,032	1,674.42	Y		
5.1) PASSIVE ANCILLARY AND MECHANICAL		2019	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2018	Mar 2019	901	1,673.28	Y		
5.1) PASSIVE ANCILLARY AND MECHANICAL		2020	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2019	Mar 2020	1,899	1,672.99	Y		
5.1) PASSIVE ANCILLARY AND MECHANICAL		2021	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2020	Mar 2021	1,200	1,706.67	Y		
5.1) PASSIVE ANCILLARY AND MECHANICAL		2022	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2021	Mar 2022	1,200	2,101.67	Y		
5.1) PASSIVE ANCILLARY AND MECHANICAL		2023	NSWC / CHINA LAKE	WR	CHINA LAKE	Nov 2022	Mar 2023	1,372	1,790.82	Y		
5.1) PASSIVE ANCILLARY AND MECHANICAL		2024	NSWC / CHINA LAKE	WR	CHINA LAKE	Oct 2023	Feb 2024	1,359	1,827.08	Y		
6) M6005 CALIBRATION STANDARDS												
6.1) M6005 CALIBRATION STANDARDS(†)		2022	NSWC/CORONA / CORONA	WR	CORONA	Nov 2021	Mar 2022	560	24,864.29	Y		
6.1) M6005 CALIBRATION STANDARDS(†)		2023	NSWC/CORONA / CORONA	WR	CORONA	Nov 2022	Mar 2023	539	25,326.53	Y		
6.1) M6005 CALIBRATION STANDARDS(†)		2024	NSWC/CORONA / CORONA	WR	CORONA	Oct 2023	Feb 2024	619	25,783.17	Y		

(†) indicates the presence of a P-21

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2940 / Gen Purp Elec Test Equip (GPETE)	**Aggregated Items:** Gen Purp Elec Test Equip (GPETE)

Items (Units in Each)							Fiscal Year 2018												Fiscal Year 2019												BALANCE
										Calendar Year 2018												Calendar Year 2019									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
6) M6005 CALIBRATION STANDARDS																															
6.1) M6005 CALIBRATION STANDARDS																															
	8	2022	NAVY	560	0	560																									560
	8	2023	NAVY	539	0	539																									539
	8	2024	NAVY	619	0	619																									619
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2940 / Gen Purp Elec Test Equip (GPETE)	**Aggregated Items:** Gen Purp Elec Test Equip (GPETE)

Items (Units in Each)							Fiscal Year 2020												Fiscal Year 2021												BALANCE
										Calendar Year 2020												Calendar Year 2021									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
6) M6005 CALIBRATION STANDARDS																															
6.1) M6005 CALIBRATION STANDARDS																															
	8	2022	NAVY	560	0	560																									560
	8	2023	NAVY	539	0	539																									539
	8	2024	NAVY	619	0	619																									619
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy | **Date:** March 2023

Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10 | **P-1 Line Item Number / Title:** 2940 / Gen Purp Elec Test Equip (GPETE) | **Aggregated Items:** Gen Purp Elec Test Equip (GPETE)

Items (Units in Each)							Fiscal Year 2022												Fiscal Year 2023												BALANCE
										Calendar Year 2022												Calendar Year 2023									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
6) M6005 CALIBRATION STANDARDS																															
6.1) M6005 CALIBRATION STANDARDS																															
	8	2022	NAVY	560	0	560		A -	-	-	-	560																			0
	8	2023	NAVY	539	0	539														A -	-	-	-	539							0
	8	2024	NAVY	619	0	619																									619
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2940 / Gen Purp Elec Test Equip (GPETE)	**Aggregated Items:** Gen Purp Elec Test Equip (GPETE)

Items (Units in Each)							Fiscal Year 2024												Fiscal Year 2025												BALANCE
										Calendar Year 2024												Calendar Year 2025									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
6) M6005 CALIBRATION STANDARDS																															
6.1) M6005 CALIBRATION STANDARDS																															
	8	2022	NAVY	560	560	0																									0
	8	2023	NAVY	539	539	0																									0
	8	2024	NAVY	619	0	619	A -	-	-	-	619																				0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2940 / Gen Purp Elec Test Equip (GPETE)	**Aggregated Items:** Gen Purp Elec Test Equip (GPETE)

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2024	1-8-5 For 2024	MAX For 2024	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	NSWC/CORONA - CORONA			TBD	0	0	4	4	0	0	0	0

"A" in the Delivery Schedule indicates the Contract Award Date.
Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2950 / Network Tactical Common Data Link (CDL)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0604280N	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	24.763	8.795	11.792	16.475	0.000	16.475	9.070	12.602	7.435	13.233	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	24.763	8.795	11.792	16.475	0.000	16.475	9.070	12.602	7.435	13.233	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**24.763**	**8.795**	**11.792**	**16.475**	**0.000**	**16.475**	**9.070**	**12.602**	**7.435**	**13.233**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.065	-	-	-	-	-	-	-	-	-	0.065
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Network Tactical Common Data Link (NTCDL) provides the ability to transmit/receive real-time intelligence, surveillance, and reconnaissance (ISR) data simultaneously from multiple sources (air, surface, sub-surface, and man-portable) and exchange command and control information (voice, data, imagery, and full-motion video) across dissimilar joint, service, coalition, and civil networks. NTCDL provides warfighters the capability to support multiple, simultaneous, networked operations with in-service Common Data Link (CDL) equipped aircraft (e.g., MH- 60R) in addition to next-generation manned and unmanned platforms (e.g., P-8 Poseidon, Triton, MQ-25 (Stingray), small tactical unmanned aircraft systems (STUAS), and Fire Scout). NTCDL benefits the Fleet by providing a horizon extension for line-of-sight systems for use in time-critical strike missions.

Communications Data Link System Technical Refresh (CDLS TR): Provides fielding link management computer upgrades to meet Fleet Windows 10 Operating System IA requirements, a second 360 degree data link, as well as the inclusion of digital distribution of Intelligence Surveillance and Reconnaissance (ISR), Full Motion Video (FMV), and Anti-Submarine Warfare (ASW) data in Plain Text (PT) to Automated Digital Network System (ADNS) for shipboard dissemination to support Anti-Access/Area Denial (A2AD). CDLS TR supports various Common Data Link (CDL) air platforms including MH-60R, MQ-4 Triton, MQ-8B/C Fire Scout, P-3 and P-8 to include command and control of the aircraft during flight operations. The CDLS TR upgrade includes a Flight Deck Checkout test link between aircraft on the deck through CDLS to end-user prior to flight operations to ensure end-to-end connectivity of organic assets prior to missions.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2950 / Network Tactical Common Data Link (CDL)

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** 0604280N	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Network Tactical Common Data Link (CDL)				- / 24.763	- / 2.387	- / -	- / -	- / -	- / -
P-3a	1 / Network Tactical Common Data Link (NTCDL) (TBD)				- / 0.000	- / 6.408	- / 11.792	- / 16.475	- / 0.000	- / 16.475
P-40	**Total Gross/Weapon System Cost**				**- / 24.763**	**- / 8.795**	**- / 11.792**	**- / 16.475**	**- / 0.000**	**- / 16.475**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Network Tactical Common Data Link (CDL)				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / Network Tactical Common Data Link (NTCDL) (TBD)				- / 9.070	- / 12.602	- / 7.435	- / 13.233	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 9.070**	**- / 12.602**	**- / 7.435**	**- / 13.233**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY24 funding supports procurement of one (1) NTCDL system and installation of one (1) NTCDL system on a CVN that was procured in FY22. Due to increased fleet Common Data Link (CDL) operations, NTCDL provides advanced CDL capability and is the follow on solution to CDLS providing 4 additional simultaneous links for a total of 6 links. NTCDL is Navy's next generation tactical ISR capability for multiple (surface, air, sub-surface, man-portable) platforms. NTCDL brings a key fleet capability of compatibility with new airborne platforms including MQ-25.

FY24 investment supports critical upgrades to the CDLS capability required by the CVN in support of MQ-25 refueling and ISR operations, enabling the embarked Air Wing to execute Strike Warfare, Long Range Fires missions and ASW in defense of the carrier strike group (CSG). NTCDL is critical to future primary Line of Sight (LOS) Command and Control (C2) capabilities for the MQ-25 mission. NTCDL is instrumental within the naval aviation community in executing the required ISR missions and future C2 operations of unmanned vehicles, including single CDL mission capability, directly effecting MQ-25, MH-60R, MH-60S, P-8A, and Joint/National assets.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2950 / Network Tactical Common Data Link (CDL)	**Aggregated Items Title:** Network Tactical Common Data Link (CDL)

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
1) Network Tactical Common Data Link (CDL)																				
1.1) Consolidated Prior Year Requirements [1]	A		1,796.200	10	17.962	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) CDLS Tech Refresh Installation	A		-	-	6.801	-	-	2.387	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) Network Tactical Common Data Link (CDL)			**-**	**-**	***24.763***	**-**	**-**	***2.387***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total			**-**	**-**	**24.763**	**-**	**-**	**2.387**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

[1] Consolidated prior years for LINK-16 Antennas ($.290M), CDLS Tech Refresh Procurement ($12.443M), and CDLS Tech Refresh Support (DSA, Production Support, & NRE) ($5.229M).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2950 / Network Tactical Common Data Link (CDL)	**Modification Number / Title:** 1 / Network Tactical Common Data Link (NTCDL)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	6.408	11.792	16.475	0.000	16.475	9.070	12.602	7.435	13.233	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	6.408	11.792	16.475	0.000	16.475	9.070	12.602	7.435	13.233	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**6.408**	**11.792**	**16.475**	**0.000**	**16.475**	**9.070**	**12.602**	**7.435**	**13.233**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Network Tactical Common Data Link (NTCDL) provides the ability to transmit/receive real-time intelligence, surveillance, and reconnaissance (ISR) data simultaneously from multiple sources (air, surface, sub-surface, and man-portable) and exchange command and control information (voice, data, imagery, and full-motion video) across dissimilar joint, service, coalition, and civil networks. NTCDL provides warfighters the capability to support multiple, simultaneous, networked operations with in-service Common Data Link (CDL) equipped aircraft (e.g., MH- 60R) in addition to next-generation manned and unmanned platforms (e.g., P-8 Poseidon, Triton, MQ-25 (Stingray), small tactical unmanned aircraft systems (STUAS), and Fire Scout). NTCDL benefits the Fleet by providing a horizon extension for line-of-sight systems for use in time-critical strike missions.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2950 / Network Tactical Common Data Link (CDL)	**Modification Number / Title:** 1 / Network Tactical Common Data Link (NTCDL)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Network Tactical Common Data Link (NTCDL)												
B Kits												
Recurring												
1.1.1) NTCDL System Procurement - NonOrganic (2)	- / -	1 / 6.000	- / -	1 / 10.000	- / -	1 / 10.000	- / -	1 / 10.424	- / -	1 / 10.867	Continuing	Continuing
1.1.2) NTCDL Engineering Change Order - Organic	- / -	- / -	- / 3.710	- / -	- / -	- / -	- / 1.544	- / -	- / 2.223	- / -	- / -	- / 7.477
1.1.3) NTCDL Non Recurring Equipment - Organic	- / -	- / -	- / 3.806	- / -	- / -	- / -	- / 2.306	- / -	- / -	- / -	- / -	- / 6.112
Subtotal: Recurring	*- / 0.000*	*- / 6.000*	*- / 7.516*	*- / 10.000*	*- / -*	*- / 10.000*	*- / 3.850*	*- / 10.424*	*- / 2.223*	*- / 10.867*	*Continuing*	*Continuing*
Subtotal: Network Tactical Common Data Link (NTCDL)	*- / -*	*1 / 6.000*	*- / 7.516*	*1 / 10.000*	*- / -*	*1 / 10.000*	*- / 3.850*	*1 / 10.424*	*- / 2.223*	*1 / 10.867*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / 6.000*	*- / 7.516*	*- / 10.000*	*- / -*	*- / 10.000*	*- / 3.850*	*- / 10.424*	*- / 2.223*	*- / 10.867*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) NTCDL Integration Support	- / -	- / -	- / -	- / 0.480	- / -	- / 0.480	- / -	- / 0.574	- / 0.047	- / 0.652	- / -	- / 1.753
2.2) NTCDL Production Support	- / -	- / 0.240	- / 0.451	- / 0.635	- / -	- / 0.635	- / -	- / 0.643	- / -	- / 0.655	Continuing	Continuing
2.3) NTCDL DSA	- / -	- / 0.168	- / 0.325	- / 1.298	- / -	- / 1.298	- / 1.057	- / 0.961	- / 0.825	- / 1.059	Continuing	Continuing
Subtotal: Support	*- / 0.000*	*- / 0.408*	*- / 0.776*	*- / 2.413*	*- / -*	*- / 2.413*	*- / 1.057*	*- / 2.178*	*- / 0.872*	*- / 2.366*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: Network Tactical Common Data Link (NTCDL)	- / 0.000	- / 0.000	- / 3.500	- / 4.062	- / 0.000	- / 4.062	- / 4.163	- / 0.000	- / 4.340	- / 0.000	Continuing	Continuing
Subtotal: Installation	*- / 0.000*	*- / -*	*- / 3.500*	*- / 4.062*	*- / -*	*- / 4.062*	*- / 4.163*	*- / -*	*- / 4.340*	*- / -*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**6.408**	**11.792**	**16.475**	**0.000**	**16.475**	**9.070**	**12.602**	**7.435**	**13.233**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2950 / Network Tactical Common Data Link (CDL)	**Modification Number / Title:** 1 / Network Tactical Common Data Link (NTCDL)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Network Tactical Common Data Link (NTCDL)

Manufacturer Information

Manufacturer Name: BAE Systems LP — Manufacturer Location: Wayne, NJ

Administrative Leadtime *(in Months)*: 8 — Production Leadtime *(in Months)*: 15

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jun 2022						
Delivery Dates	Sep 2023						

Manufacturer Name: TBD (3) — Manufacturer Location: San Diego, CA

Administrative Leadtime *(in Months)*: 6 — Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Apr 2024				
Delivery Dates			Apr 2025				

Installation Information

Method of Implementation: [none specified]:: Installation Name: NTCDL System Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	1 / 3.500	1 / 4.062	0 / 0.000	1 / 4.062	- / -	- / -	- / -	- / -	0 / 0.000	2 / 7.562
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.163	- / -	- / -	- / -	0 / 0.000	1 / 4.163
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 4.340	- / -	0 / 0.000	1 / 4.340
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	- / -	- / -	1 / 3.500	1 / 4.062	0 / 0.000	1 / 4.062	1 / 4.163	- / -	1 / 4.340	- / -	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2950 / Network Tactical Common Data Link (CDL)	**Modification Number / Title:** 1 / Network Tactical Common Data Link (NTCDL)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Network Tactical Common Data Link (NTCDL)

Installation Information

Method of Implementation: [none specified]:: Installation Name: NTCDL System Procurement

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	Cont.	Cont.
Out	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	Cont.	Cont.

Footnotes:

(2) FY22 and prior system procurements were bought on an LRIP Development Contract with PoP ending June 2023. FY24 and beyond systems will be procured on a follow-on production contract. Initial market research indicates an increased unit cost of approximately $10M. FY23 installation cost supports the installation of one (1) RDT&E,N funded NTCDL EDM system that was reprioritized to be fielded as a production representative unit to the fleet in order to meet and support MQ-25 testing requirements by Q3 2023.

(3) Follow-on production contract for NTCDL not yet awarded - Initial research anticipates a 12 month production lead time.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2960 / Integ Combat System Test Facility

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	68.164	5.829	6.053	6.345	0.000	6.345	6.359	6.492	6.627	6.762	-	112.631
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	68.164	5.829	6.053	6.345	0.000	6.345	6.359	6.492	6.627	6.762	-	112.631
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**68.164**	**5.829**	**6.053**	**6.345**	**0.000**	**6.345**	**6.359**	**6.492**	**6.627**	**6.762**	**-**	**112.631**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.212	0.246	0.247	-	0.247	0.190	0.244	0.289	0.300	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This program supports various Navy Land Based Test Sites (LBTS) required to support integration and interoperability testing. Sites include, but are not limited to: Naval Surface Warfare Center (NSWC) Dahlgren, Surface Combat System Center (SCSC) Wallops Island, and NSWC Dam Neck.

The United States Navy has a requirement to fully test and certify computer programs for maturity, Interoperability and Integration (I&I) prior to delivery to the Fleet. Commander, U.S. Fleet Forces Command (CUSFFC) provided specific direction to develop a unified modernization process and certify all combat system baselines for integration and interoperability as an integral step in the Chief of Naval Operations (CNO) Optimized Fleet Response Plan (O-FRP). Various Navy facilities, serving as LBTS, conduct the required testing in support of CVN, DDG, CG, LHD, LHA, LPD 17 and LSD class ships. These sites also comprise the Navy's Distributed Integration & Interoperability Assessment Capability (DIIAC) (supported through the use of JMETC network) alliance, which performs Interoperability Assessment and Systems Engineering Events (SEEs) for deploying Strike Groups. These facilities also provide combat system in-service support to respond to emergent fleet problems. This capability tests and certifies new combat system baselines in a lab based environment, which has significantly reduced the cost of corrective action and shifted the burden of problem discovery away from the operator at sea. It also provides support to the acquisition community to conduct interoperability (shift to the left) testing earlier in the acquisition cycle. As existing systems experience parts obsolescence issues and tech refresh updates, the LBTS must procure and install existing test beds to accurately replicate the Command, Control, Communication, Computer, Combat System and Intelligence (C5I) configuration that is designed for the fleet. In addition, new combat systems architectures are under development for new ship classes such as LCS, CVN 78, DDG 1000, as well as new Open Architecture (OA) variants of legacy suites. Procurement of production representative systems of these OA combat systems being delivered to operational fleet units is critical to ensure that testing and subsequent certification of both current and newly installed combat systems is in accordance with NAVSEAINST 9410.2 Naval Warfare Systems Certification Policy (NWSCP) and the Optimized Fleet Response Plan (O-FRP). The basic procurement outlined herein is directed at expanding various facilities' capability to support Interoperability Integration and Stressful Endurance testing. Procurement requirements are directly tied to the interoperability testing schedule and establish independence between test beds allowing for parallel certification efforts. Procurements are required to build the necessary test beds and for laboratory support equipment. This budget procures lab support equipment that ensures various facilities are able to support the new tactical subsystems that use Commercial Off-the-Shelf (COTS) equipment.

In addition, the basic program provides for equipment/upgrades for the Navy's Distributed Integration & Interoperability Assessment Capability (DIIAC) needed to conduct interoperability assessment testing. The DIIAC consists of 16 land based sites networked to certify computer programs prior to their delivery to the fleet and provides support to the acquisition community to conduct interoperability and integration (shift to the left) testing earlier in the acquisition cycle. Interoperability Assessment and Stressful Endurance testing is required for all deploying strike groups per the Joint Fleet Instruction.

[P40A / M8400 - SESEF Electronic Equipment]: The Shipboard Electronic Systems Evaluation Facilities (SESEF) are Navy owned and operated test sites located near heavy fleet concentrated areas and strategic Forward Deployed Naval Forces Sites. The SESEF Program mission is to provide electromagnetic systems test and evaluation services to afloat and shore commands for upgraded systems, to validate

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2960 / Integ Combat System Test Facility	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

system performance following new construction and overhaul/availability, and to provide real-time assessment of material readiness in an operational environment. Also provided are: system modernization and integration, system and equipment component procurement and software (S/W) upgrades for test systems to include, but not limited to, Tactical Control and Navigation (TACAN), Antenna Radiation Pattern (ARP) systems, Identification Friend or Foe (IFF), Direction Finder (DF)/Radio Direction Finder (RDF), LINK 11/16/22, Electronic Warfare/Electronic Attack (EW/EA) and HF/VHF/UHF communication systems, including secure voice. SESEFs are used to effectively conduct TACAN certifications, AN/SLQ-32 Electronic Warfare (EW) Planned Maintenance System (PMS) requirements checks, Ship Signals Exploitation Equipment (SSEE) calibrations and PMS checks, and to detect and to isolate shipboard system deficiencies leading to maintenance action to increase ship material readiness at the completion of construction, delivery availabilities, during routine ship operations, and prior to deployment. This funding is associated with initial spares funding line JC2M8 Integrated Combat System Test Facility (J2960).

[P40A / M8500 - Interoperability Assessment Equipment]: M8500 - Interoperability assessment equipment known as Distributed Integration & Interoperability Assessment Capability (DIIAC) procures upgrades to support the 18 sites that comprise the Navy's DIIAC sites. Procures hardware that provides the DIIAC Operations Center (DOC) the ability to support monitoring and execution of events providing data collection and distribution. Funds are also allocated for site upgrades to meet current standards and allow scalability for DIIAC requirements; and, in addition, to enable the DIIAC to maintain efficiency and product improvement to interface with other Joint communities using Joint Mission Environment Test Community (JMETC) network. Focused on the force-level impact of new systems and platforms under development, the DIIAC supports testing that ensures Commander, Naval Sea System Command/Program Executive Offices (NAVSEA/PEOs) are delivering mature and interoperable warfare systems at the Platform and Strike Group levels, with NAVSEA providing Strike Force Interoperability Certification and Assessments. This is the only such testing of combat systems and Command, Control, Communication, Computer, Combat System and Intelligence (C5I) configuration items prior to shipboard delivery for operational use.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2960 / Integ Combat System Test Facility

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	ICSTF Program				- / 68.164	- / 5.829	- / 6.053	- / 6.345	- / -	- / 6.345
P-40	**Total Gross/Weapon System Cost**				**- / 68.164**	**- / 5.829**	**- / 6.053**	**- / 6.345**	**- / 0.000**	**- / 6.345**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
Funding for procurements and installations for upgrades and modernization of the eight operational sites and one mobile trailer across the AORs to support the Shipboard Electronic Systems Evaluation Facility (SESEF).

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2960 / Integ Combat System Test Facility	**Aggregated Items Title:** ICSTF Program

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) M8400 - SESEF Electronic Equipment																				
1.1) SESEF Electronic Equipment	A		-	-	39.559	-	-	2.564	-	-	2.678	-	-	2.804	-	-	-	-	-	2.804
Subtotal: 1) M8400 - SESEF Electronic Equipment			**-**	**-**	***39.559***	**-**	**-**	***2.564***	**-**	**-**	***2.678***	**-**	**-**	***2.804***	**-**	**-**	**-**	**-**	**-**	***2.804***
2) M8500 - Interoperability Assessment Equipment																				
2.1) Interoperability Assessment Equipment	A		-	-	28.605	-	-	3.265	-	-	3.375	-	-	3.541	-	-	-	-	-	3.541
Subtotal: 2) M8500 - Interoperability Assessment Equipment			**-**	**-**	***28.605***	**-**	**-**	***3.265***	**-**	**-**	***3.375***	**-**	**-**	***3.541***	**-**	**-**	**-**	**-**	**-**	***3.541***
Total			**-**	**-**	**68.164**	**-**	**-**	**5.829**	**-**	**-**	**6.053**	**-**	**-**	**6.345**	**-**	**-**	**-**	**-**	**-**	**6.345**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2970 / EMI Control Instrumentation

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	58.022	3.925	4.219	4.282	0.000	4.282	4.174	4.283	4.368	4.458	-	87.731
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	58.022	3.925	4.219	4.282	0.000	4.282	4.174	4.283	4.368	4.458	-	87.731
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**58.022**	**3.925**	**4.219**	**4.282**	**0.000**	**4.282**	**4.174**	**4.283**	**4.368**	**4.458**	**-**	**87.731**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The EMI Control Instrumentation Program is supported by OPNAV N2N6, OPNAV N95, OPNAV N96, OPNAV N97 and OPNAV N98. The EMI Control Instrumentation Program provides Cradle to Grave Systems Engineering for Mission Assurance by implementing Electromagnetic Compatibility (EMC) hardware solutions, Spectrum Management (SM) software solutions, and by procuring specialized test equipment used in the characterization/ quantification of EMI problems aboard US Navy platforms. This ensures equipment, systems, and platforms meet their Operational Mission Requirements and goals within their intended operational Electromagnetic (EM) environment.

MA004 - EMI (HARDWARE) FIXES: Procurement and installation of Electromagnetic Interference (EMI) Hardware Solutions (i.e. Fixes) will achieve Electromagnetic Compatibility (EMC) among and between shipboard electronic/electric systems and/or equipment. This will be accomplished by determining the optimal EMI fix hardware, evaluating the effectiveness of the EMI solution, then procuring and installing the required hardware for mitigation verification. The fixes may include various types of radio frequency (RF) filters, limiters, Transient Protection Devices (TPD), blankers, radar absorbing material (RAM) and shielding methods. MA004 - EMI (Hardware) Fixes is supported by OPNAV N95, OPNAV N96, OPNAV N97 and OPNAV N98.

MA104 - EMI (SOFTWARE) FIXES: Procurement and installation of EMI Software Fixes for platform/strike group/Area of Operation. These specific spectrum procedures (software application capabilities) and frequency management techniques (software modules) will be used to eliminate and reduce EMI when hardware solutions are unacceptable. Funds will also be used to support procurement of models and other capabilities, including ILS for software tools/utilities/applications that correct/mitigate operational EMI. MA104 - EMI (Software) Fixes are supported by OPNAV N95, OPNAV N96, OPNAV N97 and OPNAV N98.

MA204 - EMI CONTROL INSTRUMENTATION: EMI Control Instrumentation will procure specialized test equipment used in the characterization and quantification of EMI problems aboard US Navy platforms. Instrumentation will be procured for use in identifying the sources of EMI and determining the extent of EMI so that effective corrective measures can be applied. The instrumentation procured will include automated and special EMI test equipment (e.g., for spectrum analysis, mapping field intensities, etc.). EMI Control Instrumentation can include both hardware and software products that will enhance or streamline data collection efforts, including the ability to provide remote access capability. MA204 - EMI CONTROL INSTRUMENTATION are supported by OPNAV N2N6.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2970 / EMI Control Instrumentation

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	EMI Control Instrumentation				- / 58.022	- / 3.925	- / 4.219	- / 4.282	- / -	- / 4.282
P-40	**Total Gross/Weapon System Cost**				**- / 58.022**	**- / 3.925**	**- / 4.219**	**- / 4.282**	**- / 0.000**	**- / 4.282**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

MA004 (EMI HDW Fixes) OPN Funds are used to procure and install (P/I) EMI Fixes on deploying ships and submarines. The number of EMI Fixes procured (MA004 Hardware Fixes) are dependent on the number of ships/submarines in the Fleet and when they deploy.

MA104 (EMI SFW Fixes) procures and installs SFW Fixes to mitigate electromagnetic interference (EMI). This effort retains responsibility for the procurement of models and frequency management techniques that are encompassed by other Navy tools (e.g., Real-Time Spectrum Operations).

MA204 (EMI Control Instrumentation) procures and installs specialized test equipment for HW and SW products in collecting data to provide corrective measures.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2970 / EMI Control Instrumentation	Aggregated Items Title: EMI Control Instrumentation

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) MA004 EMI (HARDWARE) FIXES																				
1.1) MA004 EMI (HARDWARE) FIXES - N96	A		-	-	9.732	-	-	0.980	-	-	1.134	-	-	1.151	-	-	-	-	-	1.151
Subtotal: 1) MA004 EMI (HARDWARE) FIXES			**-**	**-**	***9.732***	**-**	**-**	***0.980***	**-**	**-**	***1.134***	**-**	**-**	***1.151***	**-**	**-**	**-**	**-**	**-**	***1.151***
2) New P40A Grouping																				
2.1) MA004 EMI (HARDWARE) FIXES - N95	A		-	-	6.800	-	-	0.704	-	-	0.833	-	-	0.852	-	-	-	-	-	0.852
2.2) MA004 EMI (HARDWARE) FIXES - N97	A		-	-	7.047	-	-	0.728	-	-	0.463	-	-	0.467	-	-	-	-	-	0.467
2.3) MA004 EMI (HARDWARE) FIXES N98	A		-	-	7.816	-	-	0.659	-	-	0.796	-	-	0.805	-	-	-	-	-	0.805
Subtotal: 2) New P40A Grouping			**-**	**-**	***21.663***	**-**	**-**	***2.091***	**-**	**-**	***2.092***	**-**	**-**	***2.124***	**-**	**-**	**-**	**-**	**-**	***2.124***
3) MA104 EMI (SOFTWARE) FIXES																				
3.1) MA104 EMI (SOFTWARE) FIXES - N95	A		-	-	4.586	-	-	0.078	-	-	0.092	-	-	0.092	-	-	-	-	-	0.092
3.2) MA104 EMI (SOFTWARE) FIXES - N96	A		-	-	6.766	-	-	0.109	-	-	0.126	-	-	0.127	-	-	-	-	-	0.127
3.3) MA104 EMI (SOFTWARE) FIXES - N97	A		-	-	4.866	-	-	0.081	-	-	0.051	-	-	0.051	-	-	-	-	-	0.051
3.4) MA104 EMI (SOFTWARE) FIXES - N98	A		-	-	6.539	-	-	0.073	-	-	0.088	-	-	0.089	-	-	-	-	-	0.089
Subtotal: 3) MA104 EMI (SOFTWARE) FIXES			**-**	**-**	***22.757***	**-**	**-**	***0.341***	**-**	**-**	***0.357***	**-**	**-**	***0.359***	**-**	**-**	**-**	**-**	**-**	***0.359***
4) MA204 EMI CONTROL INSTRUMENTATION																				
4.1) MA204 EMI CONTROL INSTRUMENTATION - N2N6	A		-	-	3.870	-	-	0.513	-	-	0.636	-	-	0.648	-	-	-	-	-	0.648
Subtotal: 4) MA204 EMI CONTROL INSTRUMENTATION			**-**	**-**	***3.870***	**-**	**-**	***0.513***	**-**	**-**	***0.636***	**-**	**-**	***0.648***	**-**	**-**	**-**	**-**	**-**	***0.648***
Total			**-**	**-**	**58.022**	**-**	**-**	**3.925**	**-**	**-**	**4.219**	**-**	**-**	**4.282**	**-**	**-**	**-**	**-**	**-**	**4.282**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1,097.765	87.475	88.951	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	1,274.191
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1,097.765	87.475	88.951	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	1,274.191
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1,097.765**	**87.475**	**88.951**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**-**	**1,274.191**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	43.974	-	43.974	-	0.857	0.720	-	-	45.551
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Beginning in FY24, all funding under LI 2980 has been realigned to new LI 2981 - In-Service Radars and Sensors.

[P40A / DC020 DUAL BAND RADAR (DBR)]: Funding is required to maintain the In-Service Engineering Agent (ISEA) and Original Equipment Manufacturer (OEM) production services and support for Configuration Management. Funding also implements the DBR Life Cycle Sustainment Plan (LCSP) and infrastructure, Diminishing Manufacturing Sources and Material Shortages (DMSMS) Plan, associated hardware and software obsolescence mod kits, procurement of Engineering Change Proposals (ECPs), associated logistics products and on-board repair parts allowance requirements to enable system operation. Additionally, funding is required for a technology refresh for the DBR Signal Data Processors (SDPs) for CVN 78 and DDG 1000 Class ships. The current version of the IBM Advanced Interactive eXecutive (AIX) operating system (OS) that is running on the IBM P6 DBR SDPs will be at the end of service in FY22 and the risk for DBR to satisfy Cyber Authority to Operate (ATO) requirements will increase. The next version of IBM AIX OS will not run on the IBM P6. Hardware spares for DBR SDP P6 computers are no longer available from IBM or certified IBM vendors. Production Support is also required to assist with DBR Combat System Integration and Technical Documentation. Funding also supports CVN 78 and DDG 1000 Class Testing (OT) events. Additional limitations will be identified during DDG1001 Shipboard Activation as well as the CVN 78 and DDG 1000 deployments. The OEM and Government Technical Team have documented the critical radar issues that require correction via ECPs. Funding for these ECP efforts is required due to the engineering and technical complexity of the change proposals needed to satisfy combat system qualification requirements. The Under Secretary of Defense (Acquisition, Technology and Logistics) Independent Review Team (IRT) recommended in 2016 that the Navy establish infrastructure and mechanisms to accelerate the acquisition of spare parts for DBR and develop a repair capability for DBR equipment. DBR Special Test Equipment and Infrastructure funding is needed for: (1) test equipment and support for a repair depot for assemblies and subassemblies for DBR components, including Common Array Power System (CAPS), and Common Array Cooling System (CACS); (2) resolution of system obsolescence that will degrade system Ao; and (3) establishment of product support engineering infrastructure needed by the DBR In-Service Engineering Agent (ISEA) and OEM onboard technicians to test and resolve issues for deployed systems on DDG 1000 Class and CVN 78. The additional DBR sustainment and infrastructure efforts will facilitate the transition of material sparing support of DBR to NAVSUP.

[P40A / DC022 RADAR RESTORATION MATERIAL]: Radar Restoration funding procures components to support radar restoration (Arrays and miscellaneous Antenna Sub-Assemblies) and Engineering Change Proposals (ECPs) to address obsolescence and improve supportability. The Antenna Overhaul Kit consists of various components including waveguides, nuts, bolts, bearings, washers, seals, etc.

[P40A / DC026 I-STALKER]: Improved Stalker (I-Stalker) will provide incremental improvements to the currently fielded Stalker Long Range Electro-Optic Sensor System (SLREOSS) in response to a 2016 United States Fleet Forces Command (USFFC) Operational Needs Statement (ONS). SLREOSS was developed as a modular, portable, form/fit replacement for the NATO Sea Sparrow Missile System (NSSMS) MK 6 Low Light Level Television (LLLTV) in response to the 2010 Naval Forces Central Command (NAVCENT) Counter Swarm Urgent Operational Need (UON) to combat Fast Attack Craft/Fast Inshore Attack Craft (FAC/FIAC). It is currently being fielded in either the NSSMS MK6 MOD 3 LLLTV Director Mount configuration or NSSMS MK6 MOD 4 LLLTV Independent Mount configuration, depending on platform

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

specifications. I-Stalker will provide required upgrades to the SLREOSS Independent Mount configuration with the enhanced capabilities provided by the Navy-owned Situational Awareness System (SAwS) to deliver an integrated radar and electro-optic/Infrared control and display suite. I-Stalker includes two (2) NSSMS MK6 MOD 4 LLLTV Independent Mount systems and one (1) SAwS. This combined system is referred to as the AN/SAY-3. I-Stalker requirements are transitioning from individual resource sponsor management to a total program level consistent with the I-Stalker transition to a Program of Record (POR). FY23 I-Stalker OPN funding is currently contained in both BLI 5231 and BLI 2980. In FY23, total funding requirements remain split between BLIs 5231 and 2980.

[P40A - 2 / DC004 CALIBRATION STANDARDS - Prior Year]: Starting in FY22, funding for Calibration Standards transferred to BLI 2940. These funds procure Calibration Standards to execute a detailed, multi-year sustainment and modernization plan for intermediate, organizational and depot level maintenance activities. Calibration Standards are equipment employed to ensure the accuracy of test equipment used to install, align, and maintain all navy weapons systems ashore and afloat. The Navy's inventory of Calibration Standards are approaching obsolescence and require modernization to avoid deterioration in accuracy and calibration of our weapons systems. Many of the original standards are no longer in production, so replacement standards must be purchased from newer model inventory, some of which have a greater unit cost. Failure to maintain accurate calibration standards will cause our weapons systems to perform below expectations. The impacts would range from premature mechanical failures due to incorrectly installed mechanical components, to radar and missile operational inaccuracies due to improperly set components. A defined, multi-year modernization plan for Calibration Standards is in place. The unit cost of the replacement calibration standards to be procured, range from $11K (general purpose power meter)

[P40A - 2 / DC012 AN/SPS-74(V) PERISCOPE DETECTION RADAR - Prior Year]: AN/SPS-74(V) PERISCOPE DETECTION RADAR (PDR): The CVN Periscope Detection Radar (PDR), AN/SPS-74(V) is a radar that provides automatic detection and discrimination of submarine periscopes using advanced algorithms enabling discrimination of periscopes from surface contacts, buoys, small boats, floating mines, etc. Four Advanced Development Models(ADMs) have been installed and are operating on CVN class ships. The AN/SPS-74 program was cancelled in FY12. Funds were used for Engineering Change Proposals (ECPs) to address obsolescence issues, sustainment, and continued operation of installed AN/SPS-74 ADMs as well as de-installation. Funding for SPS-74 ended in FY19.

[P40A - 2 / DC019 RADAR RESTORATION AN/SPS-67 ANTENNA - Prior Year]: Established an antenna manufacturing capability at Naval Surface Warfare Center (NSWC) Crane needed to provide additional rotatable pool antennas and associated engineering changes for the AN/SPS-67(V)3 to support the restoration of installed fleet antennas.

[P40A - 2 / DC021 AN/SPS-67(V)5 MARITIME RADAR PROCESSOR (MRP) - Prior Year]: The Maritime Radar Processor (MRP) was developed to improve the detection of small boats/targets by USN ships. Prior year funding used to integrate and field small boat detection software improvements to AN/SPS-67(V)5 Surface Search Radar. Funding also used to field software build 3.0 for various corrections including tracker fixes, Windows Operating System (OS) elimination, improved Information Assurance (IA) posture, and squint correction to improve bearing accuracy.

[P3A / DC001 - AN/SPS-73(V)]: The AN/SPS-73(V) Radar provides navigation and general surface search radar functionality on all U.S. Navy ships. The AN/SPS-73(V)12 is the Automatic Radar Plotting Aid (ARPA) Navigation Radar for the U.S. Navy being upgraded to the AN/SPS-73(V)18 Next Generation Surface Search Radar (NGSSR). NGSSR upgrade funding will be utilized for engineering changes, which will improve surface combatant's ability to engage fast attack craft/fast in shore attack craft (FAC/FIAC) tracking and periscope detection and discrimination, as well as address cybersecurity shortfalls and Commercial-Off-The-Shelf (COTS) obsolescence of the legacy AN/SPS-73 systems. The NGSSR will update the current AN/SPS-73(V)12 and replace the AN/SPS-67(V) and all commercially provided Navigation Radars fielded in the fleet. NGSSR production has been accelerated as a result of the October 2017 Commander Fleet Forces Comprehensive Review, which followed the McCain and Fitzgerald collisions. The installation costs for six system installs were excluded in this budget due to funding received by COMNAVSURFPAC. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981, resulting in 36 NGSSR procurements and 46 installs being reflected in this budget.

[P3A - 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)]: The AN/SPS-48G 3-D Air Surveillance Radar is a follow-on to the existing AN/SPS-48E onboard Aircraft Carriers and large-deck Amphibious ships. AN/SPS-48G was initiated in response to Fleet complaints regarding AN/SPS-48E reliability and supportability. Upgrade of the AN/SPS-48E with the AN/SPS-48G remains a high Fleet priority as it will reduce Operation and Support (O&S) costs and improve Operational Availability. Both factors are cited by the Fleet as unsatisfactory for the AN/SPS-48E. This capability was designed and incorporated into the AN/SPS-48E after design of the AN/SPS-48G had been initiated. This change needs to be translated into the different hardware and software architectures of the AN/SPS-48G. FY18 was the last year of AN/SPS-48G procurements. Remaining installation funding is for advanced planning (AP) and planning yard design services allocation (DSA) which are required up to one year prior to the year of installation. DSA funds are used for Ship Installation Drawings (SIDs), Alteration Installation Team (AIT) contracting fees, and ship-checks. Installation funding has increased due to LPD Class ship availability shifts and cancellations.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P3A - 3 / DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year]: Provided real-time volunumeric wind profiles, convective weather detection/display, and radar refractivity assessments from AN/SPY-1 radar returns. TEP is an adjunct processor and display, tapping radar data from weather and refractivity data, with users able to access information through Secret Internet Protocol Router (SIPR). Funding for TEP ended in FY19. Funding was used to remove equipment and closeout program.

[P3A - 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS]: DC018 AN/SPY-1 RM&A IMPROVEMENTS - These Reliability, Maintainability, and Availability (RM&A) improvements are intended to reduce cascading failures, mitigate obsolescence issues, and improve reliability in support of Anti-Air Warfare (AAW) and Ballistic Missile Defense (BMD) missions while still providing AN/SPY-1 Radar Total Ownership Cost (TOC) reductions. The improvements include, but are not limited to, installation for Sidewall Capacitor Circuit Protection and 10kW Traveling Wave Tube (TWT) Monitoring Circuits Ordnance Alterations (ORDALTS) for AN/SPY-1; B (V), D, D (V), CG and DDGs. Solid State Switch Assemblies (SSSA) will replace legacy switch tube modulator deck via an ORDALT. Multi-Mission Signal Processor (MMSP) is the signal processor for the AN/SPY-1 radar. MMSP-Restoration (MMSP-R) cabinets will be procured to provide production representative configurations for land-based testing and training to support AEGIS ships at AEGIS Training and Readiness Center (ATRC) and Surface Combat System Center (SCSC) Wallops Island. Procurement and installation of SSSA for DDG Ships, Shore Sites and Spares are aligned with the DDG Modernization availability periods. MMSP Power Supplies for DDGs (Qty 25) were procured under BLI 0900, Aegis Ashore (Qty 2) were procured by Missile Defense Agency (MDA) in FY20 and will be installed under BLI 2980 starting in FY23, and installations will continue from FY24-FY27 under new BLI 2981. MMSP Power Supplies for Land Based Test and Training Sites (LBTTS) (Qty 5) were procured in FY20 and installed in FY21 under BLI 2980. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981, resulting in 16 DDGs and five (5) LBTTS SSSA procurements, and ten (10) DDGs and five (5) LBTTS SSSA installs being reflected in this budget.

[P3A - 5 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)]: Air and Missile Defense Radar (AMDR) Operations and Support (O&S)]: Air and Missile Defense Radar (AMDR) has been designated the AN/SPY-6(V)1 to address Ballistic Missile Defense (BMD) and Air Defense (AD) capability gaps identified in the Maritime Air and Missile Defense of Joint Forces (MAMDJF) Initial Capabilities Document (ICD); AN/SPY-6(V)1 will be initially fielded on the DDG-51 FLT-III platform. A variant of the AN/ SPY-6(V) will replace the AN/SPY-1 radar on existing DDG 51 FLT-IIA ships. The AN/SPY-6(V) Product Support Strategy established NSWC Port Hueneme Division as the Product Support Integrator (PSI) for overall system Operational Availability (AO) and Backend Processing (BEP) subsystem(s) Life Cycle Support. The BEP is comprised of Commercial off the Shelf (COTS) x86 based Modular Open System Architecture (MOSA), allowing for Form-Fit-Function (FFF) replacement with next generation server and processer technology. Interim support for the BEP will be provided via Task Order on the Defense Technical Information Center (DTIC) Information Analysis Center Multiple Award Contract (IAC MAC). Obsolescence management and technology refresh will be provided by a combination of ISEA tasking and program office leadership. Funding will sustain the Navy's next generation family of radars, AN/SPY-6(V). This applies to all current and future variants of the AN/SPY-6(V), including future modifications or separate programs to address different mission areas and utilization onboard different ship classes. The "To Complete" is representative of the AN/SPY-6(V)1's full 40-year life cycle across 26 ship years (a total of 1040 ship years).

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy | **Date:** March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment

P-1 Line Item Number / Title:
2980 / Items less than $5 Million

ID Code (A=Service Ready, B=Not Service Ready): A | **Program Elements for Code B Items:** N/A | **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	Items less than $5 Million	P-5a			- / 189.520	- / 41.942	- / 34.954	- / -	- / -	- / -
P-40a	Items Less Than $5 Million - Prior Year Only				- / 105.338	- / -	- / -	- / -	- / -	- / -
P-3a	1 / DC001 - AN/SPS-73(V) (TBD)				- / 272.649	- / 22.602	- / 36.716	- / 0.000	- / 0.000	- / 0.000
P-3a	2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR) (TBD)				- / 348.990	- / 3.526	- / 3.337	- / 0.000	- / 0.000	- / 0.000
P-3a	3 / DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year (TBD)				- / 9.353	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
P-3a	4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS (TBD)				- / 170.087	- / 15.682	- / 8.576	- / 0.000	- / 0.000	- / 0.000
P-3a	5 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S) (TBD)			P384	- / 1.828	- / 3.723	- / 5.368	- / 0.000	- / 0.000	- / 0.000
P-40	**Total Gross/Weapon System Cost**				**- / 1,097.765**	**- / 87.475**	**- / 88.951**	**- / 0.000**	**- / 0.000**	**- / 0.000**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	Items less than $5 Million	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-40a	Items Less Than $5 Million - Prior Year Only				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / DC001 - AN/SPS-73(V) (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 331.967
P-3a	2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR) (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 355.853
P-3a	3 / DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 9.353
P-3a	4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 194.345
P-3a	5 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S) (TBD)			P384	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 10.919
P-40	**Total Gross/Weapon System Cost**				**- / 0.000**	**- / 0.000**	**- / 0.000**	**- / 0.000**	**- / -**	**- / 1,274.191**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2980 / Items less than $5 Million	Aggregated Items Title: Items less than $5 Million

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) DC020 DUAL BAND RADAR (DBR) (1)																				
1.1) DBR PRODUCTION SUPPORT	A		-	-	22.877	-	-	6.977	-	-	3.823	-	-	-	-	-	-	-	-	-
1.2) DBR ENGINEERING CHANGE PROPOSALS (ECPS)	A		-	-	107.636	-	-	17.763	-	-	20.059	-	-	-	-	-	-	-	-	-
1.3) DBR SPECIAL TEST EQUIPMENT AND INFRASTRUCTURE	A		-	-	42.044	-	-	12.932	-	-	1.445	-	-	-	-	-	-	-	-	-
Subtotal: 1) DC020 DUAL BAND RADAR (DBR)			**-**	**-**	***172.557***	**-**	**-**	***37.672***	**-**	**-**	***25.327***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2) DC022 RADAR RESTORATION MATERIAL (2)																				
2.1) 48 ARRAYS(†)	A		10,053.57	1,120	11.260	10,554.69	256	2.702	10,738.10	252	2.706	-	-	-	-	-	-	-	-	-
2.2) ANTENNA SUB-ASSEMBLIES	A		-	-	0.997	-	-	0.262	-	-	0.267	-	-	-	-	-	-	-	-	-
2.3) ENGINEERING CHANGE PROPOSALS (ECPS)	A		-	-	1.383	-	-	0.195	-	-	0.439	-	-	-	-	-	-	-	-	-
2.4) ANTENNA OVERHAUL KIT	A		-	-	3.323	-	-	1.111	-	-	1.160	-	-	-	-	-	-	-	-	-
Subtotal: 2) DC022 RADAR RESTORATION MATERIAL			**-**	**-**	***16.963***	**-**	**-**	***4.270***	**-**	**-**	***4.572***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
3) DC026 I-STALKER (3)																				
3.1) I-STALKER INDEPENDENT MOUNT (4)(†)	A		-	-	-	-	-	-	615,000.00	5	3.075	-	-	-	-	-	-	-	-	-
3.2) I-STALKER INSTALL (5)	A		-	-	-	-	-	-	-	-	1.825	-	-	-	-	-	-	-	-	-
3.3) I-STALKER ENG CHANGE PROPOSALS (6)	A		-	-	-	-	-	-	-	-	0.155	-	-	-	-	-	-	-	-	-
Subtotal: 3) DC026 I-STALKER			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	***5.055***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total			**-**	**-**	**189.520**	**-**	**-**	**41.942**	**-**	**-**	**34.954**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) (1) Engineering Change Proposals (ECPs): FY23 efforts uses ECP funding in support of DBR sustainment engineering efforts. The specific sustainment engineering efforts included: software trouble report corrections, certified software baseline ECP integration, logistic technical manual updates, waterfront manual troubleshooting and fault isolation procedure delivery and non-recurring engineering for planning the transition of the DBR Signal Data Processor (SDP)

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Aggregated Items Title:** Items less than $5 Million

computers from the obsolete IBM P6 to the latest generation IBM P9 computers. Production Support (PS): FY23 PS funding is required to maintain the OEM capability to perform repairs on system components that failed during shipboard operations, to provide OEM and Government failure reporting analysis and corrective action system (FRACAS) support, and to obtain the SDP hardware and software maintenance support for the IBM P6 computers. Special Test Equipment and Infrastructure (STE&I): FY23 STE&I funding is required to resolve a critical system sustainment test equipment deficiency for DBR by continuing the production of a hybrid SPY-3/SPY-4 Receiver Exciter (REX) test set. The hybrid REX test set is needed to support the procurement, test and certification of new REX components. The FY23 STE&I funding also supports the additional infrastructure needed by the DBR In-Service Engineering Agent (ISEA) and OEM onboard technicians to test and resolve issues for deployed systems on DDG 1000 Class and CVN 78. Starting in FY24, funding has been realigned to new BLI 2981.

(2) Radar Restoration funding FYDP procures components to support radar restoration (Arrays and miscellaneous Antenna Sub-Assemblies) and Engineering Change Proposals (ECPs) to address obsolescence and improve supportability. The Antenna Overhaul Kit consists of various components including waveguides, nuts, bolts, bearings, washers, seals, etc.

(3) Since the FY23 budget request, funding for I-Stalker Processing Module and I-Stalker Sensor Suite have been removed from this budget.

(4) Since the FY23 budget request, FY23 IM procurement quantities increased from 2 to 5 to support updated fielding plan installations, in alignment with the latest ship availability and deployment schedules. The FY23 IM unit cost has increased to reflect the latest contract option year pricing, which includes adjustments in material and labor costs. Supports meeting an Urgent Operational Need (UON). Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981.

(5) I-Stalker installation funding includes funding for Advanced Planning (AP) and Planning Yard Design Services Allocation (DSA), which is required up to two years before the year of installation. DSA funds Ship Installation Drawings (SIDs), Alteration Installation Team (AIT) contracts, and shipchecks. Due to the rapid response nature of the I-Stalker program, installations are planned during a ship's Window of Opportunity (WOO). In FY23, I-Stalker total installation funding requirements are split between BLIs 5231 and 2980. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981.

(6) I-Stalker Engineering Change Proposal (ECP) funding requirements address several known obsolescence and reliability issues. In FY23, I-Stalker ECP total funding requirements remain split between BLIs 5231 and 2980. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2980 / Items less than $5 Million	Aggregated Items: Items less than $5 Million

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) DC022 RADAR RESTORATION MATERIAL												
2.1) 48 ARRAYS		2022	NSWC CRANE / CRANE, IN	Various	NSWC/CRANE	Apr 2022	Apr 2023	256	10,554.69	Y		
2.1) 48 ARRAYS		2023 (7)	NSWC CRANE / CRANE, IN	Various	NSWC/CRANE	Dec 2022	Feb 2023	252	10,738.10	Y		
3) DC026 I-STALKER												
3.1) I-STALKER INDEPENDENT MOUNT (4)		2023 (8)	BALL / Westminster, CO	SS / FFP	NAVSEA	Mar 2023	Mar 2024	5	615,000.00	N		Oct 2022

Footnotes:

(7) The FY23 award date accelerated one month due to earlier than anticipated contract award. The delivery date was accelerated by 11 months due to associated Array material being readily available for earlier delivery.

(8) Shift in award date is due to late release of funding. Since the FY23 budget request, Independent Mount delivery time has changed from 15 months to 12 months. Additionally, the FY23 IM unit cost has increased to reflect the latest contract option year pricing, which includes adjustments in material and labor costs.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Aggregated Items Title:** Items Less Than $5 Million - Prior Year Only

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) DC001 SPS-73 RADAR																				
1.1) TECH REFRESH	A		209,565.89	129	27.034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) DC001 SPS-73 RADAR			**-**	**-**	***27.034***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2) DC004 CALIBRATION STANDARDS - Prior Year																				
2.1) CALIBRATION STANDARDS - Prior Year	A		26,360.61	2,285	60.234	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 2) DC004 CALIBRATION STANDARDS - Prior Year			**-**	**-**	***60.234***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
3) DC012 AN/SPS-74(V) PERISCOPE DETECTION RADAR - Prior Year																				
3.1) PRODUCTION SUPPORT	A		-	-	4.368	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 3) DC012 AN/SPS-74(V) PERISCOPE DETECTION RADAR - Prior Year			**-**	**-**	***4.368***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
4) DC019 RADAR RESTORATION AN/SPS-67 ANTENNA - Prior Year																				
4.1) HARDWARE	A		-	-	2.465	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.2) OTHER	A		-	-	1.716	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 4) DC019 RADAR RESTORATION AN/SPS-67 ANTENNA - Prior Year			**-**	**-**	***4.181***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
5) DC021 AN/SPS-67(V)5 MARITIME RADAR PROCESSOR (MRP) - Prior Year																				
5.1) AN/SPS-67(V)5 MARITIME RADAR PROCESSOR (MRP)	A		-	-	3.651	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) DC021 AN/SPS-67(V)5 MARITIME RADAR PROCESSOR (MRP) - Prior Year			**-**	**-**	***3.651***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
6) RED FALCON (OCO)																				
6.1) RED FALCON (OCO)	A		-	-	5.870	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) RED FALCON (OCO)			**-**	**-**	***5.870***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total			**-**	**-**	**105.338**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	272.649	22.602	36.716	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	331.967
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	272.649	22.602	36.716	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	331.967
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**272.649**	**22.602**	**36.716**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**331.967**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/SPS-73(V) Radar provides navigation and general surface search radar functionality on all U.S. Navy ships. The AN/SPS-73(V)12 is the Automatic Radar Plotting Aid (ARPA) Navigation Radar for the U.S. Navy being upgraded to the AN/SPS-73(V)18 Next Generation Surface Search Radar (NGSSR). NGSSR upgrade funding will be utilized for engineering changes, which will improve surface combatant's ability to engage fast attack craft/fast in shore attack craft (FAC/FIAC) tracking and periscope detection and discrimination, as well as address cybersecurity shortfalls and Commercial-Off-The-Shelf (COTS) obsolescence of the legacy AN/SPS-73 systems. The NGSSR will update the current AN/SPS-73(V)12 and replace the AN/SPS-67(V) and all commercially provided Navigation Radars fielded in the fleet. NGSSR production has been accelerated as a result of the October 2017 Commander Fleet Forces Comprehensive Review, which followed the McCain and Fitzgerald collisions. The installation costs for six system installs were excluded in this budget due to funding received by COMNAVSURFPAC. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981, resulting in 36 NGSSR procurements and 46 installs being reflected in this budget.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/SPS-73	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC001 - AN/SPS-73(V)												
B Kits												
Recurring												
1.1.1) SPS-73 SYSTEMS - NonOrganic	79 / 18.452	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	79 / 18.452
1.1.2) NEXT GENERATION NON RECURRING ENGINEERING - Organic (9)	- / 70.586	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 70.586
1.1.3) NEXT GENERATION SURFACE SEARCH RADAR - NonOrganic (10)	35 / 46.546	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	35 / 46.546
1.1.4) NEXT GENERATION SURFACE SEARCH RADAR SHORE SITES - NonOrganic (11)	6 / 7.908	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 7.908
Subtotal: Recurring	*- / 143.492*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 143.492*
Subtotal: DC001 - AN/SPS-73(V)	*120 / 143.492*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*120 / 143.492*
Subtotal: Procurement, All Modification Items	*- / 143.492*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 143.492*
Support *(All Modification Items)*												
2.1) PRODUCTION SUPPORT (12)	- / 46.586	- / 5.013	- / 8.109	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 59.708
2.2) MISCELLANEOUS ECP SUPPORT (13)	- / 38.553	- / 5.030	- / 5.507	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 49.090
2.3) AP/ DSA	- / -	- / 3.648	- / 5.015	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 8.663
Subtotal: Support	*- / 85.139*	*- / 13.691*	*- / 18.631*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 117.461*
Installation												
Modification Item 1 of 1: DC001 - AN/SPS-73(V)	- / 44.018	- / 8.911	- / 18.085	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 71.014
Subtotal: Installation	*- / 44.018*	*- / 8.911*	*- / 18.085*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 71.014*
Total												
Total Cost (Procurement + Support + Installation)	**272.649**	**22.602**	**36.716**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**331.967**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DC001 - AN/SPS-73(V)

Manufacturer Information

Manufacturer Name: AN/SPS-73 Next Generation Navigation Radar - ULTRA ELECTRONICS OCEAN SYSTEMS, INC.	Manufacturer Location: BRAINTREE, MA
Administrative Leadtime *(in Months)*: 0	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: [none specified]:: Installation Name: SPS-73 SYSTEMS

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	79 / 18.452	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	79 / 18.452
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	79 / 18.452	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	79 / 18.452

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79
Out	79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DC001 - AN/SPS-73(V)

Installation Information

Method of Implementation: [none specified]:: Installation Name: NEXT GENERATION SURFACE SEARCH RADAR

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	3 / 17.547	1 / 5.477	9 / 18.085	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	13 / 41.109
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	3 / 17.547	1 / 5.477	9 / 18.085	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	13 / 41.109

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	3	-	-	-	1	4	1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
Out	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

Method of Implementation: [none specified]:: Installation Name: NEXT GENERATION SURFACE SEARCH RADAR SHORE SITES

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	4 / 8.019	2 / 3.434	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 11.453
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DC001 - AN/SPS-73(V)

Installation Information

Method of Implementation: [none specified]:: Installation Name: NEXT GENERATION SURFACE SEARCH RADAR SHORE SITES

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	4 / 8.019	2 / 3.434	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 11.453

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	4	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Out	2	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6

Footnotes:

(9) Non-Recurring Engineering (NRE) funding was required to accelerate updating the aging and obsolete SPS-73 to the SPS-73(V)18 Next Generation Surface Search Radar (NGSSR) configuration, which addressed Cyber and Electro-magnetic Warfare threats that did not exist at the time of the original SPS-73 design. NRE funds were utilized for government efforts to finalize NGSSR specifications, including design/cost trade-offs to assess different features that could affect cost/schedule such as dual system installations, track fusion, tactical training, AEGIS and SSDS combat system interfaces, and cybersecurity. NRE funding was to mitigate FAC/FIAC and cybersecurity shortfalls, and to capitalize on periscope detection and discrimination capabilities. Funding also completed software development, finalized NGSSR hardware configuration and conducted combat system integration and testing. Qualification testing included navigation radar International Maritime Organization (IMO) and Safety Of Life At Sea (SOLAS) compliance, Periscope Detection and Discrimination (PDD) interface, Combat System Interface validation, Surface Search Radar validation, cybersecurity, shock, Electromagnetic interference (EMI) and environmental.

(10) NGSSR production units are procured as a result of the October 2017 Commander Fleet Forces Comprehensive Review which is a priority requirement that is directly related to the McCain and Fitzgerald collisions. The procurement profile and the installation schedule have been adjusted in accordance with current funding levels ship availability schedules. Costs for installations show both current year installation funding for the quantity of installations, in addition to AP and planning yard DSA for current year and following year installs. Installation costs may vary due to scope of system removals for each ship class, the number of AN/SPS-73(V)18 systems installed on each ship (single or dual configuration) and anticipated higher shipyard estimates based on coast-wide bidding which results in uncertainty in location and cost. Advance Planning (AP) and Planning Yard Design Services Allocation (DSA) funding has been established as a separate line (2.3) broken out from actual installation costs. Funding for AP and DSA is customarily required over the course of the two years prior to the actual installation in accordance with the Navy Modernization Process Management and Operational Manual (NMP MOM) SL720-AA-MAN-030 Rev 4 to support individual ship checks, ship drawing packages and long lead material unique to the installation in order to maintain alignment with ship availability schedules. Additionally, AP and DSA costs are driven by NMP MOM milestones, based on the availability period of the installation and not by the procurement year. Third Party Planning, SIDS and ship-checks funding estimated at 75% of total AP is required ~A-660 days before the availability. Installation Planning Yard DSA funding (Class Dependent) is required ~A-220 (25% of DSA). Additional DSA costs for Shipyard Support Services funding (SSR) is required ~A-120 (Shipyard/Class dependent). Funding for installs may cross fiscal years depending on whether the availability start is early or late in a fiscal year. FY23 procurements and installs decreased since the FY23 budget request due to a funding reduction.

(11) Shore site installations were included in the fielding plan in response to a fleet request to increase the number of training facilities for navigation training as well as increasing the number of combat system integration lab installations for AEGIS and SSDS development. Shore Sites costs are for site preparation and infrastructure for permanent shore sites and training in various locations.

(12) Production Support funding is for production of hardware and hardware components, which are primarily from Warfare Center Activity support, Software Support Activity (SSA), Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), Technical Design Agent (TDA) and Professional Support Services (PSS) and continued efforts. This funding also includes support for cybersecurity compliance and software certification. FY23 funding increased since the FY23 budget request due to receipt of actual costs of material and increased labor rates.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(13) Miscellaneous ECP support is required to address hardware and software obsolescence/availability issues which requires research and investigation by the ISEA to locate, test, and provide suitable substitutes to maintain Fleet Navigation Readiness and Safety of Life at Sea (SOLAS). Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981 and will continue to be required for SPS-73 efforts throughout the outyears until sufficient quantities of NGSSR systems are fielded and the population of legacy systems decreases accordingly.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	348.990	3.526	3.337	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	355.853
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	348.990	3.526	3.337	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	355.853
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**348.990**	**3.526**	**3.337**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**355.853**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/SPS-48G 3-D Air Surveillance Radar is a follow-on to the existing AN/SPS-48E onboard Aircraft Carriers and large-deck Amphibious ships. AN/SPS-48G was initiated in response to Fleet complaints regarding AN/SPS-48E reliability and supportability. Upgrade of the AN/SPS-48E with the AN/SPS-48G remains a high Fleet priority as it will reduce Operation and Support (O&S) costs and improve Operational Availability. Both factors are cited by the Fleet as unsatisfactory for the AN/SPS-48E. This capability was designed and incorporated into the AN/SPS-48E after design of the AN/SPS-48G had been initiated. This change needs to be translated into the different hardware and software architectures of the AN/SPS-48G. FY18 was the last year of AN/SPS-48G procurements. Remaining installation funding is for advanced planning (AP) and planning yard design services allocation (DSA) which are required up to one year prior to the year of installation. DSA funds are used for Ship Installation Drawings (SIDs), Alteration Installation Team (AIT) contracting fees, and ship-checks. Installation funding has increased due to LPD Class ship availability shifts and cancellations. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/SPS-48G	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)												
B Kits												
Recurring												
1.1.1) AN/SPS-48G HARDWARE - FMP - NonOrganic (14)	25 / 156.609	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	25 / 156.609
1.1.2) EQUIPMENT NONRECURRING - Organic	- / 11.191	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 11.191
1.1.3) ENGINEERING CHANGE PROPOSALS - Organic	- / 21.710	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 21.710
1.1.4) ENGINEERING CHANGE ORDERS - Organic	- / 57.532	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 57.532
1.1.5) AN/SPS-48G HARDWARE - NON-FMP - NonOrganic	2 / 12.973	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 12.973
Subtotal: Recurring	*- / 260.015*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 260.015*
Subtotal: DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)	*27 / 260.015*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*27 / 260.015*
Subtotal: Procurement, All Modification Items	*- / 260.015*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 260.015*
Support *(All Modification Items)*												
2.1) PRODUCTION SUPPORT	- / 27.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 27.500
Subtotal: Support	*- / 27.500*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 27.500*
Installation												
Modification Item 1 of 1: DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)	- / 61.475	- / 3.526	- / 3.337	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 68.338
Subtotal: Installation	*- / 61.475*	*- / 3.526*	*- / 3.337*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 68.338*
Total												
Total Cost (Procurement + Support + Installation)	**348.990**	**3.526**	**3.337**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**355.853**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)

Manufacturer Information

Manufacturer Name: Exelis | Manufacturer Location: VAN NUYS, CA

Administrative Leadtime *(in Months)*: 0 | Production Leadtime *(in Months)*: 24

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: [none specified]:: Installation Name: AN/SPS-48G HARDWARE - FMP

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	20 / 57.109	1 / 3.526	1 / 3.337	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	22 / 63.972
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	20 / 57.109	1 / 3.526	1 / 3.337	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	22 / 63.972

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	20	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
Out	17	1	-	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)

Installation Information

Method of Implementation: AIT:: Installation Name: AN/SPS-48G HARDWARE - NON-FMP

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	2 / 4.366	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 4.366
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	2 / 4.366	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 4.366

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Out	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

Footnotes:

(14) Installation funding for Advanced Planning (AP) and Planning Yard Design Services Allocation (DSA) is required up to one year prior to the year of installation. DSA funds are used for Ship Installation Drawings (SIDs), Alteration Installation Team (AIT) contracting fees, and ship checks. The installation costs are variable per hull, with the difference being primarily the AP and DSA costs which are variable based on a combination of the number of future installations and the result of coast wide bidding resulting in uncertainty in location and cost. Installation funding has been adjusted to align with current ship availability schedules.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 3 / DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	9.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.353
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	9.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.353
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**9.353**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**9.353**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Prior year funding provided real-time volunumeric wind profiles, convective weather detection/display, and radar refractivity assessments from AN/SPY-1 radar returns. TEP is an adjunct processor and display, tapping radar data from weather and refractivity data, with users able to access information through Secret Internet Protocol Router (SIPR). Funding for TEP ended in FY19 and was used to remove equipment and closeout the program.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 3 / DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: TACTICAL ENVIRONMENTAL PROCESSOR (TEP)	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year												
B Kits												
Recurring												
1.1.1) DDG HARDWARE - FMP - NonOrganic (15)	8 / 2.317	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 2.317
1.1.2) DDG COTS REFRESH - Organic	- / 0.130	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.130
1.1.3) TEP SHORE SITES HARDWARE - NonOrganic	3 / 0.499	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.499
Subtotal: Recurring	*- / 2.946*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 2.946*
Subtotal: DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year	*11 / 2.946*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*11 / 2.946*
Subtotal: Procurement, All Modification Items	*- / 2.946*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 2.946*
Support *(All Modification Items)*												
2.1) PRODUCTION SUPPORT	- / 5.472	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 5.472
Subtotal: Support	*- / 5.472*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 5.472*
Installation												
Modification Item 1 of 1: DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year	- / 0.935	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.935
Subtotal: Installation	*- / 0.935*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 0.935*
Total												
Total Cost (Procurement + Support + Installation)	**9.353**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**9.353**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 3 / DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year

Manufacturer Information

Manufacturer Name: BASIC COMMERCE AND INDUSTRIES, INC
Manufacturer Location: MOORESTOWN, NJ
Administrative Leadtime *(in Months)*: 0
Production Leadtime *(in Months)*: 11

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: AIT:: Installation Name: DDG HARDWARE - FMP

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	6 / 0.790	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 0.790
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	6 / 0.790	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 0.790

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Out	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 3 / DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC015 - TACTICAL ENVIRONMENTAL PROCESSOR (TEP) - Prior Year

Installation Information

Method of Implementation: [none specified]:: Installation Name: TEP SHORE SITES HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	3 / 0.145	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 0.145
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	3 / 0.145	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 0.145

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Out	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3

Footnotes:

(15) Starting in FY20, funding was zero'd due to higher priority requirement for resources. Directed to terminate program and remove DDG equipment.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	170.087	15.682	8.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	194.345
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	170.087	15.682	8.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	194.345
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**170.087**	**15.682**	**8.576**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**194.345**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

DC018 AN/SPY-1 RM&A IMPROVEMENTS - These Reliability, Maintainability, and Availability (RM&A) improvements are intended to reduce cascading failures, mitigate obsolescence issues, and improve reliability in support of Anti-Air Warfare (AAW) and Ballistic Missile Defense (BMD) missions while still providing AN/SPY-1 Radar Total Ownership Cost (TOC) reductions. The improvements include, but are not limited to, installation for Sidewall Capacitor Circuit Protection and 10kW Traveling Wave Tube (TWT) Monitoring Circuits Ordnance Alterations (ORDALTS) for AN/SPY-1; B (V), D, D (V), CG and DDGs. Solid State Switch Assemblies (SSSA) will replace legacy switch tube modulator deck via an ORDALT. Multi-Mission Signal Processor (MMSP) is the signal processor for the AN/SPY-1 radar. MMSP-Restoration (MMSP-R) cabinets will be procured to provide production representative configurations for land-based testing and training to support AEGIS ships at AEGIS Training and Readiness Center (ATRC) and Surface Combat System Center (SCSC) Wallops Island. Procurement and installation of SSSA for DDG Ships, Shore Sites and Spares are aligned with the DDG Modernization availability periods. MMSP Power Supplies for DDGs (Qty 25) were procured under BLI 0900, Aegis Ashore (Qty 2) were procured by Missile Defense Agency (MDA) in FY20 and will be installed under BLI 2980 starting in FY23, and installations will continue from FY24-FY27 under new BLI 2981. MMSP Power Supplies for Land Based Test and Training Sites (LBTTS) (Qty 5) were procured in FY20 and installed in FY21 under BLI 2980. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981, resulting in 16 DDGs and five (5) LBTTS SSSA procurements, and ten (10) DDGs and five (5) LBTTS SSSA installs being reflected in this budget.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/SPY-1 RM&A IMPROVEMENTS	**Modification Type:** TBD	**Related RDT&E PEs:** 0604501N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS												
B Kits												
Recurring												
1.1.1) SIDEWALL AND 10KW TWT DDG HARDWARE - NonOrganic	62 / 7.883	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	62 / 7.883
1.1.2) PACK UP KITS - Organic	3 / 4.125	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 4.125
1.1.3) SIDEWALL AND 10KW TWT CG HARDWARE - NonOrganic	24 / 4.802	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	24 / 4.802
1.1.4) SIDEWALL AND 10KW TWT SHORE SITE HARDWARE - NonOrganic	8 / 1.172	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 1.172
1.1.5) SOLID STATE SWITCH ASSEMBLY DDG HARDWARE - NonOrganic (16)	14 / 67.414	2 / 9.288	- / 0.005	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	16 / 76.707
1.1.6) SOLID STATE SWITCH ASSEMBLY SHORE SITE HARDWARE - NonOrganic (17)	5 / 23.037	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 23.037
1.1.7) SOLID STATE SWITCH ASSEMBLY SPARES - Organic (18)	26 / 17.055	1 / 0.640	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	27 / 17.695
1.1.8) SOLID STATE SWITCH ASSEMBLY FINAL POWER AMPLIFIER ENV/QUAL - Organic	1 / 1.756	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.756
1.1.9) MMSP-R SHORE SITE HARDWARE - NonOrganic	7 / 10.020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 10.020
1.1.10) TEST EQUIPMENT - NonOrganic	- / 2.201	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.201
1.1.11) MMSP POWER SUPPLY DDG HARDWARE - NonOrganic (19)	9 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 0.000
Subtotal: Recurring	*- / 139.465*	*- / 9.928*	*- / 0.005*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 149.398*
Subtotal: DC018 - AN/SPY-1 RM&A IMPROVEMENTS	*159 / 139.465*	*3 / 9.928*	*- / 0.005*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*162 / 149.398*
Subtotal: Procurement, All Modification Items	*- / 139.465*	*- / 9.928*	*- / 0.005*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 149.398*
Support *(All Modification Items)*												
2.1) PRODUCTION SUPPORT (20)	- / 7.888	- / 0.626	- / 1.187	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 9.701
2.2) ENGINEERING CHANGE PROPOSAL (ECP) (21)	- / -	- / -	- / 1.835	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.835
Subtotal: Support	*- / 7.888*	*- / 0.626*	*- / 3.022*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 11.536*

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/SPY-1 RM&A IMPROVEMENTS	**Modification Type:** TBD	**Related RDT&E PEs:** 0604501N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Installation												
Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS	- / 22.734	- / 5.128	- / 5.549	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 33.411
Subtotal: Installation	*- / 22.734*	*- / 5.128*	*- / 5.549*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 33.411*
Total												
Total Cost (Procurement + Support + Installation)	**170.087**	**15.682**	**8.576**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**194.345**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS

Manufacturer Information

Manufacturer Name: SOLID STATE SWITCH ASSEMBLY (SSSA) - RAYTHEON | Manufacturer Location: Andover, MA

Administrative Leadtime *(in Months)*: 0 | Production Leadtime *(in Months)*: 26

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2022	Mar 2023					
Delivery Dates	Jan 2025	May 2025					

Installation Information

Method of Implementation: AIT:: Installation Name: SIDEWALL AND 10KW TWT DDG HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	62 / 4.432	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	62 / 4.432
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	62 / 4.432	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	62 / 4.432

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62
Out	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS

Installation Information

Method of Implementation: AIT:: Installation Name: SIDEWALL AND 10KW TWT CG HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	22 / 2.700	1 / 0.165	1 / 0.203	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	24 / 3.068
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	22 / 2.700	1 / 0.165	1 / 0.203	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	24 / 3.068

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	22	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24
Out	22	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24

Method of Implementation: AIT:: Installation Name: SIDEWALL AND 10KW TWT SHORE SITE HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	8 / 0.074	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	8 / 0.074
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS

Installation Information

Method of Implementation: AIT:: Installation Name: SIDEWALL AND 10KW TWT SHORE SITE HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	8 / 0.074	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	8 / 0.074

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Out	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8

Method of Implementation: [none specified]:: Installation Name: SOLID STATE SWITCH ASSEMBLY DDG HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	5 / 7.683	3 / 3.804	2 / 3.207	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 14.694
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	5 / 7.683	3 / 3.804	2 / 3.207	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 14.694

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS

Installation Information

Method of Implementation: [none specified]:: Installation Name: SOLID STATE SWITCH ASSEMBLY DDG HARDWARE

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	5	2	-	1	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
Out	1	-	1	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5

Method of Implementation: [none specified]:: Installation Name: SOLID STATE SWITCH ASSEMBLY SHORE SITE HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	4 / 4.961	1 / 1.159	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	5 / 6.120
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	4 / 4.961	1 / 1.159	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	5 / 6.120

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Out	2	-	-	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS

Installation Information

Method of Implementation: AIT:: Installation Name: MMSP-R SHORE SITE HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	7 / 2.884	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 2.884
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	7 / 2.884	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 2.884

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Out	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7

Method of Implementation: [none specified]:: Installation Name: MMSP POWER SUPPLY DDG HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	9 / 2.139	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 2.139
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS

Installation Information

Method of Implementation: [none specified]:: Installation Name: MMSP POWER SUPPLY DDG HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	9 / 2.139	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	9 / 2.139

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Out	-	-	-	-	-	-	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9

Method of Implementation (Organic): PACK UP KITS **Installation Quantity:** 3

Method of Implementation (Organic): SOLID STATE SWITCH ASSEMBLY SPARES **Installation Quantity:** 27

Method of Implementation (Organic): SOLID STATE SWITCH ASSEMBLY FINAL POWER AMPLIFIER ENV/QUAL **Installation Quantity:** 1

Footnotes:

(16) SSSAs are procured based on start of ship availability with contract delivery dates (CDD) for each shipset being three months apart on average. FY22 contract award originally planned for Mar 2022 shifted to Nov 2022 due to delays in receipt of the Request For Proposal (RFP) from the a Original Equipment Manufacturer (OEM). FY23 procurements reduced from 1 to 0 due to funding reduction in FY23. FY23 cost remaining is for Transportation Account Code (TAC) for 3 SSSA deliveries. Production Leadtime changed from 19 to 26 months due to SSSA repairs required to correct system issues found during first DDG installation. FY23 SSSA DDG install qtys decreased from 4 to 2 to align with the AMOD Schedule. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981.

(17) SSSA installation at SCSC Wallops Island accommodates testing schedule for BL 9.2.3 and other test events.

(18) SSSA spares include initial spares through Material Support Date (MSD) which are required for installations. Beginning in FY23, SSSA spares will no longer be procured as a kit. Parts used will be replenished vice buying full kits. FY23 Spares funding has been reduced to 0 due to a funding reduction. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981.

(19) Since the FY23 budget request, MMSP DDG Power Supply installation line has been added to cover associated Alteration Installation Team (AIT) and OSIC ORDALT costs. This line also includes two (2) Aegis Ashore.

(20) Production support includes installation engineering services, Integrated Logistics Support (ILS) documentation updates, ORDALT instructions, engineering change proposals and Diminishing Manufacturing Sources and Material Shortages (DMSMS) analysis.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 4 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(21) Since the FY23 budget request, an Engineering Change Proposal line (2.2) was added to fund changes as a result of the first SSSA installation and shock testing.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 5 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:** P384	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1.828	3.723	5.368	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.919
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1.828	3.723	5.368	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.919
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1.828**	**3.723**	**5.368**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**10.919**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Air and Missile Defense Radar (AMDR) Operations and Support (O&S)]: Air and Missile Defense Radar (AMDR) has been designated the AN/SPY-6(V)1 to address Ballistic Missile Defense (BMD) and Air Defense (AD) capability gaps identified in the Maritime Air and Missile Defense of Joint Forces (MAMDJF) Initial Capabilities Document (ICD); AN/SPY-6(V)1 will be initially fielded on the DDG-51 FLT-III platform. A variant of the AN/ SPY-6(V) will replace the AN/SPY-1 radar on existing DDG 51 FLT-IIA ships. The AN/SPY-6(V) Product Support Strategy established NSWC Port Hueneme Division as the Product Support Integrator (PSI) for overall system Operational Availability (AO) and Backend Processing (BEP) subsystem(s) Life Cycle Support. The BEP is comprised of Commercial off the Shelf (COTS) x86 based Modular Open System Architecture (MOSA), allowing for Form-Fit-Function (FFF) replacement with next generation server and processer technology. Interim support for the BEP will be provided via Task Order on the Defense Technical Information Center (DTIC) Information Analysis Center Multiple Award Contract (IAC MAC). Obsolescence management and technology refresh will be provided by a combination of ISEA tasking and program office leadership. Funding will sustain the Navy's next generation family of radars, AN/SPY-6(V). This applies to all current and future variants of the AN/SPY-6(V), including future modifications or separate programs to address different mission areas and utilization onboard different ship classes. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981.

The "To Complete" is represented of the AN/SPY-6(V)1's full 40 year life cycle across 26 ship years (total of 1040 ship years).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 5 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:** P384	
Models of Systems Affected: AMDR Operations and Support (O&S)	**Modification Type:** TBD	**Related RDT&E PEs:** PE 0604522N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)												
B Kits												
Recurring												
1.1.1) BACKEND EQUIPMENT SUSTAINMENT - Organic [22]	- / 1.828	- / 3.723	- / 5.368	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 10.919
Subtotal: Recurring	*- / 1.828*	*- / 3.723*	*- / 5.368*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 10.919*
Subtotal: DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)	*- / 1.828*	*- / 3.723*	*- / 5.368*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 10.919*
Subtotal: Procurement, All Modification Items	*- / 1.828*	*- / 3.723*	*- / 5.368*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 10.919*
Installation												
Subtotal: Installation	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*
Total												
Total Cost (Procurement + Support + Installation)	**1.828**	**3.723**	**5.368**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**10.919**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2980 / Items less than $5 Million	**Modification Number / Title:** 5 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:** P384	
Modification Item 1 of 1: DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)		

Footnotes:

(22) Backend Equipment Sustainment funding is for performance based repair, replacement, and sparing of BEP hardware and management of obsolescence via attrition, required to achieve the systems readiness requirements. Funding ramp up across the FYDP is based on the need to establish adequate infrastructure and procure spares to support SPY-6 platform deliveries beginning in FY23 in this budget. Starting in FY24, funding has been realigned from BLI 2980 to new BLI 2981.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	255.256	0.000	255.256	241.105	204.953	216.605	219.963	8,828.064	9,965.946
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	255.256	0.000	255.256	241.105	204.953	216.605	219.963	8,828.064	9,965.946
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**255.256**	**0.000**	**255.256**	**241.105**	**204.953**	**216.605**	**219.963**	**8,828.064**	**9,965.946**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Beginning in FY24, all funding under LI 2980 (ITEMS LESS THAN $5 MILLION) has been realigned to this new line item. The Shipboard Passive Electro-Optical/ Infrared (SPEIR) program is the only FY24 new effort within this budget.

[P40A / DC020 DUAL BAND RADAR (DBR)]: Funding is required to maintain the In-Service Engineering Agent (ISEA) and Original Equipment Manufacturer (OEM) production services and support for Configuration Management. Funding also implements the DBR Life Cycle Sustainment Plan (LCSP) and infrastructure, Diminishing Manufacturing Sources and Material Shortages (DMSMS) Plan, associated hardware and software obsolescence mod kits, procurement of Engineering Change Proposals (ECPs), associated logistics products and on-board repair parts allowance requirements to enable system operation. Additionally, funding is required for a technology refresh for the DBR Signal Data Processors (SDPs) for CVN 78 and DDG 1000 Class ships. The current version of the IBM Advanced Interactive eXecutive (AIX) operating system (OS) that is running on the IBM P6 DBR SDPs reached the end of service in FY22 and the risk for DBR to satisfy Cyber Authority to Operate (ATO) requirements will increase. The next version of IBM AIX OS will not run on the IBM P6. Hardware spares for DBR SDP P6 computers are no longer available from IBM or certified IBM vendors. Production Support is also required to assist with DBR Combat System Integration and Technical Documentation. Funding also supports CVN 78 and DDG 1000 Class Operational Testing (OT) events. Additional limitations will be identified during DDG 1001 Shipboard Activation, as well as the CVN 78 and DDG 1000 deployments. The OEM and Government Technical Team have documented the critical radar issues that require correction via ECPs. Funding for these ECP efforts is required due to the engineering and technical complexity of the change proposals needed to satisfy combat system qualification requirements. The Under Secretary of Defense (Acquisition, Technology and Logistics) Independent Review Team (IRT) recommended in 2016 that the Navy establish infrastructure and mechanisms to accelerate the acquisition of spare parts for DBR and develop a repair capability for DBR equipment. DBR Special Test Equipment and Infrastructure funding is needed for: (1) test equipment and support for a repair depot for assemblies and subassemblies for DBR components, including Common Array Power System (CAPS), and Common Array Cooling System (CACS); (2) resolution of system obsolescence that will degrade system Ao; and (3) establishment of product support engineering infrastructure needed by the DBR In-Service Engineering Agent (ISEA) and OEM onboard technicians to test and resolve issues for deployed systems on DDG 1000 Class and CVN 78. The additional DBR sustainment and infrastructure efforts will facilitate the transition of material sparing support of DBR to NAVSUP.

[P40A / DC022 RADAR RESTORATION MATERIAL]: Radar Restoration funding procures components to support radar restoration (Arrays and miscellaneous Antenna Sub-Assemblies) and Engineering Change Proposals (ECPs) to address obsolescence and improve supportability. The Antenna Overhaul Kit consists of various components including waveguides, nuts, bolts, bearings, washers, seals, etc.

[P40A / DC026 I-STALKER]: Improved Stalker (I-Stalker) will provide incremental improvements to the currently fielded Stalker Long Range Electro-Optic Sensor System (SLREOSS) in response to a 2016 United States Fleet Forces Command (USFFC) Operational Needs Statement (ONS). SLREOSS was developed as a modular, portable, form/fit replacement for the NATO Sea Sparrow Missile System (NSSMS) MK 6 Low Light Level Television (LLLTV) in response to the 2010 Naval Forces Central Command (NAVCENT) Counter Swarm Urgent Operational Need (UON) to combat Fast Attack Craft/Fast Inshore Attack

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	P-1 Line Item Number / Title: 2981 / In-Service Radars and Sensors	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

Craft (FAC/FIAC). It is currently being fielded in either the NSSMS MK6 MOD 3 LLLTV Director Mount configuration or NSSMS MK6 MOD 4 LLLTV Independent Mount configuration, depending on platform specifications. I-Stalker will provide required upgrades to the SLREOSS Independent Mount configuration with the enhanced capabilities provided by the Navy-owned Situational Awareness System (SAwS) to deliver an integrated radar and electro-optic/Infrared control and display suite. I-Stalker includes two (2) NSSMS MK6 MOD 4 LLLTV Independent Mount systems and one (1) SAwS. This combined system is referred to as the AN/SAY-3. I-Stalker requirements are transitioning from individual resource sponsor management to a total program level consistent with the I-Stalker transition to a Program of Record (POR).

[P3A / DC001 - AN/SPS-73(V)]: The AN/SPS-73(V) Radar provides navigation and general surface search radar functionality on all U.S. Navy ships. The AN/SPS-73(V)12 is the Automatic Radar Plotting Aid (ARPA) Navigation Radar for the U.S. Navy being upgraded to the AN/SPS-73(V)18 Next Generation Surface Search Radar (NGSSR). NGSSR upgrade funding will be utilized for engineering changes, which will improve surface combatant's ability to engage fast attack craft/fast in shore attack craft (FAC/FIAC) tracking and periscope detection and discrimination, as well as address cybersecurity shortfalls and Commercial-Off-The-Shelf (COTS) obsolescence of the legacy AN/SPS-73 systems. The NGSSR will update the current AN/SPS-73(V)12 and replace the AN/SPS-67(V) and all commercially provided Navigation Radars fielded in the fleet. NGSSR production has been accelerated as a result of the October 2017 Commander Fleet Forces Comprehensive Review, which followed the McCain and Fitzgerald collisions.

[P3A - 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)]: The AN/SPS-48G 3-D Air Surveillance Radar is a follow-on to the existing AN/SPS-48E onboard Aircraft Carriers and large-deck Amphibious ships. AN/SPS-48G was initiated in response to Fleet complaints regarding AN/ SPS-48E reliability and supportability. Upgrade of the AN/SPS-48E with the AN/SPS-48G remains a high Fleet priority as it will reduce Operation and Support (O&S) costs and improve Operational Availability. Both factors are cited by the Fleet as unsatisfactory for the AN/SPS-48E. FY18 was the last year of AN/ SPS-48G procurements. Remaining installation funding is for advanced planning (AP) and planning yard design services allocation (DSA) which are required up to one year prior to the year of installation. DSA funds are used for Ship Installation Drawings (SIDs), Alteration Installation Team (AIT) contracting fees, and ship-checks.

[P3A - 3 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS]: DC018 AN/SPY-1 RM&A IMPROVEMENTS - These Reliability, Maintainability, and Availability (RM&A) improvements are intended to reduce cascading failures, mitigate obsolescence issues, and improve reliability in support of Anti-Air Warfare (AAW) and Ballistic Missile Defense (BMD) missions while still providing AN/SPY-1 Radar Total Ownership Cost (TOC) reductions. Solid State Switch Assembly (SSSA) Ordnance Alteration (ORDALT) will replace legacy switch tube modulator deck. SSSAs are procured based on start of ship availability with contract delivery dates (CDD) for each shipset being three months apart on average. Procurements and installations are aligned with the DDG Modernization availability periods and include two (2) Aegis Ashore requirements. Multi-Mission Signal Processor (MMSP) Power Supply ORDALT corrects an over-voltage condition in the power supplies installed with the MMSP Classic. AN/SPY-1 funding was realigned from BLI 2980 to new BLI 2981 starting in FY24. The program is procuring a total quantity of 77 DDGs systems. Procurement of 16 DDG SSSA systems was previously funded under BLI 2980; consequently, the budget reflects 61 DDG procurements. 67 installations are reflected in this budget which include 6 systems procured in the 2980 budget. There are prior year through FY23 SSSA procurement quantities shown with no funding to accommodate the installation funding profile for systems procured in the 2980 budget (these procurement quantities are not included in the total quantities being procured in this budget). MMSP Power Supplies for DDGs (Qty 25) were procured under BLI 0900 and Aegis Ashore (Qty 2) were procured by Missile Defense Agency (MDA) in FY20. Nine were installed under BLI 2980. The remaining 18 will be installed under BLI 2981 in FY24-FY26.

[P3A - 4 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)]: Air and Missile Defense Radar (AMDR) Operations and Support (O&S)]: Air and Missile Defense Radar (AMDR) has been designated the AN/SPY-6(V)1 to address Ballistic Missile Defense (BMD) and Air Defense (AD) capability gaps identified in the Maritime Air and Missile Defense of Joint Forces (MAMDJF) Initial Capabilities Document (ICD); AN/SPY-6(V)1 will be initially fielded on the DDG-51 FLT-III platform. A variant of the AN/ SPY-6(V) will replace the AN/SPY-1 radar on existing DDG 51 FLT-IIA ships. The AN/SPY-6(V) Product Support Strategy established NSWC Port Hueneme Division as the Product Support Integrator (PSI) for overall system Operational Availability (AO) and Backend Processing (BEP) subsystem(s) Life Cycle Support. The BEP is comprised of Commercial off the Shelf (COTS) x86 based Modular Open System Architecture (MOSA), allowing for Form-Fit-Function (FFF) replacement with next generation server and processer technology. Interim support for the BEP will be provided via Task Order on the Defense Technical Information Center (DTIC) Information Analysis Center Multiple Award Contract (IAC MAC). Obsolescence management and technology refresh will be provided by a combination of ISEA tasking and program office leadership. Funding will sustain the Navy's next generation family of radars, AN/SPY-6(V). This applies to all current and future variants of the AN/SPY-6(V), including future modifications or separate programs to address different mission areas and utilization onboard different ship classes. The "To Complete" is representative of the AN/SPY-6(V)1's full 40-year life cycle across 26 ship years (a total of 1040 ship years).

[P3A - 5 / DC025 - SPEIR BLOCK I]: Shipboard Passive Electro-Optical/ Infrared (SPEIR) Block I will provide a common 360-degree EO/IR Electronic Support (ES) capability to all surface ships that will passively find, fix, track, and target current/emerging threats in support of the following warfare missions: Anti-Ship Cruise Missile (ASCM) Defense, Counter-Unmanned Aircraft Systems (UAS), Counter-Fast Attack Craft / Fast Inshore Attack Craft (FAC/FIAC), and Mobility. SPEIR Block I will consist of a passive Wide Field of View (WFOV) capability with a persistent 360-degree field-of-view optical sensors for autonomous

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

detection, and tracking for 24/7 day/night shipboard situational awareness. SPEIR Block I will also include an enhanced, high-resolution Narrow-Medium Field of View (NFOV) and laser range-finding capability to provide 3D target tracking, identification, and threat assessment. SPEIR Block II will be a future program that will build on the modular open systems architecture of Block I with an expanded spatial coverage envelope and will add the capability for Periscope Detection and Discrimination (PDD), Mine Like Object (MLO) avoidance, networked operations, and full integration with the Future Integrated Combat System. Status of SPEIR Block I Major Milestones: Milestone B completed 3QFY22, procurement of Long Lead Material (LLM) (4QFY24), and Milestone C Low Rate Initial Production (LRIP) (4QFY25). SPEIR will utilize an evolutionary acquisition approach to provide a common EO/IR ES capability to the Fleet as quickly and affordably as possible through Modular Open Source Architecture (MOSA).

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 10: Other Shore Electronic Equipment	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	**Title***	**Subexhibits**	**ID CD**	**MDAP/ MAIS Code**	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*
P-40a	Items less than $5 Million	P-5a			- / 0.000	- / -	- / -	- / 78.672	- / -	- / 78.672
P-3a	1 / DC001 - AN/SPS-73(V) (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 55.666	- / 0.000	- / 55.666
P-3a	2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR) (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 1.017	- / 0.000	- / 1.017
P-3a	3 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 48.150	- / 0.000	- / 48.150
P-3a	4 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S) (TBD)			P384	- / 0.000	- / 0.000	- / 0.000	- / 33.967	- / 0.000	- / 33.967
P-3a	5 / DC025 - SPEIR BLOCK I (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 37.784	- / 0.000	- / 37.784
P-40	**Total Gross/Weapon System Cost**				**- / 0.000**	**- / 0.000**	**- / 0.000**	**- / 255.256**	**- / 0.000**	**- / 255.256**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	**Title***	**Subexhibits**	**ID CD**	**MDAP/ MAIS Code**	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*	**Quantity / Total Cost** *(Each) I ($ M)*
P-40a	Items less than $5 Million	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / DC001 - AN/SPS-73(V) (TBD)				- / 65.002	- / 46.717	- / 52.179	- / 58.620	- / 689.244	- / 967.428
P-3a	2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR) (TBD)				- / 1.017	- / 1.016	- / 1.035	- / 1.054	- / 12.000	- / 17.139
P-3a	3 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS (TBD)				- / 45.981	- / 46.352	- / 56.711	- / 57.865	- / 266.147	- / 521.206
P-3a	4 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S) (TBD)			P384	- / 40.090	- / 41.261	- / 41.932	- / 42.762	- / 4,357.445	- / 4,557.457
P-3a	5 / DC025 - SPEIR BLOCK I (TBD)				- / 27.872	- / 28.590	- / 29.146	- / 29.730	- / 3,412.809	- / 3,565.931
P-40	**Total Gross/Weapon System Cost**				**- / 241.105**	**- / 204.953**	**- / 216.605**	**- / 219.963**	**- / 8,828.064**	**- / 9,965.946**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2981 / In-Service Radars and Sensors	Aggregated Items Title: Items less than $5 Million

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) DC020 DUAL BAND RADAR (DBR)																				
1.1) DBR PRODUCTION SUPPORT (1)	A		-	-	-	-	-	-	-	-	-	-	-	3.839	-	-	-	-	-	3.839
1.2) DBR ENGINEERING CHANGE PROPOSALS (ECPS) (2)	A		-	-	-	-	-	-	-	-	-	-	-	16.446	-	-	-	-	-	16.446
1.3) DBR SPECIAL TEST EQUIPMENT AND INFRASTRUCTURE (3)	A		-	-	-	-	-	-	-	-	-	-	-	5.851	-	-	-	-	-	5.851
Subtotal: 1) DC020 DUAL BAND RADAR (DBR)			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***26.136***	**-**	**-**	**-**	**-**	**-**	***26.136***
2) DC022 RADAR RESTORATION MATERIAL (4)																				
2.1) 48 ARRAYS(†)	A		-	-	-	-	-	-	-	-	-	10,919.35	248	2.708	-	-	-	10,919.35	248	2.708
2.2) ANTENNA SUB-ASSEMBLIES	A		-	-	-	-	-	-	-	-	-	-	-	0.297	-	-	-	-	-	0.297
2.3) ENGINEERING CHANGE PROPOSALS (ECPS)	A		-	-	-	-	-	-	-	-	-	-	-	0.397	-	-	-	-	-	0.397
2.4) ANTENNA OVERHAUL KIT	A		-	-	-	-	-	-	-	-	-	-	-	1.223	-	-	-	-	-	1.223
Subtotal: 2) DC022 RADAR RESTORATION MATERIAL			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***4.625***	**-**	**-**	**-**	**-**	**-**	***4.625***
3) DC026 I-STALKER																				
3.1) I-STALKER INDEPENDENT MOUNT (5)(†)	A		-	-	-	-	-	-	-	-	-	627,000.00	6	3.762	-	-	-	627,000.00	6	3.762
3.2) I-STALKER PROCESSING MODULE (6)(†)	A		-	-	-	-	-	-	-	-	-	202,375.00	8	1.619	-	-	-	202,375.00	8	1.619
3.3) I-STALKER SENSOR SUITE (7)(†)	A		-	-	-	-	-	-	-	-	-	899,909.09	8	7.199	-	-	-	899,909.09	8	7.199
3.4) I-STALKER INSTALL (8)	A		-	-	-	-	-	-	-	-	-	-	-	5.933	-	-	-	-	-	5.933
3.5) I-STALKER PRODUCTION SUPPORT (9)	A		-	-	-	-	-	-	-	-	-	-	-	2.450	-	-	-	-	-	2.450

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2981 / In-Service Radars and Sensors	Aggregated Items Title: Items less than $5 Million

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
3.6) I-STALKER ENG CHANGE PROPOSALS (10)	A		-	-	-	-	-	-	-	-	-	-	-	7.304	-	-	-	-	-	7.304
3.7) I-STALKER TECH REFRESH (11)	A		-	-	-	-	-	-	-	-	-	-	-	5.399	-	-	-	-	-	5.399
3.8) I-STALKER DEPOT STANDUP (12)	A		-	-	-	-	-	-	-	-	-	-	-	11.143	-	-	-	-	-	11.143
3.9) STALKER SCHOOLHOUSE ESTABLISHMENT (13)	A		-	-	-	-	-	-	-	-	-	-	-	3.102	-	-	-	-	-	3.102
Subtotal: 3) DC026 I-STALKER			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***47.911***	**-**	**-**	**-**	**-**	**-**	***47.911***
Total			**-**	**-**	**0.000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**78.672**	**-**	**-**	**-**	**-**	**-**	**78.672**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) FY24 Production support funding is required to maintain the OEM capability to perform repairs on system components that have failed during shipboard operations, to provide OEM and Government failure reporting analysis and corrective action system (FRACAS) support, and obtain the SDP hardware and software maintenance support for the IBM P6 computers.

(2) FY24 ECP funding supports DBR sustainment engineering efforts involving: software trouble report corrections, certified software baseline ECP integration, logistic technical manual updates, waterfront manual troubleshooting and fault isolation procedure delivery and non-recurring engineering for planning the transition of the DBR Signal Data Processor (SDP) computers from the obsolete IBM P6 to the latest generation IBM P9 computers.

(3) FY24 STE&I funding will support the initial adaptation of the DBR tactical code to run on the new SDP operating system in three DDG 1000 Class ships and CVN 78. The FY24 STE&I funding is required to resolve a critical system sustainment test equipment deficiency for DBR by completing the production of a hybrid SPY-3/SPY-4 Receiver Exciter (REX) test set. The hybrid REX test set is needed to support the procurement, test and certification of new REX components. The increase in FY24 STE&I funding also supports the additional infrastructure needed by the DBR In-Service Engineering Agent (ISEA) and OEM onboard technicians to test and resolve issues for deployed systems on DDG 1000 Class and CVN 78.

(4) Radar Restoration funding procures components to support radar restoration (Arrays and miscellaneous Antenna Sub-Assemblies) and Engineering Change Proposals (ECPs) to address obsolescence and improve supportability. The Antenna Overhaul Kit consists of various components including waveguides, nuts, bolts, bearings, washers, seals, etc.

(5) FY24 IM quantity of 6 aligns with updated fleet requirements. Unit price increase reflects updated pricing from the Original Equipment Manufacturer (OEM), factoring in the increased cost of material and labor.

(6) FY24 PM quantity of 8 aligns with updated fleet requirements. I-Stalker PM unit price increase reflects updated pricing from the OEM, factoring in the increased cost of material and labor.

(7) FY24 SS quantity of 8 aligns with updated fleet requirements. I-Stalker SS unit price increase reflects updated pricing from the OEM, factoring in the increased cost of material and labor.

(8) Includes funding for Advanced Planning (AP) and Planning Yard Design Services Allocation (DSA), which is required up to two years before the year of installation. DSA funds Ship Installation Drawings (SIDs), Alteration Installation Team (AIT) contracts, and shipchecks. Due to the rapid response nature of the I-Stalker program, installations are planned during a ship's Window of Opportunity (WOO). Increase in installation costs from FY23 (funding is reflected in BLI 2980) to FY24 is due to the increase in the number of installs funded from one in FY23 to four in FY24.

(9) Funding reflects Government oversight of production, Government and Original Equipment Manufacturer (OEM) support of production-related hardware problems, Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), Technical Design Agent (TDA), and Professional Support Services (PSS). I-Stalker Production Support is estimated level of effort based on each FY's program requirements.

(10) 3.6 I-Stalker Engineering Change Proposal (ECP) funding requirements address previously known, emergent, and anticipated reliability and other issues. In FY24, ECPs will be awarded for Non-Recurring (NRE) cost associated with the engineering changes for the Laser Range Finder (LRF), Visible Sensor (VIS), and Mid-Wave Infrared (MWIR) sensor components of the Sensor Suite due to obsolescence of critical parts and technology. The requirements update to integrate the Consolidated Afloat Networks and Enterprise Services (CANES) program is included in these totals. The increase in cost from FY23 to FY24 reflects both the additional scope of work required to fully address ECP requirements and the latest price proposals received from the OEM. These engineering changes and the requirement to procure sensor components meets the urgent operational need (UON) of fleet requirements.

(11) I-Stalker Tech Refresh line funds the technical refresh of sensor suites procured in prior years under BLI 5231. These sensor suites will receive tech refreshed components as a result of obsolescence ECP efforts.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Aggregated Items Title:** Items less than $5 Million

(12) 3.8 I-Stalker Depot Standup funds the standup of the depot for maintenance for I-Stalker system. The following non-recurring depot standup support efforts are required for each I-Stalker Lowest Replaceable Unit (LRU): Test Equipment Design, LRU Repair Procedures, Supply Chain Establishment, Facilities Assessment, Manpower Assessment, Capacity Analysis, Establishment of Internal Production Processes, First Article Repair, and Packaging, Handling, Storage & Transportation Unit (PHS&T). Unit cost will vary from year to year depending on the type and quantity of test equipment sets being procured. An organic depot must be established to ensure the repair and return of failed LRUs thus ensuring the operational availability of the system. The organic and commercial industrial bases are not prepared to support the volume of I-Stalker repairs resulting from full fielding.

(13) 3.9 I-Stalker Schoolhouse Establishment line has been added starting in FY24 to procure I-Stalker hardware assets and to prepare associated documentation to support the establishment of the schoolhouse and overall training infrastructure in support of the transition of I-Stalker to a Program of Record (POR). The Schoolhouse will be the training location for sailors to become certified in operating and maintaining the I-Stalker system.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	P-1 Line Item Number / Title: 2981 / In-Service Radars and Sensors	Aggregated Items: Items less than $5 Million

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) DC022 RADAR RESTORATION MATERIAL												
2.1) 48 ARRAYS		2024	NSWC CRANE / CRANE, IN	Various	NSWC/CRANE	Dec 2023	Feb 2024	248	10,919.35	Y		
3) DC026 I-STALKER												
3.1) I-STALKER INDEPENDENT MOUNT (5)		2024	BALL / Westminster, CO	SS / FFP	NAVSEA	Jan 2024	Jan 2025	6	627,000.00	N		Mar 2023
3.2) I-STALKER PROCESSING MODULE (6)		2024	BALL / Westminster, CO	SS / FFP	NAVSEA	Jan 2024	Jan 2025	8	202,375.00	N		Mar 2023
3.3) I-STALKER SENSOR SUITE (7)		2024	BALL / Westminster, CO	SS / FFP	NAVSEA	Jan 2024	Jan 2025	8	899,909.09	N		Mar 2023

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	55.666	0.000	55.666	65.002	46.717	52.179	58.620	689.244	967.428
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	55.666	0.000	55.666	65.002	46.717	52.179	58.620	689.244	967.428
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**55.666**	**0.000**	**55.666**	**65.002**	**46.717**	**52.179**	**58.620**	**689.244**	**967.428**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/SPS-73(V) Radar provides navigation and general surface search radar functionality on all U.S. Navy ships. The AN/SPS-73(V)12 is the Automatic Radar Plotting Aid (ARPA) Navigation Radar for the U.S. Navy being upgraded to the AN/SPS-73(V)18 Next Generation Surface Search Radar (NGSSR). NGSSR upgrade funding will be utilized for engineering changes, which will improve surface combatant's ability to engage fast attack craft/fast in shore attack craft (FAC/FIAC) tracking and periscope detection and discrimination, as well as address cybersecurity shortfalls and Commercial-Off-The-Shelf (COTS) obsolescence of the legacy AN/SPS-73 systems. The NGSSR will update the current AN/SPS-73(V)12 and replace the AN/SPS-67(V) and all commercially provided Navigation Radars fielded in the fleet. NGSSR production has been accelerated as a result of the October 2017 Commander Fleet Forces Comprehensive Review, which followed the McCain and Fitzgerald collisions.

NGSSR funding was realigned from BLI 2980 starting in FY24. The program is procuring a total quantity of 200 NGSSR systems. Procurement of 35 systems was previously funded under BLI 2980, and the remaining 165 systems will be procured under this line item. Prior year quantity of 22 to accommodate the installation funding profile for systems procured in LI 2980. A total of 175 installations are reflected in this budget (including the qty 22 from LI 2980). Six systems are excluded from the total installation profile due to funding received by COMNAVSURFPAC supporting LPDs 23, 26 and 27 installations (2 systems per hull).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/SPS-73	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC001 - AN/SPS-73(V)												
B Kits												
Recurring												
1.1.3) NEXT GENERATION SURFACE SEARCH RADAR - NonOrganic (14)	22 / 0.000	- / -	- / -	10 / 27.707	- / -	10 / 27.707	7 / 20.108	6 / 18.050	7 / 21.011	8 / 26.588	127 / 330.200	187 / 443.664
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / 27.707*	*- / -*	*- / 27.707*	*- / 20.108*	*- / 18.050*	*- / 21.011*	*- / 26.588*	*- / 330.200*	*- / 443.664*
Subtotal: DC001 - AN/SPS-73(V)	*22 / 0.000*	*- / -*	*- / -*	*10 / 27.707*	*- / -*	*10 / 27.707*	*7 / 20.108*	*6 / 18.050*	*7 / 21.011*	*8 / 26.588*	*127 / 330.200*	*187 / 443.664*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / 27.707*	*- / -*	*- / 27.707*	*- / 20.108*	*- / 18.050*	*- / 21.011*	*- / 26.588*	*- / 330.200*	*- / 443.664*
Support *(All Modification Items)*												
2.1) PRODUCTION SUPPORT (15)	- / -	- / -	- / -	- / 3.703	- / -	- / 3.703	- / 3.389	- / 2.961	- / 2.971	- / 2.806	- / 11.103	- / 26.933
2.2) MISCELLANEOUS ECP SUPPORT (16)	- / -	- / -	- / -	- / 5.063	- / -	- / 5.063	- / 5.112	- / 5.592	- / 6.813	- / 5.760	- / 10.937	- / 39.277
2.3) ADVANCE PLANNING (AP)/ DESIGN SERVICES ALLOCATION (DSA) (17)	- / -	- / -	- / -	- / 7.479	- / -	- / 7.479	- / 8.496	- / 5.355	- / 6.688	- / 8.042	- / -	- / 36.060
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / 16.245*	*- / -*	*- / 16.245*	*- / 16.997*	*- / 13.908*	*- / 16.472*	*- / 16.608*	*- / 22.040*	*- / 102.270*
Installation												
Modification Item 1 of 1: DC001 - AN/SPS-73(V)	- / 0.000	- / 0.000	- / 0.000	- / 11.714	- / 0.000	- / 11.714	- / 27.897	- / 14.759	- / 14.696	- / 15.424	- / 337.004	- / 421.494
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / 11.714*	*- / -*	*- / 11.714*	*- / 27.897*	*- / 14.759*	*- / 14.696*	*- / 15.424*	*- / 337.004*	*- / 421.494*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**55.666**	**0.000**	**55.666**	**65.002**	**46.717**	**52.179**	**58.620**	**689.244**	**967.428**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DC001 - AN/SPS-73(V)

Manufacturer Information

Manufacturer Name: AN/SPS-73 Next Generation Navigation Radar - ULTRA ELECTRONICS OCEAN SYSTEMS, INC.	Manufacturer Location: BRAINTREE, MA
Administrative Leadtime *(in Months)*: 0	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Mar 2024	Mar 2025	Mar 2026	Mar 2027	Mar 2028
Delivery Dates			Mar 2025	Mar 2026	Mar 2027	Mar 2028	Mar 2029

Manufacturer Name: Exelis	Manufacturer Location: VAN NUYS, CA
Administrative Leadtime *(in Months)*: 0	Production Leadtime *(in Months)*: 24

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: [none specified]:: Installation Name: NEXT GENERATION SURFACE SEARCH RADAR

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	5 / 11.714	0 / 0.000	5 / 11.714	11 / 23.819	- / -	- / -	- / -	0 / 0.000	16 / 35.533
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 4.078	8 / 14.759	- / -	- / -	0 / 0.000	10 / 18.837
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 14.696	- / -	0 / 0.000	7 / 14.696
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 12.881	0 / 0.000	6 / 12.881
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.543	6 / 15.052	7 / 17.595
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 16.052	8 / 16.052
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	121 / 305.900	121 / 305.900
Total	- / -	- / -	- / -	5 / 11.714	0 / 0.000	5 / 11.714	13 / 27.897	8 / 14.759	7 / 14.696	7 / 15.424	135 / 337.004	175 / 421.494

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 1 / DC001 - AN/SPS-73(V)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DC001 - AN/SPS-73(V)

Installation Information

Method of Implementation: [none specified]:: Installation Name: NEXT GENERATION SURFACE SEARCH RADAR

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	2	1	-	2	3	5	2	3	4	2	-	2	3	4	-	-	6	-	1	-	141	181
Out	-	-	-	-	-	-	-	-	-	1	1	-	2	1	2	1	-	7	-	8	-	5	-	1	5	2	3	3	1	149	192

Footnotes:

(14) NGSSR production units are procured as a result of the October 2017 Commander Fleet Forces Comprehensive Review which is a priority requirement that is directly related to the McCain and Fitzgerald collisions. The procurement profile and the installation schedule have been adjusted in accordance with current funding levels ship availability schedules. Costs for installations show both current year installation funding for the quantity of installations. Installation costs may vary due to scope of system removals for each ship class, the number of AN/SPS-73(V)18 systems installed on each ship (single or dual configuration) and anticipated higher shipyard estimates based on coast-wide bidding which results in uncertainty in location and cost. Advance Planning (AP) and Planning Yard Design Services Allocation (DSA) funding has been established as a separate line (2.3) broken out from actual installation costs. Difference in "Ins" vs. "Outs" due to realignment from LI 2980. Out of the 200 systems being procured, qty of 13 went "In" LI 2980 and 6 installs were covered by fleet funding, resulting in a total of 181 "Ins" reflected in this budget. The "Outs" in this budget total 192 due to 2 previous "outs" in LI 2980 and qty 6 that were covered by fleet funding, for a total of 192 "outs" reflected in this budget.

(15) Production Support funding is for production of hardware and hardware components, which are primarily from Warfare Center Activity support, Software Support Activity (SSA), Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), Technical Design Agent (TDA), Professional Support Services (PSS) and continued testing efforts. This funding also includes support for cybersecurity compliance and software certification.

(16) Miscellaneous ECP support is required to address hardware and software obsolescence/availability issues which requires research and investigation by the ISEA to locate, test, and provide suitable substitutes to maintain fleet navigation Readiness and Safety of Life at Sea (SOLAS). Funding will continue to be required for SPS-73 efforts throughout the outyears until sufficient quantities of NGSSR systems are fielded and the population of legacy systems decreases accordingly.

(17) Funding for Advance Planning (AP) and Planning Yard Design Services Allocation (DSA) is customarily required over the course of the two years prior to the actual installation in accordance with the Navy Modernization Process Management and Operational Manual (NMP MOM) SL720-AA-MAN-030 Rev 4 to support individual ship checks, ship drawing packages and long lead material unique to the installation in order to maintain alignment with ship availability schedules. Additionally, AP and DSA costs are driven by NMP MOM milestones, based on the availability period of the installation and not by the procurement year. Third Party Planning, SIDS and ship-checks funding estimated at 75% of total AP is required ~A-660 days before the availability. Installation Planning Yard DSA funding (Class Dependent) is required ~A-220 (25% of DSA). Additional DSA costs for Shipyard Support Services funding (SSR) is required ~A-120 (Shipyard/Class dependent). The required funding dates may cross fiscal years depending on whether the availability start is early or late in a fiscal year. FY23 to FY24 increase accommodates pre-installation costs required for the qty 10 FY24 systems.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	1.017	0.000	1.017	1.017	1.016	1.035	1.054	12.000	17.139
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	1.017	0.000	1.017	1.017	1.016	1.035	1.054	12.000	17.139
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**1.017**	**0.000**	**1.017**	**1.017**	**1.016**	**1.035**	**1.054**	**12.000**	**17.139**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The AN/SPS-48G 3-D Air Surveillance Radar is a follow-on to the existing AN/SPS-48E onboard Aircraft Carriers and large-deck Amphibious ships. AN/SPS-48G was initiated in response to Fleet complaints regarding AN/ SPS-48E reliability and supportability. Upgrade of the AN/SPS-48E with the AN/SPS-48G remains a high Fleet priority as it will reduce Operation and Support (O&S) costs and improve Operational Availability. Both factors are cited by the Fleet as unsatisfactory for the AN/SPS-48E. FY18 was the last year of AN/ SPS-48G procurements. Remaining installation funding is for advanced planning (AP) and planning yard design services allocation (DSA) which are required up to one year prior to the year of installation. DSA funds are used for Ship Installation Drawings (SIDs), Alteration Installation Team (AIT) contracting fees, and ship-checks.

AN/SPS-48G funding was realigned from BLI 2980 to BLI 2981 starting in FY24. The installation costs for the final three systems are included in this budget, resulting in zero (0) procurements and three (3) installations within the FYDP. There are prior year procurement quantities shown with no funding to accommodate displaying the installation funding profile in this budget.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Models of Systems Affected: AN/SPS-48G **Modification Type:** TBD **Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)												
B Kits												
Recurring												
1.1.1) AN/SPS-48G HARDWARE - FMP - NonOrganic (18)	3 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.000
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*
Subtotal: DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)	*3 / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*3 / 0.000*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*
Installation												
Modification Item 1 of 1: DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)	- / 0.000	- / 0.000	- / 0.000	- / 1.017	- / 0.000	- / 1.017	- / 1.017	- / 1.016	- / 1.035	- / 1.054	- / 12.000	- / 17.139
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / 1.017*	*- / -*	*- / 1.017*	*- / 1.017*	*- / 1.016*	*- / 1.035*	*- / 1.054*	*- / 12.000*	*- / 17.139*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**1.017**	**0.000**	**1.017**	**1.017**	**1.016**	**1.035**	**1.054**	**12.000**	**17.139**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)

Manufacturer Information

Manufacturer Name: Exelis | Manufacturer Location: VAN NUYS, CA

Administrative Leadtime *(in Months)*: 0 | Production Leadtime *(in Months)*: 24

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: [none specified]:: Installation Name: AN/SPS-48G HARDWARE - FMP

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	1 / 1.017	0 / 0.000	1 / 1.017	1 / 1.017	0 / 1.016	0 / 1.035	1 / 1.054	3 / 12.000	6 / 17.139
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	1 / 1.017	0 / 0.000	1 / 1.017	1 / 1.017	0 / 1.016	0 / 1.035	1 / 1.054	3 / 12.000	6 / 17.139

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3

Footnotes:

(18) AN/SPS-48G funding has been realigned from BLI 2980 to BLI 2981 in FY24. Procurement of all AN/SPS-48G systems was previously funded under BLI 2980, and the installation costs for the final three systems are included in this budget, resulting in zero (0) procurements and three (3) installations. Installation funding for Advanced Planning (AP) and Planning Yard Design Services Allocation (DSA) is required

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 2 / DC009 - AN/SPS-48G RADAR OBSOLESCENCE AND AVAILABILITY RECOVERY (ROAR)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

up to one year prior to the year of installation. DSA funds are used for Ship Installation Drawings (SIDs), Alteration Installation Team (AIT) contracting fees, and ship checks. The installation costs are variable per hull, with the difference being primarily the AP and DSA costs which are variable based on a combination of the number of future installations and the result of coast wide bidding resulting in uncertainty in location and cost. Installation funding has been adjusted to align with current ship availability schedules. Since the FY23 budget request, LPD 19 and LHA 6 installation costs have been reduced only to accommodate the current program funding level (however, the current cost of an install is ~$3M-$3.5M).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 3 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	48.150	0.000	48.150	45.981	46.352	56.711	57.865	266.147	521.206
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	48.150	0.000	48.150	45.981	46.352	56.711	57.865	266.147	521.206
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**48.150**	**0.000**	**48.150**	**45.981**	**46.352**	**56.711**	**57.865**	**266.147**	**521.206**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

DC018 AN/SPY-1 RM&A IMPROVEMENTS - These Reliability, Maintainability, and Availability (RM&A) improvements are intended to reduce cascading failures, mitigate obsolescence issues, and improve reliability in support of Anti-Air Warfare (AAW) and Ballistic Missile Defense (BMD) missions while still providing AN/SPY-1 Radar Total Ownership Cost (TOC) reductions. Solid State Switch Assembly (SSSA) Ordnance Alteration (ORDALT) will replace legacy switch tube modulator deck. SSSAs are procured based on start of ship availability with contract delivery dates (CDD) for each shipset being three months apart on average. Procurements and installations are aligned with the DDG Modernization availability periods and include two (2) Aegis Ashore requirements. Multi-Mission Signal Processor (MMSP) Power Supply ORDALT corrects an over-voltage condition in the power supplies installed with the MMSP Classic.

AN/SPY-1 funding was realigned from BLI 2980 starting in FY24. The program is procuring a total quantity of 77 DDGs systems. Procurement of 16 DDG SSSA systems previously funded under BLI 2980, and the remaining 61 DDG procurements are reflected in this line item. 67 installations are reflected in this budget which include 6 systems procured in the 2980 budget. There are prior year through FY23 SSSA procurement quantities shown with no funding to accommodate the installation funding profile for systems procured in the 2980 budget (these procurement quantities are not included in the total quantities being procured in this budget). MMSP Power Supplies for DDGs (Qty 25) were procured under BLI 0900 and Aegis Ashore (Qty 2) were procured by Missile Defense Agency (MDA) in FY20. Nine were installed under BLI 2980. The remaining 18 will be installed under BLI 2981 in FY24-FY26.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 3 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0604501N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS												
B Kits												
Recurring												
1.1.1) SOLID STATE SWITCH ASSEMBLY DDG HARDWARE - NonOrganic (19)	4 / 0.000	2 / 0.000	- / -	7 / 35.469	- / -	7 / 35.469	7 / 36.206	6 / 31.655	7 / 38.197	7 / 38.552	27 / 145.676	67 / 325.755
1.1.2) SOLID STATE SWITCH ASSEMBLY SPARES - Organic (20)	- / -	- / -	- / -	- / 0.800	- / -	- / 0.800	- / 0.800	- / 0.800	- / 0.800	- / 0.800	- / 10.400	- / 14.400
1.1.3) MMSP POWER SUPPLY DDG HARDWARE - NonOrganic (21)	18 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	18 / 0.000
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / 36.269*	*- / -*	*- / 36.269*	*- / 37.006*	*- / 32.455*	*- / 38.997*	*- / 39.352*	*- / 156.076*	*- / 340.155*
Subtotal: DC018 - AN/SPY-1 RM&A IMPROVEMENTS	*22 / 0.000*	*2 / 0.000*	*- / -*	*7 / 36.269*	*- / -*	*7 / 36.269*	*7 / 37.006*	*6 / 32.455*	*7 / 38.997*	*7 / 39.352*	*27 / 156.076*	*85 / 340.155*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / 36.269*	*- / -*	*- / 36.269*	*- / 37.006*	*- / 32.455*	*- / 38.997*	*- / 39.352*	*- / 156.076*	*- / 340.155*
Support *(All Modification Items)*												
2.1) PRODUCTION SUPPORT (22)	- / -	- / -	- / -	- / 1.607	- / -	- / 1.607	- / 1.880	- / 1.830	- / 1.923	- / 2.074	- / 6.001	- / 15.315
2.2) ENGINEERING CHANGE PROPOSAL (ECP) (23)	- / -	- / -	- / -	- / 1.509	- / -	- / 1.509	- / 1.511	- / 2.151	- / 1.742	- / 2.297	- / -	- / 9.210
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / 3.116*	*- / -*	*- / 3.116*	*- / 3.391*	*- / 3.981*	*- / 3.665*	*- / 4.371*	*- / 6.001*	*- / 24.525*
Installation												
Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS	- / 0.000	- / 0.000	- / 0.000	- / 8.765	- / 0.000	- / 8.765	- / 5.584	- / 9.916	- / 14.049	- / 14.142	- / 104.070	- / 156.526
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / 8.765*	*- / -*	*- / 8.765*	*- / 5.584*	*- / 9.916*	*- / 14.049*	*- / 14.142*	*- / 104.070*	*- / 156.526*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**48.150**	**0.000**	**48.150**	**45.981**	**46.352**	**56.711**	**57.865**	**266.147**	**521.206**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 3 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS

Manufacturer Information

Manufacturer Name: SOLID STATE SWITCH ASSEMBLY (SSSA) - RAYTHEON | Manufacturer Location: Andover, MA

Administrative Leadtime *(in Months)*: 0 | Production Leadtime *(in Months)*: 26

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Mar 2024	Mar 2025	Mar 2026	Mar 2027	Mar 2028
Delivery Dates			May 2026	May 2027	May 2028	May 2029	May 2030

Installation Information

Method of Implementation: [none specified]:: Installation Name: SOLID STATE SWITCH ASSEMBLY DDG HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	3 / 5.732	0 / 0.000	3 / 5.732	1 / 2.037	- / -	- / -	- / -	0 / 0.000	4 / 7.769
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	1 / 2.119	1 / 2.015	- / -	- / -	0 / 0.000	2 / 4.134
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 6.042	4 / 7.446	- / -	0 / 0.000	7 / 13.488
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 6.603	4 / 8.751	0 / 0.000	7 / 15.354
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 5.391	3 / 5.357	6 / 10.748
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 12.499	7 / 12.499
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 12.625	7 / 12.625
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	27 / 73.589	27 / 73.589
Total	- / -	- / -	- / -	3 / 5.732	0 / 0.000	3 / 5.732	2 / 4.156	4 / 8.057	7 / 14.049	7 / 14.142	44 / 104.070	67 / 150.206

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	1	1	-	1	-	1	1	-	1	1	1	1	2	2	1	2	2	2	2	1	44	67
Out	-	-	-	-	-	-	-	-	-	1	-	1	-	1	1	2	1	1	-	-	2	2	-	1	1	1	1	2	-	54	72

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 3 / DC018 - AN/SPY-1 RM&A IMPROVEMENTS

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC018 - AN/SPY-1 RM&A IMPROVEMENTS

Installation Information

Method of Implementation: [none specified]:: Installation Name: MMSP POWER SUPPLY DDG HARDWARE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	9 / 3.033	0 / 0.000	9 / 3.033	4 / 1.428	5 / 1.859	- / -	- / -	0 / 0.000	18 / 6.320
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	9 / 3.033	0 / 0.000	9 / 3.033	4 / 1.428	5 / 1.859	- / -	- / -	0 / 0.000	18 / 6.320

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	2	2	3	2	1	1	1	1	1	2	1	1	-	-	-	-	-	-	-	-	-	18
Out	-	-	-	-	-	-	-	-	-	2	2	3	2	1	1	1	1	1	2	1	1	-	-	-	-	-	-	-	-	-	18

Footnotes:

(19) SSSAs are procured based on start of ship availability with contract delivery dates (CDD) for each shipset being three months apart on average. FY24 SSSA increase (from FY22) in unit cost for SSSA ORDALTs is based on FY22 pre-negotiated cost. Total procurements and installations also include two (2) Aegis Ashore requirements. Overall installation costs have increased across the FYDP due to additional contracting fees, On Site Installation Coordinator (OSIC) requirements and Regional Maintenance Center (RMC) support costs. These costs were previously covered through the DDG Modernization Program. Difference in "Ins" vs. "Outs" due to realignment from LI 2980. Out of the 77 systems being procured, qty of 10 went "In" LI 2980, resulting in a total of 67 "Ins" reflected in this budget. The "Outs" in this budget total 72 due to 5 previous "outs" completed in LI 2980.

(20) SSSA spares include initial spares through Material Support Date (MSD) which are required for installations. SSSA spares will no longer be procured as a kit. Parts used will be replenished vice buying full kits.

(21) MMSP DDG Power Supply installation line covers associated Alteration Installation Team (AIT) and OSIC ORDALT costs.

(22) Production support includes installation engineering services, Integrated Logistics Support (ILS) documentation updates, ORDALT instructions, engineering change proposals and Diminishing Manufacturing Sources and Material Shortages (DMSMS) analysis.

(23) Engineering Change Proposal line (2.2) funds changes as a result of the first SSSA installation and shock testing.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 4 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:** P384	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	33.967	0.000	33.967	40.090	41.261	41.932	42.762	4,357.445	4,557.457
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	33.967	0.000	33.967	40.090	41.261	41.932	42.762	4,357.445	4,557.457
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**33.967**	**0.000**	**33.967**	**40.090**	**41.261**	**41.932**	**42.762**	**4,357.445**	**4,557.457**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Air and Missile Defense Radar (AMDR) Operations and Support (O&S)]: Air and Missile Defense Radar (AMDR) has been designated the AN/SPY-6(V)1 to address Ballistic Missile Defense (BMD) and Air Defense (AD) capability gaps identified in the Maritime Air and Missile Defense of Joint Forces (MAMDJF) Initial Capabilities Document (ICD); AN/SPY-6(V)1 will be initially fielded on the DDG-51 FLT-III platform. A variant of the AN/ SPY-6(V) will replace the AN/SPY-1 radar on existing DDG 51 FLT-IIA ships. The AN/SPY-6(V) Product Support Strategy established NSWC Port Hueneme Division as the Product Support Integrator (PSI) for overall system Operational Availability (AO) and Backend Processing (BEP) subsystem(s) Life Cycle Support. The BEP is comprised of Commercial off the Shelf (COTS) x86 based Modular Open System Architecture (MOSA), allowing for Form-Fit-Function (FFF) replacement with next generation server and processer technology. Interim support for the BEP will be provided via Task Order on the Defense Technical Information Center (DTIC) Information Analysis Center Multiple Award Contract (IAC MAC). Obsolescence management and technology refresh will be provided by a combination of ISEA tasking and program office leadership. Funding will sustain the Navy's next generation family of radars, AN/SPY-6(V). This applies to all current and future variants of the AN/SPY-6(V), including future modifications or separate programs to address different mission areas and utilization onboard different ship classes.

The "To Complete" is representative of the AN/SPY-6(V)1's full 40-year life cycle across 26 ship years (a total of 1040 ship years).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 4 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:** P384	
Models of Systems Affected: AMDR Operations and Support (O&S)	**Modification Type:** TBD	**Related RDT&E PEs:** 0604522N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)												
B Kits												
Recurring												
1.1.1) BACKEND EQUIPMENT SUSTAINMENT - Organic [24]	- / -	- / -	- / -	- / 10.143	- / -	- / 10.143	- / 12.993	- / 15.221	- / -	- / -	- / -	- / 38.357
1.1.2) TECHNOLOGY BASELINE MODERNIZATION - Organic [25]	- / -	- / -	- / -	- / 23.824	- / -	- / 23.824	- / 27.097	- / 26.040	- / 41.932	- / 42.762	- / 4,357.445	- / 4,519.100
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / 33.967*	*- / -*	*- / 33.967*	*- / 40.090*	*- / 41.261*	*- / 41.932*	*- / 42.762*	*- / 4,357.445*	*- / 4,557.457*
Subtotal: DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)	*- / -*	*- / -*	*- / -*	*- / 33.967*	*- / -*	*- / 33.967*	*- / 40.090*	*- / 41.261*	*- / 41.932*	*- / 42.762*	*- / 4,357.445*	*- / 4,557.457*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / 33.967*	*- / -*	*- / 33.967*	*- / 40.090*	*- / 41.261*	*- / 41.932*	*- / 42.762*	*- / 4,357.445*	*- / 4,557.457*
Installation												
Subtotal: Installation	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**33.967**	**0.000**	**33.967**	**40.090**	**41.261**	**41.932**	**42.762**	**4,357.445**	**4,557.457**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 4 / DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:** P384	
Modification Item 1 of 1: DC024 - Air and Missile Defense Radar (AMDR) Operations and Support (O&S)		

Footnotes:

(24) Backend processing (BEP) equipment sustainment funding is for field repair, replacements, sparing requirements of obsolescence commercial of the shelf (COTS) hardware. The short life cycle of COTS hardware required an active sustainment strategy to manage available sparing need and achieve system readiness. BEP equipment consists of COTS servers, networking equipment, and supporting peripherals. Funding ramp-up across the FYDP is based on the need to establish adequate infrastructure and procure spares to support SPY-6 platform deliveries that started in FY23 and increases in FY24 (FY23 funding is contained in the BLI 2980 budget). There will be two additional ships fielded in FY24 for a total of four ships fielded.

(25) Technology Baseline Modernization funds configuration modernization occurs every 6 years; incrementally refreshes COTS x86 BEP not already refreshed through attrition and non-COTS BEP required to maintain configuration baseline and align with industry standards and infrastructure. The first required wave of Tech Refresh costs begin in FY24 driven by COTS refresh cycle and timed to procure equipment just in time for execution post Combat System Light Off for two individual platform SPY-6 backends. Funding increase in FY24 supports additional SPY-6 ships moving into the tech refresh profile window.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 5 / DC025 - SPEIR BLOCK I
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	37.784	0.000	37.784	27.872	28.590	29.146	29.730	3,412.809	3,565.931
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	37.784	0.000	37.784	27.872	28.590	29.146	29.730	3,412.809	3,565.931
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**37.784**	**0.000**	**37.784**	**27.872**	**28.590**	**29.146**	**29.730**	**3,412.809**	**3,565.931**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Shipboard Passive Electro-Optical/ Infrared (SPEIR) Block I will provide a common 360-degree EO/IR Electronic Support (ES) capability to all surface ships that will passively find, fix, track, and target current/ emerging threats in support of the following warfare missions: Anti-Ship Cruise Missile (ASCM) Defense, Counter-Unmanned Aircraft Systems (UAS), Counter-Fast Attack Craft / Fast Inshore Attack Craft (FAC/FIAC), and Mobility. SPEIR Block I will consist of a passive Wide Field of View (WFOV) capability with a persistent 360-degree field-of-view optical sensors for autonomous detection and tracking for 24/7 day/night shipboard situational awareness. SPEIR Block I will also include an enhanced, high-resolution Narrow-Medium Field of View (NFOV) and laser range-finding capability to provide 3D target tracking, identification, and threat assessment. SPEIR Block II will be a future program that will build on the modular open systems architecture of Block I with an expanded spatial coverage envelope and will add the capability for Periscope Detection and Discrimination (PDD), Mine Like Object (MLO) avoidance, networked operations, and full integration with the Future Integrated Combat System. Status of SPEIR Block I Major Milestones: Milestone B completed 3QFY22, procurement of Long Lead Material (LLM) (4QFY24), and Milestone C Low Rate Initial Production (LRIP) (4QFY25). SPEIR will utilize an evolutionary acquisition approach to provide a common EO/IR ES capability to the Fleet as quickly and affordably as possible through Modular Open Source Architecture (MOSA).

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 5 / DC025 - SPEIR BLOCK I
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0604501N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: DC025 - SPEIR BLOCK I												
B Kits												
Recurring												
1.1.1) SPEIR BLOCK I - SYSTEM - NonOrganic [26]	- / -	- / -	- / -	1 / 16.993	- / -	1 / 16.993	1 / 16.226	1 / 16.095	- / -	- / -	126 / 1,955.964	129 / 2,005.278
1.1.2) NON-FMP SPEIR SHORE SITE - NonOrganic [27]	- / -	- / -	- / -	1 / 11.853	- / -	1 / 11.853	- / -	- / -	1 / 6.624	1 / 6.756	1 / 6.891	4 / 32.124
1.1.3) INCO SPARES - NonOrganic [28]	- / -	- / -	- / -	- / 2.956	- / -	- / 2.956	- / 2.201	- / 0.189	- / 1.237	- / 1.262	- / 68.788	- / 76.633
Subtotal: Recurring	*- / 0.000*	*- / -*	*- / -*	*- / 31.802*	*- / -*	*- / 31.802*	*- / 18.427*	*- / 16.284*	*- / 7.861*	*- / 8.018*	*- / 2,031.643*	*- / 2,114.035*
Subtotal: DC025 - SPEIR BLOCK I	*- / -*	*- / -*	*- / -*	*2 / 31.802*	*- / -*	*2 / 31.802*	*1 / 18.427*	*1 / 16.284*	*1 / 7.861*	*1 / 8.018*	*127 / 2,031.643*	*133 / 2,114.035*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / -*	*- / -*	*- / 31.802*	*- / -*	*- / 31.802*	*- / 18.427*	*- / 16.284*	*- / 7.861*	*- / 8.018*	*- / 2,031.643*	*- / 2,114.035*
Support *(All Modification Items)*												
2.1) PRODUCTION SUPPORT (PS) [29]	- / -	- / -	- / -	- / 2.622	- / -	- / 2.622	- / 4.471	- / 4.016	- / 6.805	- / 6.943	- / 60.234	- / 85.091
2.2) TECH REFRESH	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 1.536	- / 1.567	- / 225.274	- / 228.377
2.3) ENGINEERING CHANGE PROPOSALS (ECP) [30]	- / -	- / -	- / -	- / 1.989	- / -	- / 1.989	- / 3.072	- / 0.306	- / 0.926	- / 0.945	- / 55.062	- / 62.300
Subtotal: Support	*- / 0.000*	*- / -*	*- / -*	*- / 4.611*	*- / -*	*- / 4.611*	*- / 7.543*	*- / 4.322*	*- / 9.267*	*- / 9.455*	*- / 340.570*	*- / 375.768*
Installation												
Modification Item 1 of 1: DC025 - SPEIR BLOCK I	- / 0.000	- / 0.000	- / 0.000	- / 1.371	- / 0.000	- / 1.371	- / 1.902	- / 7.984	- / 12.018	- / 12.257	- / 1,040.596	- / 1,076.128
Subtotal: Installation	*- / 0.000*	*- / -*	*- / -*	*- / 1.371*	*- / -*	*- / 1.371*	*- / 1.902*	*- / 7.984*	*- / 12.018*	*- / 12.257*	*- / 1,040.596*	*- / 1,076.128*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**0.000**	**0.000**	**37.784**	**0.000**	**37.784**	**27.872**	**28.590**	**29.146**	**29.730**	**3,412.809**	**3,565.931**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 5 / DC025 - SPEIR BLOCK I

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: DC025 - SPEIR BLOCK I

Manufacturer Information

Manufacturer Name: TBD (31) | Manufacturer Location: TBD

Administrative Leadtime *(in Months)*: 0 | Production Leadtime *(in Months)*: 18

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Jul 2024	Apr 2025	Apr 2026	Apr 2027	Apr 2028
Delivery Dates			May 2026	Oct 2026	Oct 2027	Oct 2028	Oct 2029

Installation Information

Method of Implementation: [none specified]:: Installation Name: SPEIR BLOCK I - SYSTEM

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	0 / 1.371	0 / 0.000	0 / 1.371	0 / 0.503	1 / 6.119	- / -	- / -	0 / 0.000	1 / 7.993
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	0 / 1.399	0 / 0.296	1 / 7.440	- / -	0 / 0.000	1 / 9.135
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.975	0 / 0.621	1 / 8.194	0 / 0.000	1 / 9.790
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 3.957	0 / 3.436	126 / 1,039.306	126 / 1,046.699
Total	- / -	- / -	- / -	0 / 1.371	0 / 0.000	0 / 1.371	0 / 1.902	1 / 7.390	1 / 12.018	1 / 11.630	126 / 1,039.306	129 / 1,073.617

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	-	126	129
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	1	-	126	129

Method of Implementation: [none specified]:: Installation Name: NON-FMP SPEIR SHORE SITE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 5 / DC025 - SPEIR BLOCK I
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: DC025 - SPEIR BLOCK I

Installation Information

Method of Implementation: [none specified]:: Installation Name: NON-FMP SPEIR SHORE SITE

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.594	- / -	- / -	0 / 0.000	1 / 0.594
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.627	0 / 0.000	1 / 0.627
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.640	1 / 0.640
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.650	1 / 0.650
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.594	- / -	1 / 0.627	2 / 1.290	4 / 2.511

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	2	4
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	3	4

Footnotes:

(26) SPEIR installations are phased over three years with planning efforts being conducted in the two fiscal years prior to the installation of the unit on the ship. The funding requirements are phased in accordance with the Navy Modernization Process Management and Operational Manual (NMP MOM) SL720-AA-MAN-030 Rev 4. Funding is provided in the two years before the physical shipboard installation for Design Allocation Services (DSA) and installation kit material. DSA includes ship check, ship installation drawings and bill of materials creation. Installation kit material is composed of all items marked government furnished material on the bill of materials. These items take longer than 30 days to procure and therefore cannot be supported by the installing activity. Total cost for installations shows cost for year of install onboard ships and DSA in the two years prior to the installation.

(27) The FY24 Shore Site configuration is a full SPEIR Block I system composed of three (3) Wide Field of View (WFOV) and two (2) Narrow Field of View (NFOV) subsystems specifically required for integration and testing and will not be installed on a ship. The FY27 and FY28 Shore Site configurations are partial systems composed of one (1) WFOV and one (1) NFOV subsystem specifically required for training and will not be installed on a ship. The four (4) total shore sites planned align with the approved MS B Service Cost Position (SCP).

(28) Spares include initial spares through Material Support Date (MSD) in FY27, which are required for installations.

(29) Production support reflects Government oversight of production, Government and Original Equipment Manufacturer (OEM) support of production-related hardware problems, Integrated Logistics Agent (ILA), Acquisition Engineering Agent (AEA), Technical Design Agent (TDA), and Professional Support Services (PSS).

(30) Engineering Change Proposal (ECP) funding requirement reflects anticipated design changes during production to address known reliability and other issues.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 10	**P-1 Line Item Number / Title:** 2981 / In-Service Radars and Sensors	**Modification Number / Title:** 5 / DC025 - SPEIR BLOCK I
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(31) The lead time for the first lot is 22 months and 18 months for all subsequent lots. The FY24 contract award date aligns with planned program Long Lead Material authorization. FY24 delivery date is based on a 22-month lead time.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 2437 / Battle Force Tactical Network

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	0.000	0.000	74.180	0.000	74.180	105.833	106.813	105.958	107.414	-	500.198
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	0.000	0.000	74.180	0.000	74.180	105.833	106.813	105.958	107.414	-	500.198
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**0.000**	**0.000**	**74.180**	**0.000**	**74.180**	**105.833**	**106.813**	**105.958**	**107.414**	**-**	**500.198**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The details of this Budget Line Item are classified SECRET//NOFORN and are submitted to Congress in the classified budget justification books.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 2437 / Battle Force Tactical Network	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Battle Force Tactical Network				- / 0.000	- / -	- / -	- / 74.180	- / -	- / 74.180
P-40	**Total Gross/Weapon System Cost**				**- / 0.000**	**- / 0.000**	**- / 0.000**	**- / 74.180**	**- / 0.000**	**- / 74.180**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The details of this Budget Line Item are classified SECRET//NOFORN and are submitted to Congress in the classified budget justification books.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 2437 / Battle Force Tactical Network	**Aggregated Items Title:** Battle Force Tactical Network (1)

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) BATTLE FORCE TACTICAL NETWORK																				
1.1) Battle Force Tactical Network	A		-	-	-	-	-	-	-	-	-	-	-	74.180	-	-	-	-	-	74.180
Subtotal: 1) BATTLE FORCE TACTICAL NETWORK			**-**	**-**	***0.000***	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	***74.180***	**-**	**-**	**-**	**-**	**-**	***74.180***
Total			**-**	**-**	**0.000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.180**	**-**	**-**	**-**	**-**	**-**	**74.180**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

(1) The details of this Budget Line Item are classified SECRET//NOFORN and are submitted to Congress in the classified budget justification books.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	190.369	43.212	36.941	29.776	0.000	29.776	27.350	32.087	35.622	36.392	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	190.369	43.212	36.941	29.776	0.000	29.776	27.350	32.087	35.622	36.392	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**190.369**	**43.212**	**36.941**	**29.776**	**0.000**	**29.776**	**27.350**	**32.087**	**35.622**	**36.392**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.833	0.822	0.848	-	0.848	0.342	0.077	0.001	0.001	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Funding provides for the procurement and installation of Integrated Waveform (IW) and Mobile User Objective System (MUOS) Digital Modular Radio (DMR) systems and IW and MUOS upgrade kits. DMR with IW and MUOS hardware is a four-channel software defined radio that provides satellite communications, Line of Sight (LOS) and High Frequency (HF), Very High Frequency (VHF) and Ultra High Frequency (UHF) communication capability to surface, submarine, and shore facilities. This variant of the DMR, including upgrade kits, provides hardware with IW/MUOS capability. This system is formally specified by both Fleet Commanders as a threshold capability for global maritime command, control, and communications in a Distributed Maritime Environment to execute current warfighting plans and is required for National Command and Control capability.

Funding will also be used for NSA mandated cryptographic modernization requirement for MUOS waveform 3.2. The aging Legacy UHF SATCOM constellation should not be counted on for continued voice and data, past the currently projected end-of-life dates. Furthermore, the NSA has directed all HAIPE platforms to upgrade to the Advanced Cryptographic Capability to address advancing Cyber threats.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-3a	1 / (DN 110) DMR IW and MUOS Radios (TBD)				- / 117.357	- / 21.680	- / 21.694	- / 17.396	- / 0.000	- / 17.396
P-3a	2 / (DN 111) DMR IW and MUOS Upgrade Kits (TBD)				- / 73.012	- / 21.532	- / 15.247	- / 12.380	- / 0.000	- / 12.380
P-40	**Total Gross/Weapon System Cost**				**- / 190.369**	**- / 43.212**	**- / 36.941**	**- / 29.776**	**- / 0.000**	**- / 29.776**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-3a	1 / (DN 110) DMR IW and MUOS Radios (TBD)				- / 20.765	- / 22.000	- / 20.599	- / 24.787	Continuing	Continuing
P-3a	2 / (DN 111) DMR IW and MUOS Upgrade Kits (TBD)				- / 6.585	- / 10.087	- / 15.023	- / 11.605	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 27.350**	**- / 32.087**	**- / 35.622**	**- / 36.392**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY24 funding provides for the procurement of 5 DMR IW & MUOS Afloat radios with 35 pieces of ancillary equipment and 1 DMR IW & MUOS Upgrade Kit with 3 pieces of ancillary equipment, for installation in FY26.

FY24 funding provides for installation of 1 DMR IW & MUOS Afloat Radio (procured prior to FY22), 3 DMR IW & MUOS Afloat Radios with the required 12 pieces of ancillary equipment, 4 DMR IW & MUOS Shore Radios with 31 required pieces of ancillary equipment, and 15 DMR IW and MUOS Upgrade Kits with 63 required pieces of ancillary equipment. These units were procured in FY22 for installation in FY24.

FY24 will also continue the procurement for US Coast Guard National Security Cutters (NSC) equipment.

The fielding plan for DMR IW & MUOS Systems changed from the PB23 submission due to changes in schedule for ships decommissioning and ship availability periods. This caused variances in procurement and installation costs & quantities between budget submissions.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms	**Modification Number / Title:** 1 / (DN 110) DMR IW and MUOS Radios
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	117.357	21.680	21.694	17.396	0.000	17.396	20.765	22.000	20.599	24.787	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	117.357	21.680	21.694	17.396	0.000	17.396	20.765	22.000	20.599	24.787	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**117.357**	**21.680**	**21.694**	**17.396**	**0.000**	**17.396**	**20.765**	**22.000**	**20.599**	**24.787**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Integrated Waveform (IW) and Mobile User Objective System (MUOS) Digital Modular Radio (DMR) Systems. The budget reflects individual radio procurements and ancillary equipment procurements for surface, subsurface, and shore sites. For the DMR IW & MUOS System, the required quantity of radios and ancillary equipment is dependent on the ship class configuration, or shore site configuration. Ancillary equipment includes power amplifiers, rack systems, human machine interface, and antennae upgrades or refurbishments. The fielding plan for DMR IW & MUOS Systems changed from the PB23 submission due to schedule changes for ships decommissioning and ship availability periods.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms	**Modification Number / Title:** 1 / (DN 110) DMR IW and MUOS Radios
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/USC-61(C)	**Modification Type:** TBD	**Related RDT&E PEs:** 0604280N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: (DN 110) DMR IW and MUOS Radios												
B Kits												
Recurring												
1.1.1) DMR IW and MUOS Radio Procurement - Afloat - NonOrganic (1)	50 / 47.689	3 / 1.172	4 / 1.594	5 / 2.033	- / -	5 / 2.033	6 / 2.488	5 / 2.115	5 / 2.157	9 / 3.961	Continuing	Continuing
1.1.2) DMR Sub Ancillary Equipment - Afloat - Organic	4 / 0.235	12 / 0.719	4 / 0.245	8 / 0.499	- / -	8 / 0.499	- / -	- / -	- / -	- / -	- / -	28 / 1.698
1.1.3) DMR Surface Ancillary Equipment - Afloat - Organic	94 / 17.569	- / -	23 / 4.951	27 / 5.472	- / -	27 / 5.472	46 / 7.895	37 / 6.817	41 / 4.108	75 / 7.839	Continuing	Continuing
1.1.4) DMR IW and MUOS Radio Procurement - Shore (BCA / TACAMO) - NonOrganic	21 / 7.821	4 / 1.563	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	25 / 9.384
1.1.5) DMR Ancillary Equipment - Shore (BCA / TACAMO) - Organic	163 / 11.913	31 / 2.068	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	194 / 13.981
1.1.6) DMR IW and MUOS Radio Procurement - USCG - Organic (2)	- / 3.411	- / -	- / 1.634	- / 1.634	- / -	- / 1.634	- / 1.634	- / 1.634	- / -	- / -	- / -	- / 9.947
Subtotal: Recurring	*- / 88.638*	*- / 5.522*	*- / 8.424*	*- / 9.638*	*- / -*	*- / 9.638*	*- / 12.017*	*- / 10.566*	*- / 6.265*	*- / 11.800*	*Continuing*	*Continuing*
Subtotal: (DN 110) DMR IW and MUOS Radios	*332 / 88.638*	*50 / 5.522*	*31 / 8.424*	*40 / 9.638*	*- / -*	*40 / 9.638*	*52 / 12.017*	*42 / 10.566*	*46 / 6.265*	*84 / 11.800*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 88.638*	*- / 5.522*	*- / 8.424*	*- / 9.638*	*- / -*	*- / 9.638*	*- / 12.017*	*- / 10.566*	*- / 6.265*	*- / 11.800*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) DMR IW and MUOS System Integration Support	- / 6.128	- / 3.382	- / 3.465	- / 3.422	- / -	- / 3.422	- / 2.357	- / 3.440	- / 4.476	- / 4.666	Continuing	Continuing
2.2) DMR IW and MUOS System Production Support	- / 6.598	- / 0.217	- / 0.288	- / 0.200	- / -	- / 0.200	- / 0.417	- / 0.452	- / 0.463	- / 0.590	Continuing	Continuing
2.3) DMR IW and MUOS System DSA (3)	- / 5.519	- / 2.419	- / 1.004	- / 1.176	- / -	- / 1.176	- / 0.608	- / 1.625	- / 1.500	- / 0.914	Continuing	Continuing
Subtotal: Support	*- / 18.245*	*- / 6.018*	*- / 4.757*	*- / 4.798*	*- / -*	*- / 4.798*	*- / 3.382*	*- / 5.517*	*- / 6.439*	*- / 6.170*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: (DN 110) DMR IW and MUOS Radios	- / 10.474	- / 10.140	- / 8.513	- / 2.960	- / 0.000	- / 2.960	- / 5.366	- / 5.917	- / 7.895	- / 6.817	Continuing	Continuing
Subtotal: Installation	*- / 10.474*	*- / 10.140*	*- / 8.513*	*- / 2.960*	*- / -*	*- / 2.960*	*- / 5.366*	*- / 5.917*	*- / 7.895*	*- / 6.817*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**117.357**	**21.680**	**21.694**	**17.396**	**0.000**	**17.396**	**20.765**	**22.000**	**20.599**	**24.787**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms	**Modification Number / Title:** 1 / (DN 110) DMR IW and MUOS Radios
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: (DN 110) DMR IW and MUOS Radios

Manufacturer Information

Manufacturer Name: General Dynamics [4]	Manufacturer Location: Scottsdale, Arizona
Administrative Leadtime *(in Months)*: 4	Production Leadtime *(in Months)*: 16

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Feb 2022	Feb 2023	Feb 2024				
Delivery Dates	Jun 2023	Jun 2024	Jun 2025				

Installation Information

Method of Implementation: [none specified]:: Installation Name: DMR IW and MUOS Radio Procurement - Afloat

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	17 / 8.552	17 / 9.520	15 / 7.881	1 / 0.579	0 / 0.000	1 / 0.579	- / -	- / -	- / -	- / -	0 / 0.000	50 / 26.532
FY 2022	- / -	- / -	- / -	3 / 1.736	0 / 0.000	3 / 1.736	- / -	- / -	- / -	- / -	0 / 0.000	3 / 1.736
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	4 / 5.366	- / -	- / -	- / -	0 / 0.000	4 / 5.366
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 5.917	- / -	- / -	0 / 0.000	5 / 5.917
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 7.895	- / -	0 / 0.000	6 / 7.895
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 6.817	Continuing	Continuing
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	5 / 4.108	5 / 4.108
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	9 / 7.839	9 / 7.839
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	17 / 8.552	17 / 9.520	15 / 7.881	4 / 2.315	0 / 0.000	4 / 2.315	4 / 5.366	5 / 5.917	6 / 7.895	5 / 6.817	Continuing	Continuing

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	17	8	-	3	6	3	3	5	4	1	3	-	-	1	2	1	-	2	1	2	-	1	2	1	2	1	2	2	-	Cont.	Cont.
Out	8	9	8	-	3	6	3	3	5	4	1	3	-	-	1	2	1	-	2	1	2	-	1	2	1	2	1	2	2	Cont.	Cont.

Method of Implementation: [none specified]:: Installation Name: DMR IW and MUOS Radio Procurement - Shore (BCA / TACAMO)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	13 / 1.922	4 / 0.620	4 / 0.632	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	21 / 3.174

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms	**Modification Number / Title:** 1 / (DN 110) DMR IW and MUOS Radios
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: (DN 110) DMR IW and MUOS Radios

Installation Information

Method of Implementation: [none specified]:: Installation Name: DMR IW and MUOS Radio Procurement - Shore (BCA / TACAMO)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	- / -	4 / 0.645	0 / 0.000	4 / 0.645	- / -	- / -	- / -	- / -	0 / 0.000	4 / 0.645
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	13 / 1.922	4 / 0.620	4 / 0.632	4 / 0.645	0 / 0.000	4 / 0.645	- / -	- / -	- / -	- / -	0 / 0.000	25 / 3.819

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	13	4	-	-	-	-	-	4	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
Out	13	-	4	-	-	-	-	-	4	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25

Method of Implementation (Organic): DMR Sub Ancillary Equipment - Afloat | **Installation Quantity:** 28

Method of Implementation (Organic): DMR Surface Ancillary Equipment - Afloat | **Installation Quantity:** 0

Method of Implementation (Organic): DMR Ancillary Equipment - Shore (BCA / TACAMO) | **Installation Quantity:** 194

Footnotes:

(1) a) The budget reflects DMR radio procurements and ancillary equipment procurements separately, for surface and subsurface platforms. b) Installation quantities align to the DMR IW & MUOS Radio quantity. Installation cost is the complete cost to install the DMR IW & MUOS radios with all required ancillary equipment. c) Procurement quantities are driven by ship class configurations and ancillary equipment (racks, power amplifiers, HMI, & antenna refurbishments/upgrades). d) All installations are aligned to current ship availabilities. e) Due to administrative lead time of four months and production lead time of 16 months, procured DMR/IW MUOS Radios afloat and ashore must be procured 2 years prior to installation. f) Procurement and Installation quantities will vary between budget submissions as the fielding plan changes due to schedule changes for ships decommissioning and current ship availability periods.

(2) USCG are procurements only and will be installed by USCG.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms	**Modification Number / Title:** 1 / (DN 110) DMR IW and MUOS Radios
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(3) Pre-Installation Design Services Allocation (DSA) are required in order to complete ship check and installation drawings for installation planning and is performed 6-12 months prior to installation start. Post Installation DSA support requirements include system operational verification tests (SOVT) and system drawings closeout requirements. DSA costs will fluctuate each FY as it is a factor of the number of installations in any given fiscal year. In FY 2024, $0.278 million funds SOVTs and design closeout for four (4) afloat radio installations (including required ancillary equipment) and four (4) shore radio installations (including required ancillary equipment), $0.898 million funds the pre-installation planning for four (4) FY25 afloat radio installations (including required ancillary equipment).

(4) Starting in FY22, the Administrative Lead Time has been reduced from seven to four months and the Production Lead Time has been shortened from 19 to 16 months due to process improvements and vendor learning curve.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms	**Modification Number / Title:** 2 / (DN 111) DMR IW and MUOS Upgrade Kits
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	73.012	21.532	15.247	12.380	0.000	12.380	6.585	10.087	15.023	11.605	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	73.012	21.532	15.247	12.380	0.000	12.380	6.585	10.087	15.023	11.605	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**73.012**	**21.532**	**15.247**	**12.380**	**0.000**	**12.380**	**6.585**	**10.087**	**15.023**	**11.605**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Integrated Waveform (IW) and Mobile User Objective System (MUOS) Digital Modular Radio (DMR) Upgrade Kits. The budget reflects individual radio upgrade kit procurements and ancillary equipment procurements separately, for surface and subsurface platforms. For the DMR IW & MUOS Upgrade Kit, the required quantity of radio upgrade kits and ancillary equipment is dependent on the ship class configuration. Ancillary equipment includes power amplifiers, human machine interface, and antennae upgrades or refurbishments. The fielding plan for DMR IW & MUOS Upgrade Kit changed from the PB23 submission due to changes in schedule for ships decommissioning and ship availability periods.

[DMR IW and MUOS Upgrade Kits Procurement] FY24 funding provides for the procurement of one (1 QTY) DMR IW & MUOS afloat upgrade kit and associated ancillary equipment as well as pre-installation design and installation of (15) Afloat Upgrade kits that were procured in FY22.

The twelve (12) month Production Lead Time (PLT) for DMR Upgrade Kit delivery is due to varying PLT's from multiple ancillary equipment vendors that are then integrated into the final product. Ancillary equipment is provided to Naval Information Warfare Center (NIWC) Pacific, for integration, assembly and test. The seven (7) month Administrative Lead Time (ALT) for DMR Upgrade Kit procurements allows for the identification and receipt of other customer funds in order to take advantage of favorable quantity pricing.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms	**Modification Number / Title:** 2 / (DN 111) DMR IW and MUOS Upgrade Kits
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: AN/USC-61(C)	**Modification Type:** TBD	**Related RDT&E PEs:** 0604280N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: (DN 111) DMR IW and MUOS Upgrade Kits												
B Kits												
Recurring												
1.1.1) DMR IW and MUOS Upgrade Kits Procurement - NonOrganic (5)	71 / 16.324	15 / 0.812	12 / 0.662	1 / 0.056	- / -	1 / 0.056	3 / 0.172	7 / 0.410	15 / 0.896	7 / 0.427	Continuing	Continuing
1.1.2) DMR Ancillary Equipment Upgrade - Organic	172 / 6.615	63 / 2.137	48 / 1.867	3 / 0.117	- / -	3 / 0.117	13 / 0.550	48 / 2.016	97 / 4.160	46 / 1.979	Continuing	Continuing
1.1.3) Engineering Change Orders (ECOs) - Organic (6)	- / 32.876	- / 10.676	- / 5.869	- / 7.248	- / -	- / 7.248	- / 1.919	- / 6.197	- / 7.153	- / 4.084	Continuing	Continuing
Subtotal: Recurring	*- / 55.815*	*- / 13.625*	*- / 8.398*	*- / 7.421*	*- / -*	*- / 7.421*	*- / 2.641*	*- / 8.623*	*- / 12.209*	*- / 6.490*	*Continuing*	*Continuing*
Subtotal: (DN 111) DMR IW and MUOS Upgrade Kits	*243 / 55.815*	*78 / 13.625*	*60 / 8.398*	*4 / 7.421*	*- / -*	*4 / 7.421*	*16 / 2.641*	*55 / 8.623*	*112 / 12.209*	*53 / 6.490*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 55.815*	*- / 13.625*	*- / 8.398*	*- / 7.421*	*- / -*	*- / 7.421*	*- / 2.641*	*- / 8.623*	*- / 12.209*	*- / 6.490*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) DMR IW and MUOS Upgrade Kits Production Support	- / 1.258	- / 0.118	- / 0.151	- / 0.175	- / -	- / 0.175	- / 0.176	- / 0.198	- / 0.207	- / 0.220	Continuing	Continuing
2.2) DMR IW and MUOS Upgrade Kits DSA (7)	- / 3.421	- / 1.035	- / 1.078	- / 0.955	- / -	- / 0.955	- / 0.515	- / 1.030	- / 1.337	- / 1.468	Continuing	Continuing
Subtotal: Support	*- / 4.679*	*- / 1.153*	*- / 1.229*	*- / 1.130*	*- / -*	*- / 1.130*	*- / 0.691*	*- / 1.228*	*- / 1.544*	*- / 1.688*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: (DN 111) DMR IW and MUOS Upgrade Kits	- / 12.518	- / 6.754	- / 5.620	- / 3.829	- / 0.000	- / 3.829	- / 3.253	- / 0.236	- / 1.270	- / 3.427	Continuing	Continuing
Subtotal: Installation	*- / 12.518*	*- / 6.754*	*- / 5.620*	*- / 3.829*	*- / -*	*- / 3.829*	*- / 3.253*	*- / 0.236*	*- / 1.270*	*- / 3.427*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**73.012**	**21.532**	**15.247**	**12.380**	**0.000**	**12.380**	**6.585**	**10.087**	**15.023**	**11.605**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms	**Modification Number / Title:** 2 / (DN 111) DMR IW and MUOS Upgrade Kits

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: (DN 111) DMR IW and MUOS Upgrade Kits

Manufacturer Information

Manufacturer Name: General Dynamics [8] | Manufacturer Location: Scottsdale, Arizona

Administrative Leadtime *(in Months)*: 7 | Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	May 2022	May 2023	May 2024				
Delivery Dates	May 2023	May 2024	May 2025				

Installation Information

Method of Implementation: Method:: Installation Name: DMR MUOS Upgrade Kits

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	33 / 12.518	18 / 6.754	20 / 5.620	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	71 / 24.892
FY 2022	- / -	- / -	- / -	15 / 3.829	0 / 0.000	15 / 3.829	- / -	- / -	- / -	- / -	0 / 0.000	15 / 3.829
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	12 / 3.253	- / -	- / -	- / -	0 / 0.000	12 / 3.253
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.236	- / -	- / -	0 / 0.000	1 / 0.236
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.270	- / -	Continuing	Continuing
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 3.427	Continuing	Continuing
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 5.506	15 / 5.506
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 2.405	7 / 2.405
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	33 / 12.518	18 / 6.754	20 / 5.620	15 / 3.829	0 / 0.000	15 / 3.829	12 / 3.253	1 / 0.236	3 / 1.270	7 / 3.427	Continuing	Continuing

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	33	9	5	4	-	9	8	3	-	4	6	5	-	6	4	2	-	-	-	1	-	1	1	1	-	3	2	2	-	Cont.	Cont.
Out	26	7	9	5	4	-	9	8	3	-	4	6	5	-	6	4	2	-	-	-	1	-	1	1	1	-	3	2	2	Cont.	Cont.

Method of Implementation (Organic): DMR Ancillary Equipment Upgrade | **Installation Quantity:** 0

Footnotes:

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3010 / Shipboard Tactical Comms	**Modification Number / Title:** 2 / (DN 111) DMR IW and MUOS Upgrade Kits
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(5) a) The budget reflects upgrade kit procurements and ancillary equipment procurements separately for surface and subsurface platforms. b) Installation quantities align to the DMR IW & MUOS Upgrade Kit quantity. Installation cost is the complete cost to install the DMR Upgrade Kits and all required ancillary equipment. c) Procurement quantities are driven by afloat upgrade kit configurations and ancillary equipment (racks, power amplifiers & antenna upgrades), which is dependent upon ship class. There are 5 different Digital Modular Radio (DMR) Integrated Waveform (IW) & Mobile User Objective System (MUOS) Upgrade Kit afloat configurations (3 surface & 2 subsurface) where each configuration ranges from 1 - 3 DMR upgrade kits and a unique set of ancillary equipment. d) All installations are aligned to current ship availabilities. e) Procurement and Installation quantities will vary between budget submissions as the fielding plan changes due to decommissions and current ship availability.

(6) ECO cost supports the continued integration effort of MUOS Waveform 3.2 on DMR. FY24 will fund MUOS Advanced Cryptographic Capability (ACC) Waveform 3.2 Phase 2, which is an NSA mandated crypto modernization requirement, along with Dynamic Local Scanning (DLS), and Thornton TRANSEC Algorithm Modernization (TTAM).

(7) Pre-Installation Design Services Allocation (DSA) are required in order to complete ship check and installation drawings for installation planning and is performed 6-12 months prior to installation start. Post Installation DSA support requirements include system operational verification tests (SOVT) and system drawings closeout requirements. DSA costs will fluctuate each FY as it is a factor of the number of installations in any given fiscal year. In FY 2024, $0.454 million funds SOVTs and design closeout for fifteen (15) FY 2024 upgrade kit installations (including required ancillary equipment), $0.501 million funds the pre-installation planning for twelve (12) FY25 upgrade kit installations (including required ancillary equipment).

(8) The seven month Administrative Lead Time for DMR MUOS Upgrade Kit system procurements allows for the identification and receipt of other customer funds in order to take advantage of favorable quantity pricing.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0204163N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1,347.081	90.073	101.691	96.916	0.000	96.916	107.239	162.314	145.243	148.403	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1,347.081	90.073	101.691	96.916	0.000	96.916	107.239	162.314	145.243	148.403	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1,347.081**	**90.073**	**101.691**	**96.916**	**0.000**	**96.916**	**107.239**	**162.314**	**145.243**	**148.403**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	1.626	1.263	2.341	-	2.341	1.620	2.093	1.850	1.923	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Ship Communication Automation (52PQ): With the evolution of afloat networks programs migrating into the Consolidated Afloat Networks and Enterprise Services (CANES) program, the Ship Communications Automation budget line will continue to support Automated Digital Network System (ADNS), Legacy Network Operation Rolling Tide (ORT), Tactical Messaging (formerly Command and Control Official Information eXchange (C2OIX)), Shore Tactical Assured Command and Control (STACC) (formerly Tactical Switching) and Piers / Enterprise Pier Connectivity Architecture (EPCA) programs.

Automated Digital Network System (ADNS): ADNS provides cyber-hardened warfighting critical, afloat-to-shore wide area networking. Capabilities include routing, switching, baseband, configuration and monitoring capabilities that interconnect Fleet tactical and coalition partner enclaves worldwide. ADNS leverages Commercial Off-the-Shelf/ Government Off-the-Shelf (COTS/GOTS) equipment and network protocols as specified by the joint technical architecture and in support of meeting the ability to connect in a range of contested battlespace environments in support of expanding the Fleets' digital competitive advantage. ADNS Increment (INC) I provides ship-to-shore Internet Protocol (IP) connectivity, separation of enclaves, reuse of unused enclave bandwidth, and ship to tactical shore IP connectivity. ADNS INC II provides capabilities of network to Satellite Communications, Load Balancing, Radio Frequency (RF) restoral, and Quality of Service (QoS) to include application prioritization, Traffic Management, compression and enhancements designed to maximize use of "effective" available bandwidth for surface, shore, and airborne platforms. ADNS INC III combines all Navy Tactical Voice, secure Communications Interoperability Protocol Inter-Working Function, Video, data requirements into a converged IP data stream, and Assured Command and Control (C2) capabilities. This includes Secure Communication Interoperability-Protocol Interworking Function (SCIP-IWF) for secure telephony over IP. In addition, the INC III architecture will incorporate an IPv4/IPv6 dual stack and a Cipher-Text security architecture to align to the Global Information Grid (GIG) in order to mesh Navy tactical surface, subsurface, airborne platforms, and Aegis Ashore sites into a single IP environment with gateway functions to joint and coalition networks. Technical Insertions (TI) are minor upgrades to existing system hardware and software baselines that are required to maximize Command, Control, Communications, Computer, Intelligence, Surveillance, and Reconnaissance (C4ISR) capability and interface functionality between ADNS and applicable programs.

Legacy Network Cyber Resiliency/Operation Rolling Tide (ORT): ORT is a Navy-wide cyber remediation effort to secure government databases and improve the overall security protocols for Navy computer networks. Specifically, Legacy Network Cyber Resiliency/ORT will fund planned legacy network upgrades and mitigate security vulnerabilities on the highest End of Life (EOL) platforms that are not targeted to be replaced by a CANES system. These upgrades will mitigate known targeted cyber vulnerabilities and include eradication of old Windows Operating Systems, critical EOL firewalls and routers and improved anti-malware solutions. Legacy Network Cyber Resiliency/ORT will improve the networks ability to detect known and unknown vulnerabilities and attacks by upgrading sensor and monitoring technologies and accelerating post-attack containment and recovery.

Piers / Enterprise Pier Connectivity Architecture (EPCA): Commander Pacific Fleet, Commander United States Naval European Command and Commander United States Naval Central Command have declared pier Information Technology (IT) infrastructure modernization to be a Force Protection matter of urgency. A fully capable and modern Enterprise pier IT infrastructure allows United States (US) Naval ships, while

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0204163N
Line Item MDAP/MAIS Code: N/A		

pier-side at 26 global locations (15 Continental United States (CONUS)/11 Outside Continental United States (OCONUS)), to secure their Radio Frequency (RF) systems for critical maintenance, perform battle force training, while continuing to send and receive operational and intelligence traffic. This element of the BLII program installs state-of-the-art, Automated Digital Network System compatible IT infrastructure to Navy operated piers worldwide, including public and commercial shipyards and authorized Department of Navy (DON) foreign ports. EPCA provides expanded Non-Classified Internet Protocol Router Network (NIPRNET)/ Secret Internet Protocol Router Network (SIPRNET) capability to piers to meet Fleet Commander stated requirements in order to maintain situational awareness related to anti-terrorist military operations. Further, it ensures bandwidth requirements are met in order to download critical security patches and updates required for ships to maintain proper Information Assurance (IA) security posture. While in port, ships are connected by either an Umbilical Cable Assembly (UCA) or a Wireless solution from the skin of the ship to the first Navy Network Operations Center (NOC).

Tactical Messaging (formerly Command and Control Official Information eXchange (C2OIX)), provides exchange of Joint Top Secret and below Official Information of high precedence Command and Control (C2) as well as routine organizational record message traffic between ashore sites and afloat platforms. The primary mission of Tactical Messaging is to provide a manageable messaging service gateway capability between Top Secret (TS), Secret Internet Protocol Router Network (SIPRNet), and the Non-classified Internet Protocol Router Network (NIPRNet) users. This messaging service capability includes seamless interoperability between other Department of Defense (DoD) messaging systems such as the Defense Information Systems Agency (DISA) Organizational Messaging Service (OMS), along with other serial-based legacy systems. Tactical Messaging provides sustainment and modernization for messaging systems on over 320 United States Navy (USN), Military Sealift Command (MSC) and United States Coast Guard (USCG) afloat platforms and 4 USN shore communications stations. The Tactical Messaging modernization effort for afloat platforms replaces the legacy, multi-rack, Naval Modular Automated Communication System (NAVMACS) with a modern, single-rack NAVMACS II system that automates and increases the speed and efficiency of handling organizational message traffic aboard ships and submarines. NAVMACS II leverages the Internet Protocol (IP) networks to send and receive organizational messages during normal operations and interfaces with non-IP serial Satellite Communication (SATCOM) and other Line of Site (LOS) and Beyond Line of Site (BLOS) Radio Frequency (RF) transmission paths to provide resilient C2 traffic during IP outages and Emission Control (EMCON) operations. C2OIX is the shore component of Tactical Messaging that handles UNCLASSIFIED, SECRET and TOP SECRET message service. C2OIX also provides an integrated Cross Domain Solution (CDS) for over 2,500 shore commands throughout the Navy shore enterprise and over 320 USN, MSC and USCG afloat platforms. C2OIX is located at the two Naval Computer Telecommunication Area Master Stations (NCTAMS PACIFIC and NCTAMS ATLANTIC) to provide worldwide coverage for shore commands. These suites also provide messaging services for satellite uplink to afloat units and Continental United States (CONUS) Areas Of Operation (AORs). Additionally, there are partial C2OIX suites located at two Naval Computer and Telecommunications Station sites (NCTS GUAM and NCTS NAPLES) to provide messaging services for satellite uplink to units operating in the Indian Ocean and Western Pacific areas of operation. Tactical Messaging satisfies shore and afloat Navy OI messaging requirements and implements products that are developed with an open system architecture that allow organizational message exchange between the Navy and other Services and Agencies.

Shore Tactical Assured Command and Control (STACC) is the Navy's Program of Record (POR) to consolidate, replace and modernize the ashore wide area network (WAN) services infrastructure with a cyber-hardened, warfighting resilient hardware, software and enterprise services infrastructure to enable information warfare from and within the tactical domain to expand the Fleets' digital competitive advantage. STACC delivers Command, Control, Communications, Computers, and Intelligence (C4I) capabilities that provide the Navy's Command and Control (C2) connection between globally deployed tactical warfighting forces - ships, submarines and aircraft, and key decision makers ashore (Numbered Fleet Commanders and Coalition partners). STACC provides this tactical connectivity through an ashore network infrastructure that includes Fleet Network Operation Centers (FLTNOCs), Maritime Operation Centers (MOCs) and DOD Gateways and Teleport sites directly enabling Distributed Maritime Operations worldwide. STACC network provides email, chat, Domain Name System (DNS), and patching applications to afloat platforms in a tactical environment to all deployed warfighting assets across all security classification levels enclaves (UNCLASSIFIED, SECRET, SECRET RELEASABLE (SECREL), VSE, and SCI).

STACC supports Fleet Commanders and Shore C2 users by globally connecting and consolidating common services, enabling resiliency, deploying resilient C2, and proactive network defense through separate and severable "tactical level" network from the "business" network (NMCI, ONE-NET) connecting "afloat" networks such as Integrated Shipboard Network Systems (ISNS)/Consolidated Afloat Networks Enterprise Services (CANES). Unlike NMCI and ONE-NET, STACC is operated and managed by the military allowing for custom network controls, custom COTS/GOTS solutions, increased protection for critical C2 and failover capability within a denied environment.

STACC provides and maintains several infrastructure systems essential for the entire Fleet to communicate end-to-end by providing a gateway for the tactical communities by incorporating the latest technologies into an integrated portfolio of products and services that facilitate effective C2 across the force. STACC supports 92 shore sites and over 410 surface and subsurface platforms in both CONUS and OCONUS locations (Maritime Operations Centers (MOC), Commander Task Force (CTF), Navy Computer Telecommunications Area Master Stations (NCTAMS), Naval Computer Telecommunications Stations (NCTS) and Detachments, and Broadcast Control Authorities (BCA)).

The STACC portfolio includes:

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0204163N
Line Item MDAP/MAIS Code: N/A		

Fleet Network Operation Centers (FLTNOC) and Sensitive Compartmented Information Network Operation Centers (SCI NOC) are the hub connecting the various enclaves including Virtual Secure Enclave (VSE) and Combined Enterprise Regional Information Exchange System Maritime (CENTRIXS-M) to afloat units and provide "tactical" level networking (IP routing, traffic management, cyber monitoring/ protection, storage, and computing) and hosting for multiple critical C4I applications and collaboration tools (Global Command and Control Services - Joint and Maritime (GCCS-J/M), BMD, ISR, Chat, email, etc.) used by Fleet Commanders to provide command and control of deployed forces.

Virtual Secure Enclave (VSE) provides a resilient C2 network (separate and severable SECRET path from the Tactical SIPRNet) designed to survive in a highly contested cyber environment and assure secure C2 communications between our shore Fleet command elements and the deployed warfighters. VSE is a thin-client architecture residing at the Naval Operation Centers (NOCs). VSE provides secure and resilient C2 network capability for specific Fleet prioritized warfighting commands (e.g., MOC, CTF, etc.) and critical C2 applications at the operational level of war in denied environment scenarios. VSE provides secure and resilient application hosting, transport, and authenticated role-based access for tactical operations.

Combined Enterprise Regional Information Exchange System Maritime (CENTRIXS-M) ashore is a collection of Coalition Classified SECREL networks (separate and severable path) used for coalition (non-US) interoperability in support of military operations. The STACC CENTRIXS-M separates and connects the MOCs, Fleet units, and Expeditionary units to various foreign partner bi-lateral and multilateral coalitions (e.g., NATO). This is a critical element of STACC allowing for collaboration and communication with coalition forces during operations.

Transport provides physical end-point connections from ships and submarines to the shore tactical infrastructure; ensuring the network traffic path is transparent to the operators. Transport is critical for providing the secure physical connectivity between shore locations.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0204163N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Ship Communications Automation	P-5a			- / 279.600	- / 6.556	- / 6.579	- / 9.591	- / 0.000	- / 9.591
P-3a	2 / PQ069 Automated Digital Network System (ADNS) - Afloat (TBD)				- / 329.913	- / 52.300	- / 53.526	- / 52.375	- / 0.000	- / 52.375
P-3a	3 / PQ070 Shore Tactical Assured Command and Control (STACC) (TBD)				- / 717.618	- / 21.215	- / 30.962	- / 25.913	- / 0.000	- / 25.913
P-3a	4 / PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA) (TBD)				- / 19.950	- / 10.002	- / 10.624	- / 9.037	- / 0.000	- / 9.037
P-40	**Total Gross/Weapon System Cost**				**- / 1,347.081**	**- / 90.073**	**- / 101.691**	**- / 96.916**	**- / 0.000**	**- / 96.916**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Ship Communications Automation	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	2 / PQ069 Automated Digital Network System (ADNS) - Afloat (TBD)				- / 58.170	- / 110.162	- / 104.531	- / 98.670	Continuing	Continuing
P-3a	3 / PQ070 Shore Tactical Assured Command and Control (STACC) (TBD)				- / 30.079	- / 32.548	- / 20.738	- / 28.378	Continuing	Continuing
P-3a	4 / PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA) (TBD)				- / 8.869	- / 8.771	- / 8.979	- / 8.388	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 107.239**	**- / 162.314**	**- / 145.243**	**- / 148.403**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

In FY24, Automated Digital Network System (ADNS) continues integration of Assured Command and Control capabilities to meet fleet requirements as well as fielding at Aegis Ashore sites. In FY24, ADNS funds are for the procurement of (31) Increment (INC) III Afloat units, (45) INC III Afloat Technical Insertion (TI) units, (4) Ashore INC I/INC II units, (6) Ashore INC III units (to include one Aegis Ashore system), and (2) ADNS Advanced Networking Tactical System (ANTS) technical refreshes, with integration, and associated costs for pre-installation design. In addition, the FY24 ADNS investment will fund installation of (36) INC III Afloat units, (45) INC III Afloat TI units, (4) Ashore INC I/INC II units, and (6) Ashore INC III units. In FY24 the decrease INC III Afloat unit procurement quantities is based on changes to fleet availability. The FY24 increase in installation quantities is driven by availability schedule changes. DDGs have more frequent availability periods, while CVNs and submarines are less frequent. The different cycles create waves of opportunities throughout the FYDP where some years generate more ship avails than others.

In FY24, Piers / Enterprise Pier Connectivity Architecture (EPCA) will procure (3) and install (3) EPCA units pier side to address pier Information Technology (IT) infrastructure modernization in support of Force Protection matter of urgency. Funds will support pre-installation design, site surveys, procurement of hardware and software, production support, and installation of Piers IT infrastructure.

In FY24, Tactical Messaging will procure, install and integrate (9) NAVMACS Afloat units and (1) C2OIX Ashore unit. Funds support associated costs for pre-installation design to replace old legacy equipment onboard ships and submarines.

In FY24, Shore Tactical Assured Command and Control (STACC) funding supports expansion of the Virtual Secure Enclave (VSE) and CENTRIXS-M infrastructure in Naples and Bahrain Areas of Responsibility in response to OPNAV's Resilient C2 study findings, aligning with PACFLT/FFC joint Resilient Command and Control Requirements. FY24 funding will procure hardware/software for ten (10) combined

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0204163N
Line Item MDAP/MAIS Code: N/A		

Commander Task Force (CTF) Client Node installations for VSE and CENTRIXS-M and installations of one (1) VSE infrastructure expansion, and one (1) CENTRIXS-M NOC infrastructure expansion. Infrastructure expansion is required to increase the capacity of the Network Operation Centers (NOCs) in order to support critical C2 applications for VSE and new CTF users for VSE and CENTRIXS-M in a denied environment.

Additionally, FY24 Shore Tactical Assured Command and Control (STACC) will also engineer, procure and integrate (11) STACC Equipment upgrades and perform (11) installations to: transition legacy serial transport to an IP environment; expand IP services (UNCLASSIFIED, SECRET, CENTRIXS-M, and SCI) to include application hosting services and expanded storage capability and network responsiveness of the central infrastructure needed to align with increases of users and demand of supported systems; and enhance Network Operations monitoring and management, provide cyber remediation solutions to detect, deter and mitigate network threats and for Assured Command and Control to support terrestrial communications and routing changes.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	P-1 Line Item Number / Title: 3050 / Ship Communications Automation	Item Number / Title [DODIC]: 1 / Ship Communications Automation
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	279.600	6.556	6.579	9.591	0.000	9.591
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	279.600	6.556	6.579	9.591	0.000	9.591
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**279.600**	**6.556**	**6.579**	**9.591**	**0.000**	**9.591**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware Cost																		
Recurring Cost																		
1.1.1) Automated Digital Network System (ADNS) - Ashore - INC I&II(†) (1)	100.000	28	2.800	100.000	4	0.400	102.000	4	0.408	104.000	4	0.416	-	-	0.000	104.000	4	0.416
1.1.2) Automated Digital Network System (ADNS) - Ashore - INC III(†) (2)	418.750	48	20.100	416.667	6	2.500	425.000	6	2.550	433.500	6	2.601	-	-	0.000	433.500	6	2.601
1.1.3) Legacy Network Cyber Resiliency/ Operation Rolling Tide (ORT) (3)	-	-	100.544	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
1.1.4) ADNS Advanced Networking Tactical System (ANTS)(†) (4)	-	-	0.000	-	-	0.000	-	-	0.000	365.000	2	0.730	-	-	0.000	365.000	2	0.730
Subtotal: Recurring Cost	-	-	*123.444*	-	-	*2.900*	-	-	*2.958*	-	-	*3.747*	-	-	*0.000*	-	-	*3.747*
Non Recurring Cost																		
1.2.1) ADNS ANTS Non-Recurring Engineering (5)	-	-	0.000	-	-	0.000	-	-	0.000	-	-	1.832	-	-	0.000	-	-	1.832
Subtotal: Non Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*1.832*	-	-	*0.000*	-	-	*1.832*
Subtotal: Hardware Cost	**-**	**-**	***123.444***	**-**	**-**	***2.900***	**-**	**-**	***2.958***	**-**	**-**	***5.579***	**-**	**-**	***0.000***	**-**	**-**	***5.579***

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	P-1 Line Item Number / Title: 3050 / Ship Communications Automation	Item Number / Title [DODIC]: 1 / Ship Communications Automation
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - Tactical Messaging Cost																		
Recurring Cost																		
2.1.1) NAVMACS Equipment (Afloat)(†)	129.910	167	21.695	178.125	8	1.425	198.000	9	1.782	198.500	9	1.787	-	-	0.000	198.500	9	1.787
2.1.2) C2OIX Equipment (Ashore)(†) (6)	-	-	0.000	190.000	2	0.380	-	-	0.000	196.676	1	0.197	-	-	0.000	196.676	1	0.197
Subtotal: Recurring Cost	-	-	*21.695*	-	-	*1.805*	-	-	*1.782*	-	-	*1.984*	-	-	*0.000*	-	-	*1.984*
Subtotal: Hardware - Tactical Messaging Cost	**-**	**-**	***21.695***	**-**	**-**	***1.805***	**-**	**-**	***1.782***	**-**	**-**	***1.984***	**-**	**-**	***0.000***	**-**	**-**	***1.984***
Hardware - Consolidated Prior Year Requirements - Tactical Messaging Cost																		
Recurring Cost																		
3.1.1) Consolidated Prior Year Requirements (7)	-	-	97.338	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*97.338*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Hardware - Consolidated Prior Year Requirements - Tactical Messaging Cost	**-**	**-**	***97.338***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Hardware - Installations - Tactical Messaging Cost																		
Recurring Cost																		
4.1.1) NAVMACS Installs (Afloat)(†)	99.910	167	16.685	153.250	8	1.226	167.444	9	1.507	167.777	9	1.510	-	-	0.000	167.777	9	1.510
4.1.2) C2OIX Installs (Ashore)(†) (8)	-	-	0.000	150.000	2	0.300	-	-	0.000	161.000	1	0.161	-	-	0.000	161.000	1	0.161
Subtotal: Recurring Cost	-	-	*16.685*	-	-	*1.526*	-	-	*1.507*	-	-	*1.671*	-	-	*0.000*	-	-	*1.671*
Subtotal: Hardware - Installations - Tactical Messaging Cost	**-**	**-**	***16.685***	**-**	**-**	***1.526***	**-**	**-**	***1.507***	**-**	**-**	***1.671***	**-**	**-**	***0.000***	**-**	**-**	***1.671***
Support - Production Support - Tactical Messaging Cost																		
5.1) Production Support Tactical Messaging	-	-	9.151	-	-	0.100	-	-	0.102	-	-	0.109	-	-	0.000	-	-	0.109
5.2) DSA Tactical Messaging	-	-	11.287	-	-	0.225	-	-	0.230	-	-	0.248	-	-	0.000	-	-	0.248
Subtotal: Support - Production Support - Tactical Messaging Cost	**-**	**-**	***20.438***	**-**	**-**	***0.325***	**-**	**-**	***0.332***	**-**	**-**	***0.357***	**-**	**-**	***0.000***	**-**	**-**	***0.357***

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	P-1 Line Item Number / Title: 3050 / Ship Communications Automation	Item Number / Title [DODIC]: 1 / Ship Communications Automation
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Gross/Weapon System Cost	-	-	279.600	-	-	6.556	-	-	6.579	-	-	9.591	-	-	0.000	-	-	9.591

(†) indicates the presence of a P-5a

Footnotes:

(1) Automated Digital Network System (ADNS): Tech refresh is required to field hardware to address End of Life issues at (4) ADNS Network Operation Centers (NOC): Naval Computer & Telecommunications Station (NCTS) Bahrain, Naval Computer & Telecommunications Area Master Station (NCTAMS) European and Central area of operation (EURCENT), NCTAMS LANT, and NCTAMS PAC sites.

(2) Automated Digital Network System (ADNS): FY24-28 procurement quantities represent minor tech refreshes at 6 sites that include 2 Broadcast Control Authority and 4 NOCs (NCTS Bahrain, NCTAMS EURCENT, NCTAMS LANT, and NCTAMS PAC). Increment (INC) III Ashore units require 3 months integration, assembly, testing and shipping after delivery, prior to installation start. Installs do not begin until 10 months after procurement contract award (7 months production lead time + 3 months integration). FY 2024 procurements will install in FY 2025.

(3) Legacy Network Cyber Resiliency/Operation Rolling Tide- Prior Year Costs total accounts for 128 units.

(4) Funding provides critical system software (U-SB4) and hardware (HB2.2) Tech Refresh upgrades in FY24, which will support FY25 and subsequent MQ-25 squadron deployments. This effort also includes a system transition to an SDN implementation aligned with overarching RC3 requirements. This effort will provide critical flight safety, air vehicle Command and Control (C2), and mission payload transport systems upgrades in support of deploying MQ-25 squadrons. Furthermore, funding is required for an SDN transition starting in FY26 in order to address EOL components and unmanned airborne RC3 requirements. Quantities represented in this budget are aligned to the number of aircraft to receive tech refresh upgrades and do not represent full system procurements. ANTS upgrades the traditional ADNS Inc. III baseline on Aircraft and is not a new start.

(5) FY24 funding for ADNS ANTS Non Recurring Engineering supports the FY24 first articles. This cost is a one time initial investment. Funding supports necessary production design drawings, environmental (shock and vibration) qualifications, logistics technical documentation, and training curricula development for the first-of-its-kind certified tested baseline. FY24 funding is required to meet MQ-25 at-sea trial events as well as MQ-25 airborne system deliveries.

(6) FY24 funding supports (1) Ashore Unit upgrade at Naval Computer Telecommunications Area Master Station Pacific (NCTAMS PAC).

(7) Prior year total costs represent a total of 237 units procured in prior years.

(8) FY24 installation funding supports (1) Ashore Installation at NCTAMS PAC.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	P-1 Line Item Number / Title: 3050 / Ship Communications Automation	Item Number / Title [DODIC]: 1 / Ship Communications Automation

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) Automated Digital Network System (ADNS) - Ashore - INC I&II		2022	Naval Information Warfare Center (NIWC) [9] / San Diego, CA	C / IDIQ	NAVWAR	Nov 2021	Mar 2022	4	100.000	Y		
1.1.1) Automated Digital Network System (ADNS) - Ashore - INC I&II		2023	Naval Information Warfare Center (NIWC) [9] / San Diego, CA	C / IDDQ	NAVWAR	Nov 2022	Mar 2023	4	102.000	Y		
1.1.1) Automated Digital Network System (ADNS) - Ashore - INC I&II		2024	Naval Information Warfare Center (NIWC) [9] / San Diego, CA	C / IDDQ	NAVWAR	Nov 2023	Mar 2024	4	104.000	Y		
1.1.2) Automated Digital Network System (ADNS) - Ashore - INC III		2022	Naval Information Warfare Center (NIWC) / San Diego, CA	C / IDIQ	NAVWAR	Nov 2021	Sep 2022	6	416.667	Y		
1.1.2) Automated Digital Network System (ADNS) - Ashore - INC III		2023	Naval Information Warfare Center (NIWC) / San Diego, CA	C / IDDQ	NAVWAR	Nov 2022	Sep 2023	6	425.000	Y		
1.1.2) Automated Digital Network System (ADNS) - Ashore - INC III		2024	Naval Information Warfare Center (NIWC) / San Diego, CA	C / IDDQ	NAVWAR	Nov 2023	Sep 2024	6	433.500	Y		
1.1.4) ADNS Advanced Networking Tactical System (ANTS)		2024	Naval Information Warfare Center Pacific (NIWC PAC) / San Diego, CA	C / TBD	San Diego, CA	Nov 2023	Sep 2024	2	365.000	Y		
2.1.1) NAVMACS Equipment (Afloat)		2022	General Dynamics Mission Systems, Inc. / Taunton, MA	C / IDIQ	Aberdeen Proving Ground, MD	Jan 2022	Feb 2022	8	178.125	Y		
2.1.1) NAVMACS Equipment (Afloat)		2023	TBD / TBD	C / TBD	TBD	Jan 2023	Feb 2023	9	198.000	Y		
2.1.1) NAVMACS Equipment (Afloat)		2024	TBD / TBD	C / TBD	TBD	Jan 2024	Feb 2024	9	198.500	Y		
2.1.2) C2OIX Equipment (Ashore)		2022	General Dynamics Mission Systems, Inc. / Taunton, MA	C / IDIQ	Aberdeen Proving Ground, MD	Jan 2022	Feb 2022	2	190.000	Y		
2.1.2) C2OIX Equipment (Ashore)		2024	TBD / TBD	C / TBD	TBD	Jan 2024	Feb 2024	1	196.676	Y		
4.1.1) NAVMACS Installs (Afloat)		2022	Naval Information Warfare Center / Various	WR	N/A	Nov 2021	Nov 2021	8	153.250	Y		
4.1.1) NAVMACS Installs (Afloat)		2023	Naval Information Warfare Center / Various	WR	N/A	Nov 2022	Nov 2022	9	167.444	Y		
4.1.1) NAVMACS Installs (Afloat)		2024	Naval Information Warfare Center / Various	WR	N/A	Nov 2023	Nov 2023	9	167.777	Y		
4.1.2) C2OIX Installs (Ashore)		2022	Naval Information Warfare Center (NIWC) / Various	WR	N/A	Nov 2021	Nov 2021	2	150.000	Y		
4.1.2) C2OIX Installs (Ashore)		2024	Naval Information Warfare Center (NIWC) Pacific / San Diego, CA	WR	N/A	Nov 2023	Nov 2023	1	161.000	Y		

Footnotes:

[9] Naval Information Warfare Center (NIWC) Pacific (PAC) is the procuring agency for Automated Digital Network Systems (ADNS) Ashore components and leverages multiple contract vehicles with various vendors.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 2 / PQ069 Automated Digital Network System (ADNS) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	329.913	52.300	53.526	52.375	0.000	52.375	58.170	110.162	104.531	98.670	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	329.913	52.300	53.526	52.375	0.000	52.375	58.170	110.162	104.531	98.670	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**329.913**	**52.300**	**53.526**	**52.375**	**0.000**	**52.375**	**58.170**	**110.162**	**104.531**	**98.670**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Automated Digital Network System (ADNS) is the gateway to the tactical Wide Area Network (WAN) afloat for Internet Protocol (IP) network operations, supporting information dissemination and external connectivity. ADNS allows services and applications to interconnect to the Defense Information Systems Network (DISN) ashore via multiple Radio Frequency (RF) resources and pier connectivity. ADNS provides the only Quality and Class of Service (QoS/CoS) routing for Multi-Service Voice, Video, and Data domains across available Radio Frequency (RF) paths.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 2 / PQ069 Automated Digital Network System (ADNS) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:** 0204163N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: PQ069 Automated Digital Network System (ADNS) - Afloat												
B Kits												
Recurring												
1.1.1) Automated Digital Network System (ADNS) - Afloat- INC III - NonOrganic (10)	206 / 186.165	31 / 27.963	36 / 33.123	31 / 29.093	- / -	31 / 29.093	38 / 36.375	83 / 81.040	59 / 58.759	59 / 59.934	Continuing	Continuing
1.1.2) ADNS Tech Insertions - NonOrganic (11)	234 / 34.983	46 / 4.450	36 / 3.552	45 / 4.529	- / -	45 / 4.529	38 / 3.901	39 / 4.084	39 / 4.165	40 / 4.358	Continuing	Continuing
Subtotal: Recurring	*- / 221.148*	*- / 32.413*	*- / 36.675*	*- / 33.622*	*- / -*	*- / 33.622*	*- / 40.276*	*- / 85.124*	*- / 62.924*	*- / 64.292*	*Continuing*	*Continuing*
Subtotal: PQ069 Automated Digital Network System (ADNS) - Afloat	*440 / 221.148*	*77 / 32.413*	*72 / 36.675*	*76 / 33.622*	*- / -*	*76 / 33.622*	*76 / 40.276*	*122 / 85.124*	*98 / 62.924*	*99 / 64.292*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 221.148*	*- / 32.413*	*- / 36.675*	*- / 33.622*	*- / -*	*- / 33.622*	*- / 40.276*	*- / 85.124*	*- / 62.924*	*- / 64.292*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) ADNS - Production Support	- / 9.181	- / 1.690	- / 2.200	- / 2.017	- / 0.000	- / 2.017	- / 2.417	- / 5.107	- / 3.775	- / 3.858	Continuing	Continuing
2.2) ADNS - DSA (12)	- / 13.118	- / 2.838	- / 2.485	- / 2.094	- / 0.000	- / 2.094	- / 2.672	- / 4.489	- / 6.967	- / 7.182	Continuing	Continuing
Subtotal: Support	*- / 22.299*	*- / 4.528*	*- / 4.685*	*- / 4.111*	*- / -*	*- / 4.111*	*- / 5.089*	*- / 9.596*	*- / 10.742*	*- / 11.040*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: PQ069 Automated Digital Network System (ADNS) - Afloat	- / 86.466	- / 15.359	- / 12.166	- / 14.642	- / 0.000	- / 14.642	- / 12.805	- / 15.442	- / 30.865	- / 23.338	Continuing	Continuing
Subtotal: Installation	*- / 86.466*	*- / 15.359*	*- / 12.166*	*- / 14.642*	*- / -*	*- / 14.642*	*- / 12.805*	*- / 15.442*	*- / 30.865*	*- / 23.338*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**329.913**	**52.300**	**53.526**	**52.375**	**0.000**	**52.375**	**58.170**	**110.162**	**104.531**	**98.670**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 2 / PQ069 Automated Digital Network System (ADNS) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: PQ069 Automated Digital Network System (ADNS) - Afloat

Manufacturer Information

Manufacturer Name: Naval Informaiton Warfare Center (NIWC) -- San Diego, CA (Afloat ADNS Technical Insertion)	Manufacturer Location: San Diego, CA
Administrative Leadtime *(in Months)*: 1	Production Leadtime *(in Months)*: 1

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2021	Nov 2022	Nov 2023				
Delivery Dates	Dec 2021	Dec 2022	Dec 2023				

Manufacturer Name: VARIOUS (Afloat ADNS Inc III) (13)	Manufacturer Location: VARIOUS
Administrative Leadtime *(in Months)*: 1	Production Leadtime *(in Months)*: 7

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Nov 2021	Nov 2022	Nov 2023				
Delivery Dates	Jun 2022	Jun 2023	Jun 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: Automated Digital Network System (ADNS) - Afloat- INC III

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	166 / 71.318	40 / 12.169	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	206 / 83.487
FY 2022	- / -	- / -	31 / 9.620	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	31 / 9.620
FY 2023	- / -	- / -	- / -	36 / 11.395	0 / 0.000	36 / 11.395	- / -	- / -	- / -	- / -	0 / 0.000	36 / 11.395
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	31 / 10.008	- / -	- / -	- / -	0 / 0.000	31 / 10.008
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	38 / 12.514	- / -	- / -	0 / 0.000	38 / 12.514
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	83 / 27.879	- / -	Continuing	Continuing
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	59 / 20.214	0 / 0.000	59 / 20.214
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	166 / 71.318	40 / 12.169	31 / 9.620	36 / 11.395	0 / 0.000	36 / 11.395	31 / 10.008	38 / 12.514	83 / 27.879	59 / 20.214	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 2 / PQ069 Automated Digital Network System (ADNS) - Afloat

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: PQ069 Automated Digital Network System (ADNS) - Afloat

Installation Information

Method of Implementation: [none specified]:: Installation Name: Automated Digital Network System (ADNS) - Afloat- INC III

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	166	6	19	7	8	7	11	7	6	9	9	9	9	8	7	8	8	9	13	10	6	14	27	30	12	15	25	15	4	Cont.	Cont.
Out	163	3	7	18	9	8	6	12	6	8	9	7	10	9	6	7	9	10	9	12	10	12	22	23	27	12	20	23	4	Cont.	Cont.

Method of Implementation: [none specified]:: Installation Name: ADNS Tech Insertions

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	234 / 15.148	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	234 / 15.148
FY 2022	- / -	46 / 3.190	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	46 / 3.190
FY 2023	- / -	- / -	36 / 2.546	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	36 / 2.546
FY 2024	- / -	- / -	- / -	45 / 3.247	0 / 0.000	45 / 3.247	- / -	- / -	- / -	- / -	0 / 0.000	45 / 3.247
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	38 / 2.797	- / -	- / -	- / -	0 / 0.000	38 / 2.797
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	39 / 2.928	- / -	- / -	0 / 0.000	39 / 2.928
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	39 / 2.986	- / -	0 / 0.000	39 / 2.986
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	40 / 3.124	Continuing	Continuing
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	234 / 15.148	46 / 3.190	36 / 2.546	45 / 3.247	0 / 0.000	45 / 3.247	38 / 2.797	39 / 2.928	39 / 2.986	40 / 3.124	Continuing	Continuing

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	234	-	21	14	11	-	13	15	8	-	14	15	16	-	12	12	14	-	13	12	14	-	14	15	10	-	15	15	10	Cont.	Cont.
Out	213	21	-	22	14	10	-	13	17	6	-	14	15	16	6	13	10	9	6	10	9	14	9	12	14	-	10	12	14	Cont.	Cont.

Footnotes:

(10) Automated Digital Network System (ADNS) Increment (INC) III Afloat procurement cost range: $.8M - $1.0M; installation cost range: $.3M - $0.5M. Average unit cost fluctuations for procurement and installation are due to varying system configurations required for surface and submarine platforms. INC III units require 4 months integration, assembly, testing and shipping after delivery, prior to installation start. Installs do not begin until 12 months after procurement is initiated (1 month administrative lead time + 7 months production lead time + 4 months integration). FY 2024 procurements will be installed in FY 2025.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 2 / PQ069 Automated Digital Network System (ADNS) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(11) FY24: Technical Insertions (TI) will be fielded to include hardware and software baseline updates to Afloat units required to maximize Command, Control, Communications, Computer, Intelligence, and Reconnaissance (C4ISR) capability and interface functionality between Automated Digital Network System (ADNS) and applicable Satellite Communications (SATCOM) systems such as Navy Multi-Band Terminal(NMT), Global Broadcast System (GBS) and Battle Force Tactical Network (BFTN). TI unit cost includes production engineering/integration requirements associated with the initial fielding of TI capability. TI(s) require (1) month administrative lead time and (1) month production lead time.

(12) Design Service Allocation (DSA) costs per unit fluctuates based on the type of platform (submarine vs Multi-purpose Aircraft Carrier, Nuclear -Propulsion (CVN)) and the type of system (Backfit vs new install) and can vary between $15K -$200K.

(13) ADNS: Full Production Contract has 4 possible vendors on Multiple Award Contract (MAC) award: SERCO, Inc, Science Applciations International Corporation (SAIC), DRS Laurel Technologies, and Leidos. Contract will be used for Increment III production units.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	717.618	21.215	30.962	25.913	0.000	25.913	30.079	32.548	20.738	28.378	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	717.618	21.215	30.962	25.913	0.000	25.913	30.079	32.548	20.738	28.378	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**717.618**	**21.215**	**30.962**	**25.913**	**0.000**	**25.913**	**30.079**	**32.548**	**20.738**	**28.378**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Shore Tactical Assured Command and Control (STACC) is the Navy's Program of Record to consolidate, replace and modernize the ashore wide area network services infrastructure with a cyber-hardened, warfighting resilient hardware, software and enterprise services infrastructure to enable information warfare from and within the tactical domain to expand the Fleets digital competitive advantage. STACC delivers Command, Control, Communications, Computers, and Intelligence (C4I) capabilities that provides the Navy's Command and Control (C2) connection between globally deployed tactical warfighting forces - ships, submarines and aircraft, and key decision makers ashore (Numbered Fleet Commanders and Coalition partners). STACC provides this tactical connectivity through ashore network infrastructure that includes Fleet Network Operation Centers (FLTNOCs), Maritime Operation Centers (MOCs) and DOD Gateways and Teleport sites directly enabling Distributed Maritime Operations worldwide. STACC network provides email, chat, Domain Name System (DNS), and patching applications to afloat platforms in a tactical environment to all deployed warfighting assets across all security classification levels enclaves (UNCLASSIFIED, SECRET, SECRET RELEASABLE (SECREL), VSE, and SCI).

STACC supports Fleet CDRs and Shore C2 users by globally connecting and consolidating common services, enabling resiliency, deploying resilient C2, and proactive network defense through separate and severable "tactical level" network from the "business" network (NMCI, ONE-NET) connecting "afloat" networks such as Integrated Shipboard Network Systems (ISNS)/Consolidated Afloat Networks Enterprise Services (CANES). Unlike NMCI and ONE-NET, STACC is operated and managed by the military allowing for custom network controls, custom COTS/GOTS solutions, increased protection for critical C2 as well as failover capability within a denied environment.

STACC provides and maintains several infrastructure systems essential for the entire Fleet to communicate end-to-end by providing a gateway for the tactical communities by incorporating the latest technologies into an integrated portfolio of products and services that facilitate effective C2 across the force. STACC supports 68 shore sites and over 410 surface and subsurface platforms in both CONUS and OCONUS locations (Maritime Operations Centers (MOC), Commander Task Force (CTF), Navy Computer Telecommunications Area Master Stations (NCTAMS), Naval Computer Telecommunications Stations (NCTS) and Detachments, and Broadcast Control Authorities (BCA)).

[Equipment - STACC] Each quantity represents a single STACC Equipment modernization/capability upgrade to a specific site. The cost of each individual modernization effort varies depending on the complexity of modernization required to mitigate
cyber security threats, keep pace with increased computing requirements for hosted applications, and support Department of Defense (DoD) directives to remove End of Life (EOL) Windows Operating Systems software as quickly
as feasible. Procurements could include refresh of routers, switches, servers, workstations, multi-level thin clients, firewalls across the five security enclaves or be as complex as a complete network refresh. There are over 1,000
different STACC devices fielded at 68 sites across the globe. Installations can include routers, switches, servers, workstations, multi-level thin clients, firewalls across the five security enclaves.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

[VSE Expansion - ASP Infrastructure] Shore Tactical Assured Command and Control (STACC) funding increase supports expansion of the Virtual Secure Enclave (VSE) and CENTRIXS-M infrastructure in Naples and Bahrain Area of Responsibility's in response to OPNAV's Resilient C2 study findings, aligning with PACFLT/FFC joint Resilient Command and Control Requirements. Infrastructure expansion is required to increase the capacity of the application service points (ASP's) and Naval Operation Centers (NOCs) in order to support critical C2 applications, and new Commander Task Force (CTF) users, in a denied environment. This allows for critical virtualized applications to be hosted within the VSE protected and/or hardened environment.

[VSE Expansion - CENTRIXS-M NOC Infrastructure] Combined Enterprise Regional Information Exchange System Maritime (CENTRIXS-M) ashore is a collection of Coalition Classified SECREL networks (separate and severable path) used for coalition (non-US) interoperability in support of military operations. CENTRIXS-M Naval Operation Center (NOC) Infrastructure expansion is required to increase network capacity in order to support new Commander Task Force (CTF) user access to CENTRIXS-M services within the VSE protected and/or hardened environment.

[VSE Expansion - CTF VSE/CENTRIXS-M Procurement] VSE Expansion - CTF Procurement - Hardware/Software procurements from FY23-26 required at 32 Commander Tasks Forces(CTF)sites to allow additional users in the Bahrain and Naples AoR to access critical virtualized C2 applications within the VSE protected and/or hardened environment. VSE will be installed at 32 CTFs, CENTRIXS-M at 21 CTFs; joint procurements and installations will be done for the 21 CTFs receiving both capabilities.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: PQ070 Shore Tactical Assured Command and Control (STACC)												
B Kits												
Recurring												
1.1.1) Consolidated Prior Year Requirements - Organic	10 / 35.760	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 35.760
1.1.2) Equipment - STACC - NonOrganic (14)	125 / 317.303	15 / 18.147	15 / 18.330	11 / 13.621	- / -	11 / 13.621	12 / 14.353	13 / 15.982	13 / 16.381	18 / 22.924	- / -	222 / 437.041
1.1.3) VSE Expansion - ASP Infrastructure - NonOrganic (15)	- / -	- / -	1 / 3.500	- / -	- / -	- / -	1 / 3.606	- / -	- / -	- / -	- / -	2 / 7.106
1.1.4) VSE Expansion - CENTRIXS-M NOC Infrastructure - NonOrganic	- / -	- / -	1 / 3.500	- / -	- / -	- / -	- / -	1 / 3.714	- / -	- / -	- / -	2 / 7.214
1.1.5) VSE Expansion - CTF VSE/CENTRIXS-M Procurement - NonOrganic (16)	- / -	- / -	3 / 0.897	10 / 3.050	- / -	10 / 3.050	7 / 2.177	1 / 0.159	- / -	- / -	- / -	21 / 6.283
1.1.6) VSE Expansion - CTF VSE Procurement - NonOrganic	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 1.739	- / -	- / -	- / -	11 / 1.739
1.1.7) VSE - Agile Enclave - Organic	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.800	1 / 1.500	1 / 1.500	1 / 1.500	- / -	4 / 6.300
1.1.8) MILCON P913:Shore Based Enterprise Network Enhancements - NonOrganic	2 / 11.489	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 11.489
Subtotal: Recurring	*- / 364.552*	*- / 18.147*	*- / 26.227*	*- / 16.671*	*- / -*	*- / 16.671*	*- / 21.936*	*- / 23.094*	*- / 17.881*	*- / 24.424*	*- / 0.000*	*- / 512.932*
Subtotal: PQ070 Shore Tactical Assured Command and Control (STACC)	*137 / 364.552*	*15 / 18.147*	*20 / 26.227*	*21 / 16.671*	*- / -*	*21 / 16.671*	*21 / 21.936*	*27 / 23.094*	*14 / 17.881*	*19 / 24.424*	*- / -*	*274 / 512.932*
Subtotal: Procurement, All Modification Items	*- / 364.552*	*- / 18.147*	*- / 26.227*	*- / 16.671*	*- / -*	*- / 16.671*	*- / 21.936*	*- / 23.094*	*- / 17.881*	*- / 24.424*	*- / 0.000*	*- / 512.932*
Support *(All Modification Items)*												
2.1) STACC Production Support	- / 26.455	- / 1.250	- / 1.283	- / 1.217	- / -	- / 1.217	- / 1.098	- / 1.251	- / 1.126	- / 1.557	Continuing	Continuing
2.2) VSE Expansion - DSA (17)	- / -	- / -	- / 1.165	- / 2.167	- / -	- / 2.167	- / 2.252	- / 1.351	- / -	- / -	- / -	- / 6.935
2.3) VSE Expansion - Production Support	- / -	- / -	- / 0.433	- / 0.186	- / -	- / 0.186	- / 0.351	- / 0.440	- / -	- / -	- / -	- / 1.410
2.4) MILCON P913: Production	- / 0.636	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.636
Subtotal: Support	*- / 27.091*	*- / 1.250*	*- / 2.881*	*- / 3.570*	*- / -*	*- / 3.570*	*- / 3.701*	*- / 3.042*	*- / 1.126*	*- / 1.557*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: PQ070 Shore Tactical Assured Command and Control (STACC)	- / 325.975	- / 1.818	- / 1.854	- / 5.672	- / 0.000	- / 5.672	- / 4.442	- / 6.412	- / 1.731	- / 2.397	- / 0.000	- / 350.301
Subtotal: Installation	*- / 325.975*	*- / 1.818*	*- / 1.854*	*- / 5.672*	*- / -*	*- / 5.672*	*- / 4.442*	*- / 6.412*	*- / 1.731*	*- / 2.397*	*- / 0.000*	*- / 350.301*
Total												

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total Cost (Procurement + Support + Installation)	**717.618**	**21.215**	**30.962**	**25.913**	**0.000**	**25.913**	**30.079**	**32.548**	**20.738**	**28.378**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: PQ070 Shore Tactical Assured Command and Control (STACC)

Manufacturer Information

Manufacturer Name: Georgia Technical Research Institute (GTRI) (18)				Manufacturer Location: San Diego, CA			
Administrative Leadtime *(in Months)*: 3				Production Leadtime *(in Months)*: 2			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Mar 2022	Mar 2023	Mar 2024				

Manufacturer Name: NIWC LANT (REIM/DC) (19)				Manufacturer Location: Charleston, SC			
Administrative Leadtime *(in Months)*: 1				Production Leadtime *(in Months)*: 2			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates	Nov 2021	Nov 2022	Nov 2023				
Delivery Dates	Jan 2022	Jan 2023	Jan 2024				

Manufacturer Name: Multiple Vendors (VSE Expansion ASP Infrastructure) (20)				Manufacturer Location: Various			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 6			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates		Apr 2023					
Delivery Dates		Oct 2023					

Manufacturer Name: Multiple Vendors (VSE Expansion CENTRIXS-M NOC Infrastructure) (21)				Manufacturer Location: Various			
Administrative Leadtime *(in Months)*: 6				Production Leadtime *(in Months)*: 6			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates		Apr 2023					
Delivery Dates		Oct 2023					

Manufacturer Name: Multiple Vendors (VSE CTF) FY23 (22)				Manufacturer Location: Various			
Administrative Leadtime *(in Months)*: 8				Production Leadtime *(in Months)*: 4			
Dates	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**FY 2028**
Contract Dates		Jun 2023					
Delivery Dates		Oct 2023					

Manufacturer Name: Multiple Vendors (VSE CTF) FY24 (23)				Manufacturer Location: Various			
Administrative Leadtime *(in Months)*: 4				Production Leadtime *(in Months)*: 4			

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: PQ070 Shore Tactical Assured Command and Control (STACC)

Manufacturer Information

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Feb 2024				
Delivery Dates			Jun 2024				

Installation Information

Method of Implementation: Method:: Installation Name: PQ070 Shore Tactical Assured Command and Control (STACC)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	127 / 325.975	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	127 / 325.975
FY 2022	- / -	10 / 1.818	5 / 0.618	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	15 / 2.436
FY 2023	- / -	- / -	10 / 1.236	5 / 0.630	0 / 0.000	5 / 0.630	- / -	- / -	- / -	- / -	0 / 0.000	15 / 1.866
FY 2024	- / -	- / -	- / -	6 / 0.757	0 / 0.000	6 / 0.757	5 / 0.637	- / -	- / -	- / -	0 / 0.000	11 / 1.394
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	7 / 0.891	5 / 0.653	- / -	- / -	0 / 0.000	12 / 1.544
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 1.044	5 / 0.666	- / -	0 / 0.000	13 / 1.710
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 1.065	5 / 0.666	0 / 0.000	13 / 1.731
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	13 / 1.731	5 / 0.000	18 / 1.731
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	127 / 325.975	10 / 1.818	15 / 1.854	11 / 1.387	0 / 0.000	11 / 1.387	12 / 1.528	13 / 1.697	13 / 1.731	18 / 2.397	5 / 0.000	224 / 338.387

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	127	-	3	3	4	5	3	3	4	5	1	3	2	5	-	3	4	5	2	3	3	5	2	3	3	4	5	4	5	5	224
Out	127	-	-	3	3	4	5	3	3	4	5	2	3	3	3	3	3	4	3	3	3	3	5	3	3	2	7	4	5	5	224

Method of Implementation: Shore:: Installation Name: VSE Expansion - ASP Infrastructure

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: PQ070 Shore Tactical Assured Command and Control (STACC)

Installation Information

Method of Implementation: Shore:: Installation Name: VSE Expansion - ASP Infrastructure

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2023	- / -	- / -	- / -	1 / 0.765	0 / 0.000	1 / 0.765	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.765
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.765	- / -	- / -	- / -	0 / 0.000	1 / 0.765
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	1 / 0.765	0 / 0.000	1 / 0.765	1 / 0.765	- / -	- / -	- / -	0 / 0.000	2 / 1.530

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Out	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2

Method of Implementation: Shore:: Installation Name: VSE Expansion - CENTRIXS-M NOC Infrastructure

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	1 / 0.510	0 / 0.000	1 / 0.510	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.510
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.536	- / -	- / -	0 / 0.000	1 / 0.536
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	1 / 0.510	0 / 0.000	1 / 0.510	- / -	1 / 0.536	- / -	- / -	0 / 0.000	2 / 1.046

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: PQ070 Shore Tactical Assured Command and Control (STACC)

Installation Information

Method of Implementation: Shore:: Installation Name: VSE Expansion - CENTRIXS-M NOC Infrastructure

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2
Out	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2

Method of Implementation: Shore:: Installation Name: VSE Expansion - CTF VSE/CENTRIXS-M Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	3 / 0.903	0 / 0.000	3 / 0.903	- / -	- / -	- / -	- / -	0 / 0.000	3 / 0.903
FY 2024	- / -	- / -	- / -	7 / 2.107	0 / 0.000	7 / 2.107	3 / 0.921	- / -	- / -	- / -	0 / 0.000	10 / 3.028
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.228	3 / 0.948	- / -	- / -	0 / 0.000	7 / 2.176
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.316	- / -	- / -	0 / 0.000	1 / 0.316
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	10 / 3.010	0 / 0.000	10 / 3.010	7 / 2.149	4 / 1.264	- / -	- / -	0 / 0.000	21 / 6.423

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	3	-	3	4	3	-	2	2	3	-	1	-	-	-	-	-	-	-	-	-	-	21
Out	-	-	-	-	-	-	-	-	-	3	-	2	3	3	2	1	2	2	2	-	1	-	-	-	-	-	-	-	-	-	21

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: PQ070 Shore Tactical Assured Command and Control (STACC)

Installation Information

Method of Implementation: [none specified]:: Installation Name: VSE Expansion - CTF VSE Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 2.915	- / -	- / -	0 / 0.000	11 / 2.915
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 2.915	- / -	- / -	0 / 0.000	11 / 2.915

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	6	-	-	-	-	-	-	-	-	-	11
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	4	-	-	-	-	-	-	-	-	11

Method of Implementation (Organic): Consolidated Prior Year Requirements - Not Installed **Installation Quantity:** 10

Method of Implementation (Organic): VSE - Agile Enclave - Not Installed **Installation Quantity:** 4

Footnotes:

(14) Each quantity represents a single STACC Equipment modernization/capability upgrade to a specific site. The cost of each individual modernization effort varies depending on the complexity of modernization required to mitigate cyber security threats, keep pace with increased computing requirements for hosted applications, and support Department of Defense (DoD) directives to remove End of Life (EOL) Windows Operating Systems software as quickly as feasible. Procurements could include refresh of routers, switches, servers, workstations, multi-level thin clients, firewalls across the five security enclaves or be as complex as a complete network refresh. There are over 1,000 different STACC devices fielded at 68 sites across the globe. Installations can include routers, switches, servers, workstations, multi-level thin clients, firewalls across the five security enclaves. The (11) FY 2024 procurements install over 12 months; (6) install in Q2-Q4 of FY 2024, and the remaining (5) install in Q1 of FY 2025.

(15) Two application service points (ASP's)capacity increases are required to support CTF expansion in Naples and Bahrain Area of Responsibility's .

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 3 / PQ070 Shore Tactical Assured Command and Control (STACC)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(16) FY24 procures hardware for (10) CTFs in Bahrain/Naples AoR.

(17) Design Service Allocation tasking covers Installation Planning and Design: Site Surveys, Ship Change Documents (SCDs), Installation Requirements Drawings (IRDs), System SOVTs, Installation Work Scopes, installation cost estimates, Site Survey Reports, Ship Installation Drawings (SIDs), Installation Design Plans (IDPs), Base Electronic Systems Engineer Plans (BESEPs), and Training System Installation Plans (TSIPs).*** FY24 funds eleven (11) site surveys and eleven (11)Installation Design packages in support of FY24 installations.

(18) Primary engineering and integration efforts for STACC - VSE

(19) Primary engineering and integration efforts for STACC - FLTNOC/TRANSPORT

(20) VSE ASPs are comprised of COTs hardware/software awarded through competitive IDIQ contracts

(21) CENTRIXS-M NOCs are comprised of COTs hardware/software awarded through competitive IDIQ contracts

(22) CTFs are comprised of COTs hardware/software awarded through competitive IDIQ contracts

(23) CTFs are comprised of COTs hardware/software awarded through competitive IDIQ contracts

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 4 / PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	19.950	10.002	10.624	9.037	0.000	9.037	8.869	8.771	8.979	8.388	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	19.950	10.002	10.624	9.037	0.000	9.037	8.869	8.771	8.979	8.388	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**19.950**	**10.002**	**10.624**	**9.037**	**0.000**	**9.037**	**8.869**	**8.771**	**8.979**	**8.388**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Piers/ Enterprise Pier Connectivity Architecture (EPCA) quantities represent the number of operational US NAVY pierside locations that will be "touched" in some capacity each fiscal year. Unit cost fluctuations are a direct result of the various sizes of each location. Location size determines the cost and amount of equipment that needs to be procured and installed.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 4 / PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA)												
A Kits												
Recurring												
1.1.1) Global Piers - Ashore - NonOrganic (24)	6 / 13.544	3 / 6.754	3 / 7.189	3 / 6.027	- / -	3 / 6.027	3 / 5.967	3 / 5.811	3 / 5.857	3 / 4.935	Continuing	Continuing
Subtotal: Recurring	*- / 13.544*	*- / 6.754*	*- / 7.189*	*- / 6.027*	*- / -*	*- / 6.027*	*- / 5.967*	*- / 5.811*	*- / 5.857*	*- / 4.935*	*Continuing*	*Continuing*
Subtotal: PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA)	*6 / 13.544*	*3 / 6.754*	*3 / 7.189*	*3 / 6.027*	*- / -*	*3 / 6.027*	*3 / 5.967*	*3 / 5.811*	*3 / 5.857*	*3 / 4.935*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 13.544*	*- / 6.754*	*- / 7.189*	*- / 6.027*	*- / -*	*- / 6.027*	*- / 5.967*	*- / 5.811*	*- / 5.857*	*- / 4.935*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Piers - Production Support (25)	- / 0.956	- / 0.564	- / 0.575	- / 0.362	- / -	- / 0.362	- / 0.358	- / 0.349	- / 0.351	- / 0.296	Continuing	Continuing
Subtotal: Support	*- / 0.956*	*- / 0.564*	*- / 0.575*	*- / 0.362*	*- / -*	*- / 0.362*	*- / 0.358*	*- / 0.349*	*- / 0.351*	*- / 0.296*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA)	- / 5.450	- / 2.684	- / 2.860	- / 2.648	- / 0.000	- / 2.648	- / 2.544	- / 2.611	- / 2.771	- / 3.157	Continuing	Continuing
Subtotal: Installation	*- / 5.450*	*- / 2.684*	*- / 2.860*	*- / 2.648*	*- / -*	*- / 2.648*	*- / 2.544*	*- / 2.611*	*- / 2.771*	*- / 3.157*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**19.950**	**10.002**	**10.624**	**9.037**	**0.000**	**9.037**	**8.869**	**8.771**	**8.979**	**8.388**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 4 / PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA)

Manufacturer Information

Manufacturer Name: Naval Informaiton Warfare Center (NIWC) — Manufacturer Location: San Diego, CA

Administrative Leadtime *(in Months)*: 2 — Production Leadtime *(in Months)*: 4

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023				
Delivery Dates	Apr 2022	Apr 2023	Apr 2024				

Manufacturer Name: Defense Logixtics Agency — Manufacturer Location: San Diego, CA

Administrative Leadtime *(in Months)*: 2 — Production Leadtime *(in Months)*: 2

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Nov 2023				
Delivery Dates			Jan 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: Global Piers - Ashore

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	6 / 5.450	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 5.450
FY 2022	- / -	3 / 2.684	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 2.684
FY 2023	- / -	- / -	3 / 2.860	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 2.860
FY 2024	- / -	- / -	- / -	3 / 2.648	0 / 0.000	3 / 2.648	- / -	- / -	- / -	- / -	0 / 0.000	3 / 2.648
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.544	- / -	- / -	- / -	0 / 0.000	3 / 2.544
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.611	- / -	- / -	0 / 0.000	3 / 2.611
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 2.771	- / -	0 / 0.000	3 / 2.771
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 3.157	0 / 0.000	3 / 3.157
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	6 / 5.450	3 / 2.684	3 / 2.860	3 / 2.648	0 / 0.000	3 / 2.648	3 / 2.544	3 / 2.611	3 / 2.771	3 / 3.157	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3050 / Ship Communications Automation	**Modification Number / Title:** 4 / PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: PQ020 Piers / Enterprise Pier Connectivity Architecture (EPCA)

Installation Information

Method of Implementation: [none specified]:: Installation Name: Global Piers - Ashore

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	6	-	-	-	3	-	-	3	-	-	-	3	-	-	-	3	-	-	-	3	-	-	-	3	-	-	-	3	-	Cont.	Cont.
Out	3	1	2	-	-	1	2	-	-	1	2	-	-	-	1	2	-	-	1	2	-	-	1	2	-	-	-	-	-	Cont.	Cont.

Footnotes:

(24) In FY24, Piers / Enterprise Pier Connectivity Architecture (EPCA) will procure (3) upgrade systems and install those systems at (3) predetermined Areas of Responsibility (AOR's). EPCA installed units at pier side locations will address pier Information Technology (IT) infrastructure modernization in support of Force Protection matter of urgency. Funds will support pre-installation design, site surveys, procurement of hardware and software, production support, and installation of Piers IT infrastructure. Installation costs vary due to site specific infrastructure, installation equipment required and physical site location.

(25) Piers production support costs have been reduced from FY23 to FY24 and beyond due to efficiencies realized in the contracting strategy and procurement of Commercial off the Shelf (COTS) equipment.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604280N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	282.718	44.447	54.140	14.107	0.000	14.107	9.342	8.185	8.300	9.006	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	282.718	44.447	54.140	14.107	0.000	14.107	9.342	8.185	8.300	9.006	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**282.718**	**44.447**	**54.140**	**14.107**	**0.000**	**14.107**	**9.342**	**8.185**	**8.300**	**9.006**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.150	0.033	0.021	-	0.021	0.069	0.022	0.035	0.037	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[P5 / NU019 BISOG Tactical Communications]: Blue in Support of Green (BISOG) Tactical Communications. Enhanced Position Location Reporting System - Data Radio (EPLRS-DR)/Enhanced Man-Pack UHF Tactical (EMUT) provides secure Anti-Jam (AJ), Ultra High Frequency (UHF) (420-450 MHz) and Line of Sight (LOS) data communications in support of amphibious operations at throughputs of up to 54 Kbps. EPLRS-DR provides embedded Position Location Information (PLI) between shipboard networks and the shore-based Marine Tactical Data Network (TDN) and the Army Tactical Internet (TI). Single Channel Ground and Airborne Radio System (SINCGARS) provides secure, anti-jam very high frequency (VHF) voice and data communications. High Frequency Shipboard Automatic Link Extension Radio (HFSAR) is a USMC support capability required on Amphibious platforms. HFSAR provides ship-to-mobile unit HF ALE capable system for rapid setup of critical LOS and over-the-horizon (OTH) communications in support of afloat and ashore intelligence and reconnaissance units.

[P5 / NU790 Navy Expeditionary C4I]: Navy Expeditionary Command, Control, Communications, Computers, & Intelligence (C4I): Executes procurements for outfitting Table of Allowance (TOA) buy lists within the Naval Special Warfare (NSW) forces, ensuring common communications and Automated Data Processing (ADP) solutions are being coordinated, tracked, and procured. Funding reflects establishment, approval and procurement of NSW service-common TOA to begin correcting shortfalls and bringing NSW forces into alignment with required outfitting standards in accordance with SOCOM-USN Memorandum of Agreement.

[P3A / Battle Force Tactical Network]: Battle Force Tactical Network (BFTN): This system is formally specified by both Fleet Commanders as a threshold capability for global maritime command control and communications in a Distributed Maritime Environment to execute current warfighting plans. Battle Force Tactical Network (BFTN) enables delivery of IP based collaboration services over legacy High Frequency (HF) assets. The system provides an interoperable, low data rate, multi-node, Beyond Line of Sight (BLOS) tactical edge networking capability using existing HF radio infrastructure. BFTN provides data path backbone for both airborne and afloat forces and increased data exchange with Allied Coalition forces. BFTN provides National, Allied, and Coalition maritime units with a medium band IP-based, tactical ship-to-ship at-sea networking capability, using legacy half-duplex Ultra High Frequency (UHF) LOS and provides the only Allied Coalition HF/UHF Comms in a satellite denied/degraded situation. BFTN will provide a bridge between legacy radio systems and future emerging wideband networking technologies.

BFTN+: The BFTN+ system provides increased capabilities within a new HF modernized architecture in a phased approach. BFTN+ builds upon the BFTN capability integrating upgraded HF radios, modern ancillary equipment, and new protected waveforms to provide an "Always On/Always Connected" (AOAC) automation required to achieve an RC3 capability in contested and congested environments. Ships and submarines will monitor HF broadcasts and can exchange voice and command and control data traffic (i.e. naval messages, chat, and email) with other platforms and coalition partners as designed in the current BFTN system. With incorporation of advanced automation and data management technology, BFTN+ will overcome historical challenges attributable to HF propagation effects to ensure links are always on and always connected by adjusting to dynamic environmental conditions. The BFTN+ component of BFTN will complete the HF command and control loop between strike groups at sea and commanders ashore.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0604280N
Line Item MDAP/MAIS Code: N/A		

BFTN+ provides system enhancements to permit robust operations, including higher data rates and advanced automatic link establishment at ELOS ranges; and resolves BFTN 3-node HF deficiencies identified in the 2019 FOT&E/Tech Evaluation. BFTN+ will be fielded in a phased approach to allow for critical hardware upgrades to be fielded now with the full capability fielded in FY26 after waveform development completes. BFTN+ Increment 1, Phase 1: BFTN will deliver software defined radios (SDRs) to replace 2-channels of legacy HF equipment for platforms without modern SDRs. Phase 1 will add modern HF equipment necessary to implement full Inc 1 phase 2 capabilities while also addressing HF legacy sustainment issues to critical components that will be shared with BFTN+. In addition, Inc 1 will provide upgrades to shore HF broadcast capabilities to enable BFTN+ non-combat, normal operations.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0604280N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Communications Items under $5M	P-5a			- / 217.376	- / 16.631	- / 20.027	- / 14.107	- / 0.000	- / 14.107
P-3a	1 / Battle Force Tactical Network (TBD)				- / 65.342	- / 27.816	- / 34.113	- / 0.000	- / 0.000	- / 0.000
P-40	**Total Gross/Weapon System Cost**				**- / 282.718**	**- / 44.447**	**- / 54.140**	**- / 14.107**	**- / 0.000**	**- / 14.107**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Communications Items under $5M	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / Battle Force Tactical Network (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 127.271
P-40	**Total Gross/Weapon System Cost**				**- / 9.342**	**- / 8.185**	**- / 8.300**	**- / 9.006**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

NU295 - BFTN System Enhancement (BFTN+): Beginning in FY24, the BFTN+ program was realigned from OPN LI 3057 to OPN LI 2437, which is classified SECRET//NOFORN and submitted annually to Congress in the classified budget justification books. Funding remains under this BLI for FY22 and FY23.

NU019 - BISOG Tactical Communications: FY24 funding provides critical communications equipment to the USMC to meet afloat Command, Control, Communications, and Computers (C4) requirements. FY24 funding will provide BISOG Tactical Communications which includes Enhanced Position Location Radio System (EPLRS) Data Radio (DR), Mobile User Objective System (MUOS) Functional Terminal (MFT), Landing Force Iridium (LFI), and Tri-Band Antenna upgrade. Additionally, BISOG Tactical Communications include Single Channel Ground and Airborne Radio System (SINCGARS) and High Frequency Shipboard Automatic Link Extension Radio (HFSAR). EPLRS and SINCGARS modernization aligns with the Navy's foundational priorities of readiness and capabilities as outlined in the Chief of Naval Operations 2022 Navigation Plan. Consolidating these systems under BISOG Tactical Communications will better allow the United States Navy to meet the requirements called out in the Afloat Marine Air Ground Task Force (MAGTF) C4 Required Capabilities Letter (AMC4RC) which calls out the major requirements of the USMC afloat in order to fight the battle from sea. These systems combined are integral in a Distributed Maritime Environment aboard Amphibious USN ships. Funding in FY24 includes procurement of 1 VRC-250 Upgrade Kit, 11 Tri-Band Antennas, 10 MUOS Functional Terminals, and 8 Landing Force Iridium systems to be installed in FY25. Funding in FY24 also includes installation of 3 VRC-250 Upgrade Kits, 8 Tri Band Antennas, 8 MUOS Functional Terminals, and 6 Landing Force Iridium Systems for Marine Embarked Units (MEU), that were procured in FY23, to support HF/UHF communications between the Landing Force Operations Center (LFOC) and Marines ashore, and to ensure interoperability between the Navy and Marine Corps.

NU790 - FY24 funding provides mission critical communications equipment, to include portable hand held radios, man pack radios, secure satellite telephones, unmanned air vehicle (UAV) communication devices, ruggedized
laptops, and encryption-decryption devices to US Navy Sea, Air, and Land (SEAL) combat operations in forward deployed contingency locations. This equipment provides real-time, actionable, time-sensitive transmission and
reception of mission orders, intelligence, action and engagement status reporting, imaging, and target specification simultaneously in multiple theaters throughout the world. The disaggregated nature of current operations has smaller
SEAL Teams deployed across the Geographic Combatant Commanders (GCC) conducting combat or combat advise operations in austere environments with little-to-no established DoD infrastructure. This equipment supports NSW

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 11: Shipboard Communications	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0604280N
Line Item MDAP/MAIS Code: N/A		

core mission requirements and is essential to the readiness and battlefield effectiveness of NSW in winning the current fight against extremist elements. FY24 decrease associated with reduction of communication equipment and ruggedized laptops.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	P-1 Line Item Number / Title: 3057 / Communications Items under $5M	Item Number / Title [DODIC]: 1 / Communications Items under $5M
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	217.376	16.631	20.027	14.107	0.000	14.107
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	217.376	16.631	20.027	14.107	0.000	14.107
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**217.376**	**16.631**	**20.027**	**14.107**	**0.000**	**14.107**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - NU019 BISOG Tactical Communications Cost																		
Non Recurring Cost																		
1.1.1) BISOG VRC-250 Upgrade(†) (1)	76.914	70	5.384	48.547	2	0.097	50.000	3	0.150	51.100	1	0.051	-	-	0.000	51.100	1	0.051
1.1.2) BISOG Tri Band Antenna(†)	4.167	24	0.100	3.499	12	0.042	3.600	8	0.029	3.679	11	0.040	-	-	0.000	3.679	11	0.040
1.1.3) BISOG MUOS Funtional Terminal(†)	33.050	20	0.661	33.935	12	0.407	35.000	8	0.280	35.770	10	0.358	-	-	0.000	35.770	10	0.358
1.1.4) BISOG Landing Force Iridium(†)	4.067	15	0.061	4.143	9	0.037	4.235	6	0.025	4.328	8	0.035	-	-	0.000	4.328	8	0.035
Subtotal: Non Recurring Cost	-	-	*6.206*	-	-	*0.583*	-	-	*0.484*	-	-	*0.484*	-	-	*0.000*	-	-	*0.484*
Subtotal: Hardware - NU019 BISOG Tactical Communications Cost	**-**	**-**	***6.206***	**-**	**-**	***0.583***	**-**	**-**	***0.484***	**-**	**-**	***0.484***	**-**	**-**	***0.000***	**-**	**-**	***0.484***
Hardware - NU790 Navy Expeditionary C4I Cost																		
Recurring Cost																		
2.1.1) Navy Expeditionary C4I Procurement (2)	-	-	45.507	-	-	13.885	-	-	16.312	-	-	10.555	-	-	0.000	-	-	10.555
Subtotal: Recurring Cost	-	-	*45.507*	-	-	*13.885*	-	-	*16.312*	-	-	*10.555*	-	-	*0.000*	-	-	*10.555*
Subtotal: Hardware - NU790 Navy Expeditionary C4I Cost	**-**	**-**	***45.507***	**-**	**-**	***13.885***	**-**	**-**	***16.312***	**-**	**-**	***10.555***	**-**	**-**	***0.000***	**-**	**-**	***10.555***

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	P-1 Line Item Number / Title: 3057 / Communications Items under $5M	Item Number / Title [DODIC]: 1 / Communications Items under $5M
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Support - NU777 Installations (NU777) Cost																		
3.1) BISOG Installations (NU777)	-	-	5.102	-	-	1.306	-	-	2.349	-	-	2.195	-	-	0.000	-	-	2.195
Subtotal: Support - NU777 Installations (NU777) Cost	**-**	**-**	***5.102***	**-**	**-**	***1.306***	**-**	**-**	***2.349***	**-**	**-**	***2.195***	**-**	**-**	***0.000***	**-**	**-**	***2.195***
Support - NU777 DSA Cost																		
4.1) BISOG DSA (3)	-	-	2.016	-	-	0.539	-	-	0.520	-	-	0.629	-	-	0.000	-	-	0.629
Subtotal: Support - NU777 DSA Cost	**-**	**-**	***2.016***	**-**	**-**	***0.539***	**-**	**-**	***0.520***	**-**	**-**	***0.629***	**-**	**-**	***0.000***	**-**	**-**	***0.629***
Support - NU555 Production Support Cost																		
5.1) BISOG Production Support	-	-	0.644	-	-	0.035	-	-	0.029	-	-	0.029	-	-	0.000	-	-	0.029
5.2) Navy Expeditionary C4I Production Support	-	-	3.931	-	-	0.283	-	-	0.333	-	-	0.215	-	-	0.000	-	-	0.215
5.3) Consolidated Prior Year Requirements (4)	-	-	153.970	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Support - NU555 Production Support Cost	**-**	**-**	***158.545***	**-**	**-**	***0.318***	**-**	**-**	***0.362***	**-**	**-**	***0.244***	**-**	**-**	***0.000***	**-**	**-**	***0.244***
Gross/Weapon System Cost	**-**	**-**	**217.376**	**-**	**-**	**16.631**	**-**	**-**	**20.027**	**-**	**-**	**14.107**	**-**	**-**	**0.000**	**-**	**-**	**14.107**

(†) indicates the presence of a P-5a

Footnotes:

(1) Funding in FY24 includes procurement of 1 VRC-250 Upgrade Kit, 11 Tri-Band Antennas, 10 MUOS Functional Terminals, and 8 Landing Force Iridium systems to be installed in FY25. Funding in FY24 also includes installation of 3 VRC-250 Upgrade Kits, 8 Tri Band Antennas, 8 MUOS Functional Terminals, and 6 Landing Force Iridium Systems for Marine Expeditionary Units (MEU), to support HF/UHF communications between the Landing Force Operations Center (LFOC) and Marines ashore, and to ensure interoperability between the Navy and Marine Corps. The quantity procured and installed (in any given year) is determined by the fleet's demand signal and platform availability and leverages the ISEA to combine installs.

(2) Quantities are not provided based on thousands of various communication and Automated Data Processing (ADP) equipment being procured in support of correcting Naval Special Warfare (NSW) Table of Allowances (TOA) equipment shortfalls. Navy Expeditionary Command, Control, Communications, Computers, & Intelligence (C4I): Executes procurements for outfitting Table of Allowance (TOA) buy lists within the Naval Special Warfare (NSW) forces, ensuring common communications and Automated Data Processing (ADP) solutions are being coordinated, tracked, and procured. FY24 decrease hinders establishment, approval and procurement of NSW service common TOA to correct shortfalls and bring NSW forces into alignment with required outfitting standards in accordance with SOCOM-USN Memorandum of Agreement.

(3) Pre-Installation DSA are required in order to complete ship check and installation drawings for installation planning and is performed 6-12 months prior to installation start. Post Installation DSA support requirements include drawings closeout. DSA costs will fluctuate each FY as it is a factor of the number of installations in any given fiscal year.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M	**Item Number / Title [DODIC]:** 1 / Communications Items under $5M
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(4) Consolidated prior years for PORT RAD - Hand Held Procurement, Hydra Procurement, NAVSEA HYDRA Requirement, DAMA IW Procurement, Hydra Installations FMP, HF SAR Installations FMP, PORT NSW Handheld and Man Pack Procurements, NAVSEA ESB SOF Procurements and Installation, EPR Crypto Mod Hand Held, EPR Crypto Mod Manpack, BISOG Non-Recurring Equipment, and PRP Production Support.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	P-1 Line Item Number / Title: 3057 / Communications Items under $5M	Item Number / Title [DODIC]: 1 / Communications Items under $5M

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) BISOG VRC-250 Upgrade		2022	Harris Corporation / ROCHESTER, NY	C / FFP	NAVWAR	May 2022	Oct 2022	2	48.547	Y		Nov 2021
1.1.1) BISOG VRC-250 Upgrade		2023	Harris Corporation / ROCHESTER, NY	C / FFP	NAVWAR	May 2023	Oct 2023	3	50.000	Y		Nov 2022
1.1.1) BISOG VRC-250 Upgrade		2024	Harris Corporation / ROCHESTER, NY	C / FFP	NAVWAR	May 2024	Oct 2024	1	51.100	Y		Nov 2023
1.1.2) BISOG Tri Band Antenna		2022	Harris Corporation / Rochester, NY	C / FFP	NAVWAR	May 2022	Oct 2022	12	3.499	Y		Nov 2021
1.1.2) BISOG Tri Band Antenna		2023	Harris Corporation / Rochester, NY	C / FFP	NAVWAR	May 2023	Oct 2023	8	3.600	Y		Nov 2022
1.1.2) BISOG Tri Band Antenna		2024	Harris Corporation / Rochester, NY	C / FFP	NAVWAR	May 2024	Oct 2024	11	3.679	Y		Nov 2023
1.1.3) BISOG MUOS Funtional Terminal		2022	Harris Corporation / Rochester, NY	C / FFP	NAVWAR	May 2022	Oct 2022	12	33.935	Y		Nov 2021
1.1.3) BISOG MUOS Funtional Terminal		2023	Harris Corporation / Rochester, NY	C / FFP	NAVWAR	May 2023	Oct 2023	8	35.000	Y		Nov 2022
1.1.3) BISOG MUOS Funtional Terminal		2024	Harris Corporation / Rochester, NY	C / FFP	NAVWAR	May 2024	Oct 2024	10	35.770	Y		Nov 2023
1.1.4) BISOG Landing Force Iridium		2022	Harris Corporation / Rochester, NY	C / FFP	NAVWAR	May 2022	Oct 2022	9	4.143	Y		Nov 2021
1.1.4) BISOG Landing Force Iridium		2023	Harris Corporation / Rochester, NY	C / FFP	NAVWAR	May 2023	Oct 2023	6	4.235	Y		Nov 2022
1.1.4) BISOG Landing Force Iridium		2024	Harris Corporation / Rochester, NY	C / FFP	NAVWAR	May 2024	Oct 2024	8	4.328	Y		Nov 2023

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M	**Modification Number / Title:** 1 / Battle Force Tactical Network
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	65.342	27.816	34.113	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	127.271
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	65.342	27.816	34.113	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	127.271
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**65.342**	**27.816**	**34.113**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**127.271**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

BFTN System Enhancement (BFTN+): Beginning in FY24, the BFTN+ program was realigned from OPN LI 3057 to OPN LI 2437, and is classified SECRET//NOFORN and submitted annually to Congress in the classified budget justification books.

Battle Force Tactical Network (BFTN): This system is formally specified by both Fleet Commanders as a threshold capability for global maritime command, control, and communications in a Distributed Maritime Environment to execute current warfighting plans. Battle Force Tactical Network (BFTN) enables delivery of IP-based collaboration services over legacy High Frequency (HF) assets. The system provides an interoperable, low data rate, multi-node, Beyond Line of Sight (BLOS) tactical edge networking capability using existing HF radio infrastructure. BFTN provides data path backbone for both airborne and afloat forces and increased data exchange with Allied Coalition forces. BFTN provides National, Allied, and Coalition maritime units with a medium band IP-based, tactical ship-to-ship at-sea networking capability, using legacy half-duplex Ultra HF (UHF) LOS and provides the only Allied Coalition HF/UHF Comms in a satellite denied/degraded situation. BFTN will provide a bridge between legacy radio systems and future emerging wideband networking technologies.

BFTN+: The BFTN+ system provides increased capabilities within a new HF modernized architecture in a phased approach. BFTN+ builds upon the BFTN capability integrating upgraded HF radios, modern ancillary equipment, and new protected waveforms to provide an "Always On/Always Connected" (AOAC) automation required to achieve an RC3 capability in contested and congested environments. Ships and submarines will monitor HF broadcasts and can exchange voice and command and control data traffic (i.e. naval messages, chat, and email) with other platforms and coalition partners as designed in the current BFTN system. With incorporation of advanced automation and data management technology, BFTN+ will overcome historical challenges attributable to HF propagation effects to ensure links are always on and always connected by adjusting to dynamic environmental conditions. The BFTN+ component of BFTN will complete the HF command and control loop between strike groups at sea and commanders ashore. BFTN+ provides system enhancements to permit robust operations, including higher data rates and advanced automatic link establishment at ELOS ranges; and resolves BFTN 3-node HF deficiencies identified in the 2019 FOT&E/Tech Evaluation. BFTN+ will be fielded in a phased approach to allow for critical hardware upgrades to be fielded now with the full capability fielded in FY26 after waveform development completes. BFTN+ Increment 1, Phase 1: BFTN will deliver software defined radios (SDRs) to replace 2-channels of legacy HF equipment for platforms without modern SDRs. Phase 1 will add modern HF equipment necessary to implement full Inc 1 phase 2 capabilities while also addressing HF legacy sustainment issues to critical components that will be shared with BFTN+. In addition, Inc 1 will provide upgrades to shore HF broadcast capabilities to enable BFTN+ non-combat, normal operations.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M	**Modification Number / Title:** 1 / Battle Force Tactical Network
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Battle Force Tactical Network												
B Kits												
Recurring												
1.1.1) BFTN Alpha Variant Procurement - NonOrganic (5)	72 / 17.827	10 / 2.950	15 / 4.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	97 / 25.277
1.1.2) BFTN+ INC1 Phase 1 HF Terminal & Terminal Integration Kit - NonOrganic (6)	6 / 3.324	6 / 3.390	20 / 11.528	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	32 / 18.242
1.1.3) BFTN+ INC1 Phase 2 Data Management Rack - Surface Procurement - NonOrganic (7)	- / -	- / -	6 / 4.307	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 4.307
1.1.4) BFTN Engineering Change Order - Organic (8)	- / 15.939	- / 2.364	- / 2.067	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 20.370
1.1.5) BFTN+ Non-Recurring Equipment Costs - Organic (9)	- / 4.227	- / 6.658	- / 1.182	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 12.067
Subtotal: Recurring	*- / 41.317*	*- / 15.362*	*- / 23.584*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 80.263*
Subtotal: Battle Force Tactical Network	*78 / 41.317*	*16 / 15.362*	*41 / 23.584*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*135 / 80.263*
Subtotal: Procurement, All Modification Items	*- / 41.317*	*- / 15.362*	*- / 23.584*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 80.263*
Support *(All Modification Items)*												
2.1) BFTN/BFTN+ Production Support (10)	- / 2.414	- / 0.751	- / 1.187	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 4.352
2.2) BFTN/BFTN+ Design Services Agency (11)	- / 6.380	- / 2.083	- / 3.262	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 11.725
Subtotal: Support	*- / 8.794*	*- / 2.834*	*- / 4.449*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 16.077*
Installation												
Modification Item 1 of 1: Battle Force Tactical Network	- / 15.231	- / 9.620	- / 6.080	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 30.931
Subtotal: Installation	*- / 15.231*	*- / 9.620*	*- / 6.080*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 30.931*
Total												
Total Cost (Procurement + Support + Installation)	**65.342**	**27.816**	**34.113**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**127.271**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M	**Modification Number / Title:** 1 / Battle Force Tactical Network
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Battle Force Tactical Network

Manufacturer Information

Manufacturer Name: L3 TECHNOLOGIES INC	Manufacturer Location: CAMDEN, NJ
Administrative Leadtime *(in Months)*: 4	Production Leadtime *(in Months)*: 9

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Feb 2022	Feb 2023					
Delivery Dates	Nov 2022	Nov 2023					

Installation Information

Method of Implementation: [none specified]:: Installation Name: BFTN Alpha Variant Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	52 / 15.231	20 / 7.400	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	72 / 22.631
FY 2022	- / -	- / -	10 / 3.800	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 3.800
FY 2023	- / -	- / -	- / -	15 / 0.000	0 / 0.000	15 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	15 / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	52 / 15.231	20 / 7.400	10 / 3.800	15 / 0.000	0 / 0.000	15 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	97 / 26.431

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	52	5	5	5	5	3	3	4	-	5	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97
Out	51	1	5	5	5	5	3	3	4	-	5	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97

Method of Implementation: [none specified]:: Installation Name: BFTN+ INC1 Phase 1 HF Terminal & Terminal Integration Kit

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	6 / 2.220	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 2.220

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M	**Modification Number / Title:** 1 / Battle Force Tactical Network
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Battle Force Tactical Network

Installation Information

Method of Implementation: [none specified]:: Installation Name: BFTN+ INC1 Phase 1 HF Terminal & Terminal Integration Kit

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	6 / 2.280	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 2.280
FY 2023	- / -	- / -	- / -	20 / 0.000	0 / 0.000	20 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	20 / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	6 / 2.220	6 / 2.280	20 / 0.000	0 / 0.000	20 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	32 / 4.500

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	2	2	2	-	2	2	2	-	5	5	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32
Out	-	-	2	2	2	-	2	2	2	-	5	5	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32

Method of Implementation: [none specified]:: Installation Name: BFTN+ INC1 Phase 2 Data Management Rack - Surface Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	6 / 0.000	0 / 0.000	6 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	6 / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	6 / 0.000	0 / 0.000	6 / 0.000	- / -	- / -	- / -	- / -	0 / 0.000	6 / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 11	**P-1 Line Item Number / Title:** 3057 / Communications Items under $5M	**Modification Number / Title:** 1 / Battle Force Tactical Network
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: Battle Force Tactical Network

Installation Information

Method of Implementation: [none specified]:: Installation Name: BFTN+ INC1 Phase 2 Data Management Rack - Surface Procurement

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Out	-	-	-	-	-	-	-	-	-	-	-	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6

Footnotes:

(5) BFTN identified an FY21 install quantity discrepancy after PB23 submission, and the quantity has been corrected to reflect 13 (vice 10) in the PY totals. Beginning in FY24, the BFTN Alpha Variant Procurement was realigned from OPN BLI 3057 to BLI 2437, is classified SECRET/NOFORN and is submitted annually to Congress in the classified budget justification books. The 15 units procured in FY23 are being installed in FY24, and are now portrayed in OPN LI 2437.

(6) Beginning in FY24, the BFTN+ INC1 Phase 1 HF Terminal & Terminal Integration Kit was realigned from OPN BLI 3057 to BLI 2437, is classified SECRET/NOFORN and is submitted annually to Congress in the classified budget justification books. The 20 units procured in FY23 are being installed in FY24, and are now portrayed in OPN LI 2437.

(7) Beginning in FY24, the BFTN+ INC1 Phase 2 Data Management Rack - Surface Procurement was realigned from OPN BLI 3057 to BLI 2437, is classified SECRET/NOFORN and is submitted annually to Congress in the classified budget justification books. The 6 units procured in FY23 are being installed in FY24, and are now portrayed in OPN LI 2437.

(8) Beginning in FY24, the BFTN Engineering Change Order was realigned from OPN BLI 3057 to BLI 2437, is classified SECRET/NOFORN and is submitted annually to Congress in the classified budget justification books.

(9) Beginning in FY24, the BFTN+ Non-Recurring Equipment Costs was realigned from OPN BLI 3057 to BLI 2437, is classified SECRET/NOFORN and is submitted annually to Congress in the classified budget justification books.

(10) Beginning in FY24, the BFTN/BFTN+ Production Support was realigned from OPN BLI 3057 to BLI 2437, is classified SECRET/NOFORN and is submitted annually to Congress in the classified budget justification books.

(11) Beginning in FY24, the BFTN/BFTN+ Design Services Agency was realigned from OPN BLI 3057 to BLI 2437, is classified SECRET/NOFORN and is submitted annually to Congress in the classified budget justification books.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 12: Submarine Communications	**P-1 Line Item Number / Title:** 3107 / Submarine Broadcast Support

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	227.653	47.579	91.150	73.791	0.000	73.791	67.102	66.196	45.119	46.126	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	227.653	47.579	91.150	73.791	0.000	73.791	67.102	66.196	45.119	46.126	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**227.653**	**47.579**	**91.150**	**73.791**	**0.000**	**73.791**	**67.102**	**66.196**	**45.119**	**46.126**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.151	0.094	0.163	-	0.163	0.127	0.047	0.039	0.041	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The details of this Budget Line Item are classified SECRET//NOFORN and are submitted to Congress in the classified budget justification books.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 12: Submarine Communications	**P-1 Line Item Number / Title:** 3107 / Submarine Broadcast Support	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Submarine Broadcast Support				- / 227.653	- / 47.579	- / 91.150	- / 73.791	- / -	- / 73.791
P-40	**Total Gross/Weapon System Cost**				**- / 227.653**	**- / 47.579**	**- / 91.150**	**- / 73.791**	**- / 0.000**	**- / 73.791**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The details of this Budget Line Item are classified SECRET//NOFORN and are submitted to Congress in the classified budget justification books.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 12	**P-1 Line Item Number / Title:** 3107 / Submarine Broadcast Support	**Aggregated Items Title:** Submarine Broadcast Support

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
1) Submarine Broadcast Support																				
1.1) Submarine Broadcast Support	A		-	-	227.653	-	-	47.579	-	-	91.150	-	-	73.791	-	-	-	-	-	73.791
Subtotal: 1) Submarine Broadcast Support			**-**	**-**	***227.653***	**-**	**-**	***47.579***	**-**	**-**	***91.150***	**-**	**-**	***73.791***	**-**	**-**	**-**	**-**	**-**	***73.791***
Total			**-**	**-**	**227.653**	**-**	**-**	**47.579**	**-**	**-**	**91.150**	**-**	**-**	**73.791**	**-**	**-**	**-**	**-**	**-**	**73.791**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 12: Submarine Communications	**P-1 Line Item Number / Title:** 3130 / Submarine Communication Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1,205.507	64.642	74.569	83.178	0.000	83.178	79.531	79.629	80.258	81.905	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1,205.507	64.642	74.569	83.178	0.000	83.178	79.531	79.629	80.258	81.905	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1,205.507**	**64.642**	**74.569**	**83.178**	**0.000**	**83.178**	**79.531**	**79.629**	**80.258**	**81.905**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.930	1.060	2.146	-	2.146	2.137	1.833	1.098	0.773	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The details of this Budget Line Item are classified SECRET//NOFORN and are submitted to Congress in the classified budget justification books.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 12: Submarine Communications	**P-1 Line Item Number / Title:** 3130 / Submarine Communication Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Submarine Communication Equipment				- / 1,205.507	- / 64.642	- / 74.569	- / 83.178	- / -	- / 83.178
P-40	**Total Gross/Weapon System Cost**				**- / 1,205.507**	**- / 64.642**	**- / 74.569**	**- / 83.178**	**- / 0.000**	**- / 83.178**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The details of this Budget Line Item are classified SECRET//NOFORN and are submitted to Congress in the classified budget justification books.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 12	**P-1 Line Item Number / Title:** 3130 / Submarine Communication Equipment	**Aggregated Items Title:** Submarine Communication Equipment (1)

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
1) Submarine Communication Equipment																				
1.1) Submarine Communication Equipment (2)	A		-	-	1,205.507	-	-	64.642	-	-	74.569	-	-	83.178	-	-	-	-	-	83.178
Subtotal: 1) Submarine Communication Equipment			**-**	**-**	***1,205.507***	**-**	**-**	***64.642***	**-**	**-**	***74.569***	**-**	**-**	***83.178***	**-**	**-**	**-**	**-**	**-**	***83.178***
Total			**-**	**-**	**1,205.507**	**-**	**-**	**64.642**	**-**	**-**	**74.569**	**-**	**-**	**83.178**	**-**	**-**	**-**	**-**	**-**	**83.178**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

(1) The details of this Budget Line Item are classified SECRET//NOFORN and are submitted to Congress in the classified budget justification books.

(2) BSO 15 controls included in FYDP total cost controls

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 13: Satellite Communications	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 237

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1,421.867	30.136	39.827	72.871	0.000	72.871	69.913	49.869	35.305	36.763	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1,421.867	30.136	39.827	72.871	0.000	72.871	69.913	49.869	35.305	36.763	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1,421.867**	**30.136**	**39.827**	**72.871**	**0.000**	**72.871**	**69.913**	**49.869**	**35.305**	**36.763**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.469	0.264	0.163	-	0.163	0.126	0.170	-	-	-	1.192
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The FY 2024 funding request is an increase of $33.044 million to procure additional Commercial Broadband Satellite Program (CBSP) Unit Level Variant (ULV) terminals (Qty 11) and install Unit Level Variant (ULV) Terminals (Qty 9) to meet DDG ship class fielding requirements. Additionally, the increase supports the procurement and installations of Satellite Terminal (transportable) Non-Geostationary (STtNG) terminals (Qty 35).

The Satellite Communications (SATCOM) Systems line provides funding for the procurement of shipboard terminal equipment for ship-to-ship, ship-to-shore, and ship-to-aircraft tactical communications via earth orbiting relay satellites. This includes Radio Frequency (RF) equipment and baseband equipment assembled and grouped into systems and subsystems structured to address specific naval communications requirements. These systems provide modem processors and peripheral equipment that control the RF links for message traffic, direct data transfer and secure voice communications. They are selected and oriented by communications traffic levels, types of communications, and operational missions. Commercial Broadband Satellite Program (CBSP) technical refresh of system modems and Ka Kits will directly support Assured Command and Control (AC2) posture, SATCOM reliability, space resiliency via band diversity, and redundancy. AC2 modems enable the use of Wideband Global Satellite (WGS) X-Band (ship/ submarine transmit and receive) and Ka-band (shore receive and transmit) resources to maintain link connectivity to provide assured access to mission critical communications in Anti-Access Anti-Denial (A2AD) jamming environments.

Demand Assigned Multiple Access (DAMA)/ Miniaturized DAMA: Ultra High Frequency (UHF) DAMA and MINI DAMA systems supports Command and Control (C2) voice and data communications over Satellite and Line of Sight (LOS) links. UHF SATCOM systems are formally specified as a threshold capability for global maritime command control and communications in a Distributed Maritime Environment to execute current warfighting plans and are required for National Command and Control capability. Cryptographic modernization is required for UHF systems to continue use and enable operations (e.g. Ballistic Missile Defense (BMD), Tomahawk Strike Network (TSN) and Intelligence Broadcast Services (IBS)). Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6510.02E directs the military Services to modernize National Security Agency (NSA) certified cryptographic products and algorithms prior to published Last Year of Use dates to ensure secure, interoperable information sharing. NSA's published de-certification and cease key dates for crypto algorithm contained in UHF legacy communications systems. Funding provides for the engineering, testing, procurement, and product integration, including Thornton TRANSEC Algorithm Modernization (TTAM) efforts. TTAM modernization of UHF DAMA and MINI DAMA systems aligns with the Navy's foundational priorities of readiness and capabilities as outlined in the Chief of Naval Operations 2022 Navigation Plan.

[P5 / (NR112) CBSP Ka Kits]: CBSP KA Kits: Current National focus is on highly contested environments and has highlighted a growing need of protected communications, specifically in a satellite denied environment. Assured Command and Control (AC2) Ka Band Kits will increase band diversity and access to Wideband Global SATCOM (WGS) and mitigates risk of loss of Beyond Line of Sight (BLOS)

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 13: Satellite Communications	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: 237		

wideband communications in a SATCOM-denied environment for the CBSP Program. With this capability, CBSP will be able to reduce risk of loss of C2 communications on Unit Level Variant (ULV)/ Field Level Variant (FLV) class Combatant ships in a denied environment which would assure Command and Control (C2) including ISR, NIPR/SIPR, VTC, and other critical capabilities.

[P3A / (NR117) Global Broadcast Service (GBS)]: GLOBAL BROADCAST SERVICE (GBS - NR117): GBS is a Joint Military Satellite Communications (MILSATCOM) program with the Air Force as Executive Agent for all services. GBS provides a continuous, high speed, one way information flow of high volume data to units ashore, afloat or special operations. GBS supports routine operations, training and military exercises, special activities, crises, situational awareness, weapons targeting, and reconnaissance. Deployment of GBS internet protocol (IP) terminals will allow expanded use of military intelligence collection in a broader spectrum using MILSATCOM architecture. The Navy GBS Split IP effort enables near-real-time duplex asymmetric communications connectivity to ships/subs. GBS plays a pivotal role to support the Assured Command and Control (AC2) environment.

[P3A - 2 / (NR112) Commercial Broadband Satellite program (CBSP) - Afloat]: CBSP is the U.S. Navy Commercial SATCOM program that provides the Navy's access to geostationary and Non-Geostationary Satellite Orbit (NGSO) constellations. CBSP provides the only source of wideband SATCOM to Patrol Coastal (PC) and Mine Countermeasure (MCM) Ships, diversity for MILSATCOM on Unit Level Variant (ULV) ships, and augments MILSATCOM on Force Level Variant (FLV) ships. CBSP will support the procurement and installation of a commercial terminal and service architecture that significantly increase data throughput, Navy A2AD posture, and communication reliability. CBSP also increases space resiliency by providing band diversity, assured access, and redundancy for MILSATCOM. Included in the program are Small Ship Variant (SSV - Patrol Coastal and Mine Countermeasure Ships), Unit Level Variant (ULV - including Guided Missile Destroyers and Guided Missile Frigates), and Force Level Variant (FLV - large combatant ships including Carriers). Satellite Terminal (transportable) Non-Geostationary (STtNG) is variant of CBSP which fields a Commercial Off the Shelf terminal and militarized common interface system to access Non-Geostationary Satellite Orbits (NGSO) Proliferated Low/Medium/High Earth Orbit (PLEO/MEO/HEO) constellations. STtNG augments the CBSP family of terminals, taking advantage of additional commercial space segments, to provide a simultaneous multiband failover capability to current MIL/COMSATCOM systems. Quantities reflected in the budget enable a flexible architecture, initially with Ku band, and includes the planned addition of a Ka band antenna. STtNG falls under the CBSP CPD dated 27 Apr 2009 and has been validated by Fleet war gaming exercises. STtNG supports the Naval Operational Architecture (NOA) by adding satellite frequency diversity through a transportable system which will support current and future modems.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 13: Satellite Communications	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems

ID Code (A=Service Ready, B=Not Service Ready): A | **Program Elements for Code B Items:** N/A | **Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: 237

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Satellite Communications Systems	P-5a			- / 986.545	- / 1.196	- / 0.000	- / 0.255	- / 0.000	- / 0.255
P-3a	1 / (NR117) Global Broadcast Service (GBS) (TBD)				- / 262.584	- / 2.406	- / 13.299	- / 8.798	- / 0.000	- / 8.798
P-3a	2 / (NR112) Commercial Broadband Satellite program (CBSP) - Afloat (upgrade)				- / 168.736	- / 18.631	- / 15.744	- / 55.440	- / 0.000	- / 55.440
P-3a	3 / (NR101) MINI DAMA (TBD)				- / 4.002	- / 7.903	- / 10.784	- / 8.378	- / 0.000	- / 8.378
P-40	**Total Gross/Weapon System Cost**				**- / 1,421.867**	**- / 30.136**	**- / 39.827**	**- / 72.871**	**- / 0.000**	**- / 72.871**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Satellite Communications Systems	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / (NR117) Global Broadcast Service (GBS) (TBD)				- / 8.326	- / 8.468	- / 9.099	- / 9.955	Continuing	Continuing
P-3a	2 / (NR112) Commercial Broadband Satellite program (CBSP) - Afloat (upgrade)				- / 43.523	- / 19.376	- / 17.261	- / 17.651	Continuing	Continuing
P-3a	3 / (NR101) MINI DAMA (TBD)				- / 8.511	- / 8.675	- / 8.945	- / 9.157	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 69.913**	**- / 49.869**	**- / 35.305**	**- / 36.763**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY24 - Global Broadcast System (GBS) funds are for the procurement of seven (7) Afloat Receive Terminals and six (6) Portable Receive Terminals and associated costs for pre-installation design, as well as the installation of ten (10) Afloat Receive Terminals.

FY24 - Commercial Broadband Satellite Program (CBSP) funds are for the procurement of eleven (11) Terminals and the associated costs for pre-installation design and the installation of nine (9) Unit Level Variant (ULV) Terminals to meet DDG ship class fielding requirements. Additionally, FY24 funding supports procurement, associated Non-Recurring Engineering (NRE), pre-installation design and installation of thirty-five (35) Satellite Terminal (transportable) Non-Geostationary (STtNG) terminals.

FY24 funding request for Demand Assigned Multiple Access (DAMA)/ Miniaturized DAMA is for procurement of 6 ship radios and 2 manpack radio solutions for shore; integration and installation of 2 afloat, 9 shore installations, and 5 manpack radio solutions required for continued deployment of TRANSEC modernized UHF SATCOM equipment for increased performance and security for the DAMA / MINI DAMA capabilities.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	P-1 Line Item Number / Title: 3215 / Satellite Communications Systems	Item Number / Title [DODIC]: 1 / Satellite Communications Systems
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	986.545	1.196	0.000	0.255	0.000	0.255
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	986.545	1.196	0.000	0.255	0.000	0.255
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**986.545**	**1.196**	**0.000**	**0.255**	**0.000**	**0.255**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Flyaway - Consolidated Prior Year Requirements Cost																		
Recurring Cost																		
1.1.1) Consolidated PY Requirements (1)	-	-	982.975	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*982.975*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Flyaway - Consolidated Prior Year Requirements Cost	**-**	**-**	***982.975***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Hardware - (NR112) CBSP Ka Kits Cost																		
Recurring Cost																		
2.1.1) Unit Level Variant(1)	262.600	10	2.626	271.333	3	0.814	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*2.626*	-	-	*0.814*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Hardware - (NR112) CBSP Ka Kits Cost	**-**	**-**	***2.626***	**-**	**-**	***0.814***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Support - (NR555) Production Support Cost																		
4.1) (CBSP) Ka Kits Production Support	-	-	0.308	-	-	0.240	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Support - (NR555) Production Support Cost	**-**	**-**	***0.308***	**-**	**-**	***0.240***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Support - (NR777) Install (Afloat) Cost																		
5.1) CBSP Ka Kits - ULV Install	-	-	0.312	-	-	0.097	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Support - (NR777) Install (Afloat) Cost	**-**	**-**	***0.312***	**-**	**-**	***0.097***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	P-1 Line Item Number / Title: 3215 / Satellite Communications Systems	Item Number / Title [DODIC]: 1 / Satellite Communications Systems
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Support - (NR777) DSA (Afloat) Cost																		
7.1) CBSP Ka Kits DSA	-	-	0.324	-	-	0.045	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
7.2) CBSP WAMS DSA (2)	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.255	-	-	0.000	-	-	0.255
Subtotal: Support - (NR777) DSA (Afloat) Cost	***-***	***-***	***0.324***	***-***	***-***	***0.045***	***-***	***-***	***0.000***	***-***	***-***	***0.255***	***-***	***-***	***0.000***	***-***	***-***	***0.255***
Gross/Weapon System Cost	**-**	**-**	**986.545**	**-**	**-**	**1.196**	**-**	**-**	**0.000**	**-**	**-**	**0.255**	**-**	**-**	**0.000**	**-**	**-**	**0.255**

(†) indicates the presence of a P-5a

Footnotes:

(1) Consolidated Prior Year Requirements costs of $982.975K which includes GBS Modem Upgrades, GBS Interim Modem Upgrades, GBS Shore Pre-Installation Design, SHF, NESP, CBSP, and Spectral Warrior (SW) / Spider Net (SN), DAMA/MINI DAMA(LEGACY), JMINI Control System shore, CBSP Small Ship Variant (SSV), CBSP Fore Level Unit (FLV), (CBSP) Ka Kit Non-Recurring Engineering (NRE), CBSP AC2 Modems (Procurement, Production Support, and Install), JMINI CS Shore procurement & install dollars, and MILCON P-913 installation costs.

(2) FY24 funding includes Pre-Installation Design Services Allocation (DSA) required in order to complete ship check and installation drawings for installation planning and is performed 6-12 months prior to installation start.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	P-1 Line Item Number / Title: 3215 / Satellite Communications Systems	Item Number / Title [DODIC]: 1 / Satellite Communications Systems

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.1.1) Unit Level Variant		2022	Harris Corporation - CBSP / Palm Beach, FL	C / FFP	** NO PCO **	Dec 2021	Mar 2022	3	271.333	Y		Jun 2018

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 1 / (NR117) Global Broadcast Service (GBS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	262.584	2.406	13.299	8.798	0.000	8.798	8.326	8.468	9.099	9.955	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	262.584	2.406	13.299	8.798	0.000	8.798	8.326	8.468	9.099	9.955	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**262.584**	**2.406**	**13.299**	**8.798**	**0.000**	**8.798**	**8.326**	**8.468**	**9.099**	**9.955**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

GLOBAL BROADCAST SERVICE (GBS - NR117): GBS is a Joint Military Satellite Communications (MILSATCOM) program with the Air Force as Executive Agent for all services. GBS provides a continuous, high speed, one way information flow of high volume data to units ashore, afloat or special operations. GBS supports routine operations, training and military exercises, special activities, crises, situational awareness, weapons targeting, and reconnaissance. Deployment of GBS Internet Protocol (IP) terminals will allow expanded use of military intelligence collection in a broader spectrum using MILSATCOM architecture. The Navy GBS Split IP effort enables near-real-time duplex asymmetric communications connectivity to ships/subs. GBS plays a pivotal role to support the AC2 environment.

[Engineering Change Order] Engineering Change Order (ECO) is required to implement cybersecurity upgrades and modernize fielded GBS Afloat Receive Terminals and Portable Receive Terminals to increase system performance. FY24 supports GBS ECO to install X-Band reception capability to provide coverage to Naval Forces when Ka-band beam coverage is not available or to support higher priority missions.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 1 / (NR117) Global Broadcast Service (GBS)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: (NR117) Global Broadcast Service (GBS)												
B Kits												
Recurring												
1.1.1) Afloat Receive Terminal - NonOrganic (3)	206 / 127.036	- / -	12 / 6.554	7 / 3.900	- / -	7 / 3.900	1 / 0.558	2 / 1.138	2 / 1.160	2 / 1.184	Continuing	Continuing
1.1.2) Portable Receive Terminal - Organic (4)	140 / 32.889	7 / 1.785	9 / 2.341	6 / 1.592	- / -	6 / 1.592	8 / 2.165	8 / 2.208	9 / 2.534	9 / 2.585	Continuing	Continuing
Subtotal: Recurring	*- / 159.925*	*- / 1.785*	*- / 8.895*	*- / 5.492*	*- / -*	*- / 5.492*	*- / 2.723*	*- / 3.346*	*- / 3.694*	*- / 3.769*	*Continuing*	*Continuing*
Subtotal: (NR117) Global Broadcast Service (GBS)	*346 / 159.925*	*7 / 1.785*	*21 / 8.895*	*13 / 5.492*	*- / -*	*13 / 5.492*	*9 / 2.723*	*10 / 3.346*	*11 / 3.694*	*11 / 3.769*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 159.925*	*- / 1.785*	*- / 8.895*	*- / 5.492*	*- / -*	*- / 5.492*	*- / 2.723*	*- / 3.346*	*- / 3.694*	*- / 3.769*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Production Support	- / 24.709	- / 0.098	- / 0.458	- / 0.381	- / 0.000	- / 0.381	- / 0.172	- / 0.208	- / 0.235	- / 0.248	- / -	- / 26.509
2.2) Afloat Receive Terminal DSA (5)	- / 12.585	- / 0.179	- / 0.735	- / 0.673	- / 0.000	- / 0.673	- / 0.420	- / 0.507	- / 0.620	- / 0.641	- / -	- / 16.360
2.3) Engineering Change Order (6)	- / 12.559	- / 0.000	- / 0.576	- / 0.460	- / 0.000	- / 0.460	- / 4.828	- / 4.034	- / 4.170	- / 4.909	- / -	- / 31.536
Subtotal: Support	*- / 49.853*	*- / 0.277*	*- / 1.769*	*- / 1.514*	*- / -*	*- / 1.514*	*- / 5.420*	*- / 4.749*	*- / 5.025*	*- / 5.798*	*- / 0.000*	*- / 74.405*
Installation												
Modification Item 1 of 1: (NR117) Global Broadcast Service (GBS)	- / 52.806	- / 0.344	- / 2.635	- / 1.792	- / 0.000	- / 1.792	- / 0.183	- / 0.373	- / 0.380	- / 0.388	Continuing	Continuing
Subtotal: Installation	*- / 52.806*	*- / 0.344*	*- / 2.635*	*- / 1.792*	*- / -*	*- / 1.792*	*- / 0.183*	*- / 0.373*	*- / 0.380*	*- / 0.388*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**262.584**	**2.406**	**13.299**	**8.798**	**0.000**	**8.798**	**8.326**	**8.468**	**9.099**	**9.955**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 1 / (NR117) Global Broadcast Service (GBS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: (NR117) Global Broadcast Service (GBS)

Manufacturer Information

Manufacturer Name: Aqyr Technologies, Inc. (7) — Manufacturer Location: Nashua, NH

Administrative Leadtime *(in Months)*: 2 — Production Leadtime *(in Months)*: 3

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023				
Delivery Dates	Mar 2022	Mar 2023	Mar 2024				

Manufacturer Name: SAIC — Manufacturer Location: Reston, VA

Administrative Leadtime *(in Months)*: 2 — Production Leadtime *(in Months)*: 5

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023				
Delivery Dates	May 2022	May 2023	May 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: Afloat Receive Terminal

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	198 / 52.806	2 / 0.344	6 / 1.054	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	206 / 54.204
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	9 / 1.581	3 / 0.538	0 / 0.000	3 / 0.538	- / -	- / -	- / -	- / -	0 / 0.000	12 / 2.119
FY 2024	- / -	- / -	- / -	7 / 1.254	0 / 0.000	7 / 1.254	- / -	- / -	- / -	- / -	0 / 0.000	7 / 1.254
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.183	- / -	- / -	- / -	0 / 0.000	1 / 0.183
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.373	- / -	- / -	Continuing	Continuing
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.380	- / -	0 / 0.000	2 / 0.380
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.388	0 / 0.000	2 / 0.388
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	198 / 52.806	2 / 0.344	15 / 2.635	10 / 1.792	0 / 0.000	10 / 1.792	1 / 0.183	2 / 0.373	2 / 0.380	2 / 0.388	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 1 / (NR117) Global Broadcast Service (GBS)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: (NR117) Global Broadcast Service (GBS)

Installation Information

Method of Implementation: [none specified]:: Installation Name: Afloat Receive Terminal

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	198	-	-	1	1	3	3	4	5	3	-	4	3	-	-	1	-	-	-	1	1	-	-	2	-	-	-	2	-	Cont.	Cont.
Out	198	-	-	-	1	1	3	3	4	5	3	-	4	3	-	-	1	-	-	-	1	1	-	-	2	-	-	-	2	Cont.	Cont.

Method of Implementation (Organic): Portable Receive Terminal - Not Installed **Installation Quantity:** 0

Footnotes:

(3) FY 2024 GBS Afloat Receive Terminal Procurement and Installation continues fielding requirements for Resilient Command and Control (RC2) that provides support to Fleet missions: Strike & Special Operations, Imagery and Intel Data (Live Streaming Video).

(4) GBS Portable Receive Terminals are turn-key and therefore do not have installation costs associated with them.

(5) Pre-Installation Design Services Allocation (DSA) are required in order to complete ship check and installation drawings for installation planning and is performed 6-12 months prior to installation start. Post Installation DSA support requirements include drawings closeout. DSA costs will fluctuate each FY as it is a factor of the number of installations in any given fiscal year.

(6) Engineering Change Order (ECO) is required to implement cybersecurity upgrades and modernize fielded GBS Afloat Receive Terminals and Portable Receive Terminals to increase system performance. FY24 supports GBS ECO to install X-Band reception capability to provide coverage to Naval Forces when Ka-band beam coverage is not available or to support higher priority missions.

(7) Aqyr Techologies support Portable Receive Terminals

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 2 / (NR112) Commercial Broadband Satellite program (CBSP) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	168.736	18.631	15.744	55.440	0.000	55.440	43.523	19.376	17.261	17.651	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	168.736	18.631	15.744	55.440	0.000	55.440	43.523	19.376	17.261	17.651	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**168.736**	**18.631**	**15.744**	**55.440**	**0.000**	**55.440**	**43.523**	**19.376**	**17.261**	**17.651**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

CBSP is the U.S. Navy Commercial SATCOM program that provides the Navy's access to geostationary and Non-Geostationary Satellite Orbit (NGSO) constellations. CBSP provides the only source of wideband SATCOM to Patrol Coastal (PC) and Mine Countermeasure (MCM) Ships, provides diversity for MILSATCOM on Unit Level Variant (ULV) ships, and augments MILSATCOM on Force Level Variant (FLV) ships. CBSP will support the procurement and installation of a commercial terminal and service architecture that significantly increase data throughput, Navy A2AD posture, and communication reliability. CBSP also increases space resiliency by providing band diversity, assured access, and redundancy for MILSATCOM. Included in the program are Small Ship Variant (SSV - Patrol Coastal and Mine Countermeasure Ships), Unit Level Variant (ULV - including Guided Missile Destroyers and Guided Missile Frigates), and Force Level Variant (FLV - large combatant ships including Carriers). Satellite Terminal (transportable) Non-Geostationary (STtNG) is variant of CBSP which fields a Commercial Off the Shelf terminal and militarized common interface system to access Non-Geostationary Satellite Orbits (NGSO) Proliferated Low/ Medium/High Earth Orbit (PLEO/MEO/HEO) constellations. STtNG augments the CBSP family of terminals, taking advantage of additional commercial space segments, to provide a simultaneous multiband failover capability to current MIL/COMSATCOM systems. Quantities reflected in the budget enable a flexible architecture, initially with Ku band, and includes the planned addition of a Ka band antenna. STtNG falls under the CBSP CPD dated 27 Apr 2009 and has been validated by Fleet war gaming exercises. STtNG supports the Naval Operational Architecture (NOA) by adding satellite frequency diversity through a transportable system which will support current and future modems.

The FY 2024 funding request procures additional Commercial Broadband Satellite Program (CBSP) Unit Level Variant (ULV) terminals (Qty 11)and installations of Unit Level Variant (ULV) Terminals (Qty 9) to meet DDG ship class fielding requirements. In addition, increase supports Procurement and Installations of Satellite Terminal (transportable) Non-Geostationary (STtNG) terminals (Qty 35).

[Engineering Change Orders] Engineering changes required to Improve reliability and implement bandwidth efficiency technologies to increase system performance for fielded Small Ship Variants (SSV), Unit Level Variants (ULV) and Force Level Variants (FLV) including the addition of Proliferated Low Earth Orbit (PLEO), Medium Earth Orbit (MEO), and Highly Elliptical Orbit (HEO) capabilities. Engineering changes ensure the systems meet/maintain system operational availability (Ao) thresholds and take advantage of new technology.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 2 / (NR112) Commercial Broadband Satellite program (CBSP) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Submarines, ships	**Modification Type:** upgrade	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: (NR112) Commercial Broadband Satellite program (CBSP) - Afloat												
B Kits												
Recurring												
1.1.1) Unit Level Variant (ULV) - NonOrganic [8]	49 / 47.667	7 / 7.014	6 / 6.132	11 / 11.467	- / -	11 / 11.467	6 / 6.380	7 / 7.593	6 / 6.638	7 / 7.899	Continuing	Continuing
1.1.2) Force Level Variant (FLV) - NonOrganic	25 / 42.598	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	25 / 42.598
1.1.3) Satellite Terminal (transportable) Non-Geostationary (STtNG) - NonOrganic [9]	- / -	- / -	- / -	35 / 13.300	- / -	35 / 13.300	31 / 12.016	- / -	- / -	- / -	- / -	66 / 25.316
Subtotal: Recurring	*- / 90.265*	*- / 7.014*	*- / 6.132*	*- / 24.767*	*- / -*	*- / 24.767*	*- / 18.396*	*- / 7.593*	*- / 6.638*	*- / 7.899*	*Continuing*	*Continuing*
Subtotal: (NR112) Commercial Broadband Satellite program (CBSP) - Afloat	*74 / 90.265*	*7 / 7.014*	*6 / 6.132*	*46 / 24.767*	*- / -*	*46 / 24.767*	*37 / 18.396*	*7 / 7.593*	*6 / 6.638*	*7 / 7.899*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 90.265*	*- / 7.014*	*- / 6.132*	*- / 24.767*	*- / -*	*- / 24.767*	*- / 18.396*	*- / 7.593*	*- / 6.638*	*- / 7.899*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Engineering Change Orders [10]	- / 4.739	- / 0.474	- / 0.483	- / 2.598	- / -	- / 2.598	- / 0.503	- / 0.513	- / 0.523	- / 0.534	Continuing	Continuing
2.2) Production Support [11]	- / 1.471	- / 0.420	- / 0.369	- / 1.706	- / -	- / 1.706	- / 1.267	- / 0.456	- / 0.399	- / 0.474	Continuing	Continuing
2.3) Other (DSA) [12]	- / 13.791	- / 2.155	- / 2.206	- / 4.091	- / -	- / 4.091	- / 3.197	- / 2.778	- / 1.585	- / 1.718	Continuing	Continuing
Subtotal: Support	*- / 20.001*	*- / 3.049*	*- / 3.058*	*- / 8.395*	*- / -*	*- / 8.395*	*- / 4.967*	*- / 3.747*	*- / 2.507*	*- / 2.726*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: (NR112) Commercial Broadband Satellite program (CBSP) - Afloat	- / 58.470	- / 8.568	- / 6.554	- / 22.278	- / 0.000	- / 22.278	- / 20.160	- / 8.036	- / 8.116	- / 7.026	Continuing	Continuing
Subtotal: Installation	*- / 58.470*	*- / 8.568*	*- / 6.554*	*- / 22.278*	*- / -*	*- / 22.278*	*- / 20.160*	*- / 8.036*	*- / 8.116*	*- / 7.026*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**168.736**	**18.631**	**15.744**	**55.440**	**0.000**	**55.440**	**43.523**	**19.376**	**17.261**	**17.651**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 2 / (NR112) Commercial Broadband Satellite program (CBSP) - Afloat

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: (NR112) Commercial Broadband Satellite program (CBSP) - Afloat

Manufacturer Information

Manufacturer Name: Harris - CBSP FLV — Manufacturer Location: Palm Beach, FL

Administrative Leadtime *(in Months)*: 2 — Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023				
Delivery Dates	Jun 2022	Jun 2023	Jun 2024				

Manufacturer Name: DISA - Satellite Terminal (transportable) Non-Geostationary (STtNG) — Manufacturer Location: Scott AFB, IL

Administrative Leadtime *(in Months)*: 3 — Production Leadtime *(in Months)*: 4

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Jan 2024	Jan 2025			
Delivery Dates			May 2024	May 2025			

Installation Information

Method of Implementation: Tiger Team:: Installation Name: Small Ship Variant (SSV), Unit Level Variant (ULV) and Force Level V

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	68 / 58.470	6 / 6.426	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	74 / 64.896
FY 2022	- / -	2 / 2.142	5 / 5.462	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	7 / 7.604
FY 2023	- / -	- / -	1 / 1.092	5 / 5.571	0 / 0.000	5 / 5.571	- / -	- / -	- / -	- / -	0 / 0.000	6 / 6.663
FY 2024	- / -	- / -	- / -	4 / 4.457	0 / 0.000	4 / 4.457	7 / 7.956	- / -	- / -	- / -	0 / 0.000	11 / 12.413
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	1 / 1.137	5 / 5.740	- / -	- / -	0 / 0.000	6 / 6.877
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.296	5 / 5.797	- / -	0 / 0.000	7 / 8.093
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.319	4 / 4.684	Continuing	Continuing
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 2.342	Continuing	Continuing
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	68 / 58.470	8 / 8.568	6 / 6.554	9 / 10.028	0 / 0.000	9 / 10.028	8 / 9.093	7 / 8.036	7 / 8.116	6 / 7.026	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 2 / (NR112) Commercial Broadband Satellite program (CBSP) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: (NR112) Commercial Broadband Satellite program (CBSP) - Afloat

Installation Information

Method of Implementation: Tiger Team:: Installation Name: Small Ship Variant (SSV), Unit Level Variant (ULV) and Force Level V

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	68	3	3	-	2	3	2	-	1	3	2	2	2	4	3	1	-	3	2	1	1	3	2	2	-	3	1	2	-	Cont.	Cont.
Out	68	-	3	3	-	2	5	-	-	1	3	2	2	2	4	3	1	-	3	2	1	1	3	2	2	-	3	1	2	Cont.	Cont.

Method of Implementation: Method:: Installation Name: Satellite Terminal (transportable) Non-Geostationary (STtNG)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	35 / 12.250	0 / 0.000	35 / 12.250	- / -	- / -	- / -	- / -	0 / 0.000	35 / 12.250
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	31 / 11.067	- / -	- / -	- / -	0 / 0.000	31 / 11.067
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	- / -	35 / 12.250	0 / 0.000	35 / 12.250	31 / 11.067	- / -	- / -	- / -	0 / 0.000	66 / 23.317

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	18	17	-	-	15	16	-	-	-	-	-	-	-	-	-	-	-	-	-	66
Out	-	-	-	-	-	-	-	-	-	-	-	-	18	17	-	-	15	16	-	-	-	-	-	-	-	-	-	-	-	-	66

Footnotes:

(8) 1. FY24 procures Qty 11 CBSP Unit Level Variant (ULV) terminals to meet DDG ship class fielding requirements. 2. Unit Level Variant (ULV) terminals include antenna configurations which influences average unit cost.

(9) Satellite Terminal (transportable) Non-Geostationary (STtNG) procures and installs 35 systems in FY24.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 2 / (NR112) Commercial Broadband Satellite program (CBSP) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(10) FY24 Non-Recurring Engineering (NRE) funds Advanced Digital Networking System (ADNS) testing and integration to ensure network compatibility in support of Satellite Terminal (transportable) Non-Geostationary (STtNG) production units for ship and shore. NRE funds the set-up of the pre-production test facility, production manpower, and required routing template updates necessary for pre-installation activities to ensure that STtNG units for permanent fielding can function across the DoD network for various ship and shore configurations.

(11) FY24 increase in production support is due to procurement of Satellite Terminal (transportable) Non-Geostationary (STtNG) (Qty 35)

(12) Pre-Installation Design Services Allocation (DSA) are required in order to complete ship check and installation drawings for installation planning and is performed 6-12 months prior to installation start. Post Installation DSA support requirements include drawings closeout. DSA costs will fluctuate each FY as it is a factor of the number of installations in any given fiscal year. FY24 increase in DSA is due to installation of Satellite Terminal (transportable) Non-Geostationary (STtNG)Terminals (Qty 35)

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 3 / (NR101) MINI DAMA
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	4.002	7.903	10.784	8.378	0.000	8.378	8.511	8.675	8.945	9.157	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	4.002	7.903	10.784	8.378	0.000	8.378	8.511	8.675	8.945	9.157	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**4.002**	**7.903**	**10.784**	**8.378**	**0.000**	**8.378**	**8.511**	**8.675**	**8.945**	**9.157**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Demand Assigned Multiple Access (DAMA)/ Miniaturized DAMA: Ultra High Frequency (UHF) DAMA and MINI DAMA systems supports Command and Control (C2) voice and data communications over UHF Satellite Constellations. TRANSEC modernization is required for UHF SATCOM systems to continue use and enable operations (e.g. Ballistic Missile Defense (BMD), Tomahawk Strike Network (TSN), Strike Group Voice Nets, and Intelligence Broadcast Services (IBS). Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6510.02E directs the military Services to modernize National Security Agency (NSA) certified cryptographic products and algorithms prior to published Last Year of Use dates to ensure secure, interoperable information sharing. NSA's published de-certification and cease key dates for crypto algorithm contained in UHF legacy communications systems. Funding provides for the engineering, testing, procurement and product integration.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 3 / (NR101) MINI DAMA
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: (NR101) MINI DAMA												
A Kits												
Recurring												
1.1.1) DAMA/MINI DAMA Procurement - Afloat - NonOrganic (13)	1 / 0.405	2 / 0.810	13 / 5.370	6 / 2.528	- / -	6 / 2.528	4 / 1.719	7 / 3.069	11 / 4.919	4 / 1.824	Continuing	Continuing
1.1.2) DAMA/MINI DAMA Procurement - Shore - NonOrganic	6 / 3.444	9 / 5.445	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	15 / 8.889
1.1.3) DAMA/MINI DAMA MANPACK Procurement - NonOrganic (14)	- / -	1 / 0.150	5 / 0.750	2 / 0.306	- / -	2 / 0.306	6 / 0.936	12 / 1.910	3 / 0.487	10 / 1.656	- / -	39 / 6.195
1.1.4) DAMA/MINI DAMA Engineering Change Order - Organic	- / -	- / 0.100	- / 0.173	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 0.273
Subtotal: Recurring	*- / 3.849*	*- / 6.505*	*- / 6.293*	*- / 2.834*	*- / -*	*- / 2.834*	*- / 2.655*	*- / 4.979*	*- / 5.406*	*- / 3.480*	*Continuing*	*Continuing*
Subtotal: (NR101) MINI DAMA	*7 / 3.849*	*12 / 6.505*	*18 / 6.293*	*8 / 2.834*	*- / -*	*8 / 2.834*	*10 / 2.655*	*19 / 4.979*	*14 / 5.406*	*14 / 3.480*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 3.849*	*- / 6.505*	*- / 6.293*	*- / 2.834*	*- / -*	*- / 2.834*	*- / 2.655*	*- / 4.979*	*- / 5.406*	*- / 3.480*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) DAMA/MINI DAMA Production Support	- / 0.153	- / 0.378	- / 0.367	- / 0.170	- / -	- / 0.170	- / 0.159	- / 0.299	- / 0.324	- / 0.209	Continuing	Continuing
2.2) DAMA/MINI DAMA DSA (15)	- / -	- / 0.079	- / 1.189	- / 2.113	- / -	- / 2.113	- / 0.986	- / 0.763	- / 1.270	- / 1.924	Continuing	Continuing
2.3) DAMA/MINI DAMA Non-Recurring Equipment Cost	- / -	- / 0.941	- / 1.100	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 2.041
Subtotal: Support	*- / 0.153*	*- / 1.398*	*- / 2.656*	*- / 2.283*	*- / -*	*- / 2.283*	*- / 1.145*	*- / 1.062*	*- / 1.594*	*- / 2.133*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: (NR101) MINI DAMA	- / 0.000	- / 0.000	- / 1.835	- / 3.261	- / 0.000	- / 3.261	- / 4.711	- / 2.634	- / 1.945	- / 3.544	Continuing	Continuing
Subtotal: Installation	*- / 0.000*	*- / -*	*- / 1.835*	*- / 3.261*	*- / -*	*- / 3.261*	*- / 4.711*	*- / 2.634*	*- / 1.945*	*- / 3.544*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**4.002**	**7.903**	**10.784**	**8.378**	**0.000**	**8.378**	**8.511**	**8.675**	**8.945**	**9.157**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 3 / (NR101) MINI DAMA
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: (NR101) MINI DAMA

Manufacturer Information

Manufacturer Name: General Dynamics [16]	Manufacturer Location: Scottsdale, Arizona
Administrative Leadtime *(in Months)*: 9	Production Leadtime *(in Months)*: 19

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jul 2022	Jul 2023	Jul 2024				
Delivery Dates	Feb 2024	Feb 2025	Feb 2026				

Manufacturer Name: General Dynamics	Manufacturer Location: Scottsdale, Arizona 1
Administrative Leadtime *(in Months)*: 9	Production Leadtime *(in Months)*: 19

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jul 2022						
Delivery Dates	Feb 2024						

Manufacturer Name: Harris Corp	Manufacturer Location: Rochester, NY
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023				
Delivery Dates	Dec 2022	Dec 2023	Dec 2024				

Installation Information

Method of Implementation: [none specified]:: Installation Name: DAMA/MINI DAMA Procurement - Afloat

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	1 / 0.350	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.350
FY 2022	- / -	- / -	- / -	2 / 0.828	0 / 0.000	2 / 0.828	- / -	- / -	- / -	- / -	0 / 0.000	2 / 0.828
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	13 / 4.617	- / -	- / -	- / -	0 / 0.000	13 / 4.617
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 2.347	- / -	- / -	Continuing	Continuing
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.360	- / -	Continuing	Continuing
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	7 / 3.395	Continuing	Continuing
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	- / -	- / -	1 / 0.350	2 / 0.828	0 / 0.000	2 / 0.828	13 / 4.617	6 / 2.347	4 / 1.360	7 / 3.395	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 3 / (NR101) MINI DAMA
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: (NR101) MINI DAMA

Installation Information

Method of Implementation: [none specified]:: Installation Name: DAMA/MINI DAMA Procurement - Afloat

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	6	7	-	-	3	3	-	-	2	2	-	-	3	4	Cont.	Cont.
Out	-	-	-	-	-	-	-	-	1	-	-	-	2	-	-	-	6	7	-	-	3	3	-	-	2	-	-	-	3	Cont.	Cont.

Method of Implementation: [none specified]:: Installation Name: DAMA/MINI DAMA Procurement - Shore

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	6 / 1.440	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 1.440
FY 2022	- / -	- / -	- / -	9 / 2.203	0 / 0.000	9 / 2.203	- / -	- / -	- / -	- / -	0 / 0.000	9 / 2.203
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	6 / 1.440	9 / 2.203	0 / 0.000	9 / 2.203	- / -	- / -	- / -	- / -	0 / 0.000	15 / 3.643

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	2	2	2	-	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
Out	-	-	-	-	-	-	-	2	2	2	-	3	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15

Method of Implementation: [none specified]:: Installation Name: DAMA/MINI DAMA MANPACK Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3215 / Satellite Communications Systems	**Modification Number / Title:** 3 / (NR101) MINI DAMA
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: (NR101) MINI DAMA

Installation Information

Method of Implementation: [none specified]:: Installation Name: DAMA/MINI DAMA MANPACK Procurement

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
FY 2022	- / -	- / -	1 / 0.045	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	1 / 0.045
FY 2023	- / -	- / -	- / -	5 / 0.230	0 / 0.000	5 / 0.230	- / -	- / -	- / -	- / -	0 / 0.000	5 / 0.230
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.094	- / -	- / -	- / -	0 / 0.000	2 / 0.094
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	6 / 0.287	- / -	- / -	0 / 0.000	6 / 0.287
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	12 / 0.585	- / -	0 / 0.000	12 / 0.585
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.149	0 / 0.000	3 / 0.149
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	- / -	- / -	1 / 0.045	5 / 0.230	0 / 0.000	5 / 0.230	2 / 0.094	6 / 0.287	12 / 0.585	3 / 0.149	Continuing	Continuing

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	-	-	-	-	1	-	-	-	3	2	-	-	1	1	-	-	3	3	-	4	4	4	-	-	3	-	10	39
Out	-	-	-	-	-	-	-	-	1	-	-	-	3	2	-	-	1	1	-	-	3	3	-	4	4	-	-	-	3	14	39

Footnotes:

(13) FY24 funding will continue to address hardware obsolescence and crypto modernization required to maintain capability. Instead of upgrading the legacy MD 1324 Modem which would require the continued use of antiquated SATCOM AN/WSC-3 with no path to MUOS, funding is ear marked to procure modern POR TTAM modernized radios. Replacement with modern POR radio systems has a slightly higher initial procurement and install cost, but the Life Cycle Cost of MD 1324 is eliminated (sustainment and future upgrades). In addition the common modern radio solution provides more capability, significant mission benefits and future communications growth.

(14) The procurements of 2 MINI-DAMA Manpack in FY24 will install FY25.

(15) Pre-Installation Design Services Allocation (DSA) are required in order to complete ship check and installation drawings for installation planning and is performed 6-12 months prior to installation start. Post Installation DSA support requirements include system operational verification tests (SOVT) and system drawings closeout requirements. DSA costs will fluctuate each FY as it is a factor of the number of installations in any given fiscal year. DSA increased starting in FY23 for shipboard support due to ship installation ramp up.

(16) System requires integration prior to installation. Integration timeline is 3-6 months.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 13: Satellite Communications	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 290

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1,263.503	34.723	24.586	37.921	0.000	37.921	88.661	79.169	76.946	78.986	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1,263.503	34.723	24.586	37.921	0.000	37.921	88.661	79.169	76.946	78.986	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1,263.503**	**34.723**	**24.586**	**37.921**	**0.000**	**37.921**	**88.661**	**79.169**	**76.946**	**78.986**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.432	0.231	0.298	-	0.298	-	-	-	-	-	0.961
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Navy Multiband Terminal (NMT) System provides funds for the procurement of ship, submarine, and shore protected and wideband Military Satellite Communications (MILSATCOM) terminals via earth orbiting relay satellites in the Super High Frequency, Ka, and Extremely High Frequency (EHF) bands. The NMT provides warfighters with the assured, jam resistant, secure SATCOM for message traffic, data transfer and secure voice communications. These procurements are scheduled to meet the satellite communications requirements established by the Chief of Naval Operations in the Fleet Communications Planning and Programming documents.

The NMT program is the next generation maritime military satellite communications terminal. The NMT Program is the required Navy component to the Advanced Extremely High Frequency (AEHF) Program for enhancing protected and survivable satellite communications to Naval forces. NMT multiband capabilities communicate two-way Ka-Band on Wideband Global SATCOM (WGS) and shipboard and submarine terminals to communicate with X-Band using the Defense Satellite Communications System and WGS. NMT is compatible with today's Navy Low Data Rate/Medium Data Rate terminals, X-Band terminals and will sustain the MILSATCOM architecture by providing connectivity across the spectrum of mission areas, to include land, air and naval warfare, special operations, strategic nuclear operations, strategic defense, theater missile defense, and space operations and intelligence. The NMT system will replenish and improve on the capabilities of both the Military Strategic and Tactical Relay System (MILSTAR) and WGS system by equipping the warfighters with the assured, jam resistant, secure communications as described in the Operational Requirements Document (Wideband Gapfiller System ORD, AFSPC ORD 004-99, May 3, 2000) for the joint AEHF Satellite Communications and WGS System.

The NMT protected system AN/WSC-9 V (Variant) is comprised of three configurations for ships, submarines and shore sites known as Communication Groups. Terminal Communication Groups will integrate protected and wideband signal processing to multiband Antenna Groups. The Antenna Groups align to the specific Terminal Variant for ship, submarine and shore platforms and provides the SATCOM capabilities known as Q/Ka and X/Ka assigned to platforms. NMT includes the Advanced Time Division Multiple Access (TDMA) Interface Processor (IP) and supports increased data transfers for the Automated Digital Network System (ADNS) router architecture supporting improved Quality of Service (QoS) capability, smaller form factor and easier integration into operational environments, further supporting network user access to protected MILSATCOM connectivity. Technical refresh of modems and the associated architectures will directly support Assured Command and Control (AC2) posture, SATCOM reliability, space resiliency via band diversity and redundancy. AC2 modems are an upgrade to enable the use of Wideband Global Satellite (WGS) X-Band (ship/submarine transmit and receive) and Ka-band (shore receive and transmit) resources to maintain link connectivity to provide assured access to mission critical communications in jamming environments.

This system is formally specified by both Fleet Commanders as a threshold capability for global maritime command control and communications in a Distributed Maritime Environment to execute current warfighting plans and is required for National Command and Control capability.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 13: Satellite Communications	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: 290		

[P5 / Consolidated Prior Year Requirements]: Consolidated Prior Year Requirements includes Assurred C2 Modems (Procurement, Install, SOVT, and IA&T), NMT Ashore Terminal Procurements, X/KA Backfits (Procurement, Install, SOVT, IA&T), NMT Ashore Antennas (Procurement & IA&T), NMT Afloat Sub (Procurement, Production Support, DSA, and Install), and Advanced TDMA Interface Processors (ATIP).

[P5 / (NS108) Wideband Anti-Jam Modem System (WAMS)]: The Wideband Anti-Jam Modem System (WAMS) is a Navy technology upgrade that enhances communication capability of shipboard and submarine NMTs by providing wideband Anti-Jam (AJ) Satellite Communication throughput over Wideband Global SATCOM (WGS). WAMS is a major contributor in supporting the National Defense Strategy by investing in resilience to provide assured communications capabilities. WAMS enables space segment Anti Jam (AJ) diversity (EHF/AEHF and WGS), thus enabling ships and submarines equipped with the modem to operate in wideband links closer to threat jammers. WAMS enables the use of WGS X and Ka-band resources to assure access to mission critical communications to provide Resilient Command, Control, and Communications (RC3) capabilities in contested/degraded environments, formerly known as Anti-Access/Area Denial (A2AD). The use of WAMS PTW on WGS will augment AEHF Extended Data Rate (XDR) services to provide the information throughput capacity necessary to support critical Command and Control capability.

[P5 / P-130]: Navy Multiband Terminal (NMT) funds support advance planning, system of systems architecture, and design and integration planning efforts associated with reinstallation of NMT and ATIP at P130 - Naval Computer and Telecommunications Station, Sigonella (NCTS Sigonella).

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 13: Satellite Communications	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 290

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Navy Multiband Terminal (NMT)				- / 469.660	- / 14.864	- / 0.346	- / 9.411	- / 0.000	- / 9.411
P-3a	1 / 3216 Navy Multiband Terminal (NMT) - Afloat (TBD)				- / 793.843	- / 13.752	- / 6.911	- / 7.049	- / 0.000	- / 7.049
P-3a	2 / NMT Service Life Extension Modernization (SLEMOD) Kits (TBD)				- / 0.000	- / 6.107	- / 17.329	- / 21.461	- / 0.000	- / 21.461
P-40	**Total Gross/Weapon System Cost**				**- / 1,263.503**	**- / 34.723**	**- / 24.586**	**- / 37.921**	**- / 0.000**	**- / 37.921**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Navy Multiband Terminal (NMT)				- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / 3216 Navy Multiband Terminal (NMT) - Afloat (TBD)				- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 821.555
P-3a	2 / NMT Service Life Extension Modernization (SLEMOD) Kits (TBD)				- / 27.085	- / 5.755	- / 3.003	- / 11.699	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 88.661**	**- / 79.169**	**- / 76.946**	**- / 78.986**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY 2024 funding request increased by $13.335 million from FY 2023 due to increases in Navy Multiband Terminal (NMT) Service Life Extension Modernization (SLEMOD) Kit installations and WAMS Non-Recurring Engineering (NRE) Efforts.

FY 2024 funding request includes the installation of 2 afloat NMT terminals to align with earliest remaining installation availabilities.

FY 2024 funding requests includes funding to support NMT Service Life Extension Modernization (SLEMOD) Kits (Qty 41). SLEMOD Kits provide capability enhancements to the Fleet in order to establish system resilience while maintaining perpetual readiness. The NMT PoR has been tasked with extending the lifespan of the Terminal +20 years longer than originally planned. Capability enhancement packages fielded as SLEMOD kits allow the NMT PoR to pace the threat while enhancing NMT performance and capability in order to support the Warfighter.

FY24 funding request includes WAMS Non-Recurring Engineering (NRE) efforts required to engineer a common SHIPBOARD suite for WAMS infrastructure throughout the Fleet. NRE supports stand-up of a Government integration, assembly and test facility to facilitate commonality across various surface ship architecture configurations throughout the Navy.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	P-1 Line Item Number / Title: 3216 / Navy Multiband Terminal (NMT)	Item Number / Title [DODIC]: 1 / Navy Multiband Terminal (NMT)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	469.660	14.864	0.346	9.411	0.000	9.411
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	469.660	14.864	0.346	9.411	0.000	9.411
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**469.660**	**14.864**	**0.346**	**9.411**	**0.000**	**9.411**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Flyaway - Consolidated Prior Year Requirements Cost																		
Recurring Cost																		
1.1.1) Consolidated Prior Year Requirements	-	-	358.914	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Recurring Cost	-	-	*358.914*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Flyaway - Consolidated Prior Year Requirements Cost	**-**	**-**	***358.914***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Hardware - P-130 Cost																		
Recurring Cost																		
3.1.1) P-130 (1)	-	-	0.000	-	-	0.000	-	-	0.346	-	-	0.929	-	-	0.000	-	-	0.929
Subtotal: Recurring Cost	-	-	*0.000*	-	-	*0.000*	-	-	*0.346*	-	-	*0.929*	-	-	*0.000*	-	-	*0.929*
Subtotal: Hardware - P-130 Cost	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.346***	**-**	**-**	***0.929***	**-**	**-**	***0.000***	**-**	**-**	***0.929***
Support - NS777 FMP Install (Afloat) Cost																		
6.1) ATIP SOVT	-	-	4.736	-	-	0.073	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
6.2) ATIP Installation	-	-	47.545	-	-	0.330	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
6.5) Wideband Anti-Jam Modem System (WAMS) Non-Recurring Engineering (NRE) (2)	-	-	0.000	-	-	0.000	-	-	0.000	-	-	8.482	-	-	0.000	-	-	8.482
Subtotal: Support - NS777 FMP Install (Afloat) Cost	**-**	**-**	***52.281***	**-**	**-**	***0.403***	**-**	**-**	***0.000***	**-**	**-**	***8.482***	**-**	**-**	***0.000***	**-**	**-**	***8.482***
Support - NS776 Install (Ashore) Cost																		

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	P-1 Line Item Number / Title: 3216 / Navy Multiband Terminal (NMT)	Item Number / Title [DODIC]: 1 / Navy Multiband Terminal (NMT)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
7.1) NMT Terminal Ashore SOVT	-	-	1.888	-	-	0.454	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
7.2) Ashore Antenna SOVT	-	-	0.955	-	-	0.454	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
7.3) Ashore Antennas Installation	-	-	8.588	-	-	3.165	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
7.4) NMT Terminal Ashore Installation	-	-	47.034	-	-	10.388	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Support - NS776 Install (Ashore) Cost	***-***	***-***	***58.465***	***-***	***-***	***14.461***	***-***	***-***	***0.000***	***-***	***-***	***0.000***	***-***	***-***	***0.000***	***-***	***-***	***0.000***
Gross/Weapon System Cost	**-**	**-**	**469.660**	**-**	**-**	**14.864**	**-**	**-**	**0.346**	**-**	**-**	**9.411**	**-**	**-**	**0.000**	**-**	**-**	**9.411**

Footnotes:

(1) FY23 to FY24 P-130 growth is due to pre-install planning and design occurring in FY23 with the install of NMT equipment beginning in FY24.

(2) WAMS Non-Recurring Engineering (NRE) efforts are required to engineer a common SHIPBOARD suite for WAMS infrastructure throughout the Fleet. NRE supports stand-up of a Government integration, assembly and test facility to facilitate commonality across various surface ship architecture configurations throughout the Navy.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)	**Modification Number / Title:** 1 / 3216 Navy Multiband Terminal (NMT) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	793.843	13.752	6.911	7.049	0.000	7.049	0.000	0.000	0.000	0.000	0.000	821.555
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	793.843	13.752	6.911	7.049	0.000	7.049	0.000	0.000	0.000	0.000	0.000	821.555
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**793.843**	**13.752**	**6.911**	**7.049**	**0.000**	**7.049**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**821.555**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

(Afloat Ship) (Afloat Sub): Provides jam resistant, low probability of interception and detection for protected extended data rate communications with Advanced Extremely High Frequency (AEHF) capability.

The FY24 request provides for the installation of 2 Navy Multiband Terminals (NMT) shipboard terminals to align with earliest remaining installation availabilities. Budget updates also include the breakout of Integration, Assembly and Test (IA&T) and System Operational Verification Test (SOVT) costs. IA&T efforts are performed once terminals and antennas are delivered from Raytheon Production Facilities to the government site SSC Atlantic, Charleston SC. SSC Atlantic serves as the lead integrator and performs Pre-Installation, Test and Check-Out (PITCO) of the terminals and antennas required for NMT ship and submarine afloat platforms. SOVT efforts are performed by NIWC Atlantic, Charleston, SC and NIWC Pacific, San Diego, CA and validate the NMT system is operational post installation on afloat platforms.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)	**Modification Number / Title:** 1 / 3216 Navy Multiband Terminal (NMT) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Ships, submarines	**Modification Type:** TBD	**Related RDT&E PEs:** 0604280N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: 3216 Navy Multiband Terminal (NMT) - Afloat												
B Kits												
Recurring												
1.1.1) Afloat Ship - NonOrganic (3)	129 / 438.610	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	129 / 438.610
Subtotal: Recurring	*- / 438.610*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 438.610*
Subtotal: 3216 Navy Multiband Terminal (NMT) - Afloat	*129 / 438.610*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*129 / 438.610*
Subtotal: Procurement, All Modification Items	*- / 438.610*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 438.610*
Support *(All Modification Items)*												
2.1) NMT Integration, Assembly & Test (IA&T)	- / 6.727	- / 0.488	- / 0.254	- / 0.259	- / 0.000	- / 0.259	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 7.728
2.2) Production Support - Ship	- / 21.055	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 21.055
2.3) Other DSA - Ship	- / 41.787	- / 1.341	- / 0.621	- / 0.633	- / 0.000	- / 0.633	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 44.382
2.4) NMT System Operational Verification Test (SOVT)	- / 9.655	- / 0.863	- / 0.395	- / 0.403	- / 0.000	- / 0.403	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- / 11.316
Subtotal: Support	*- / 79.224*	*- / 2.692*	*- / 1.270*	*- / 1.295*	*- / -*	*- / 1.295*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 84.481*
Installation												
Modification Item 1 of 1: 3216 Navy Multiband Terminal (NMT) - Afloat	- / 276.009	- / 11.060	- / 5.641	- / 5.754	- / 0.000	- / 5.754	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 298.464
Subtotal: Installation	*- / 276.009*	*- / 11.060*	*- / 5.641*	*- / 5.754*	*- / -*	*- / 5.754*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 298.464*
Total												
Total Cost (Procurement + Support + Installation)	**793.843**	**13.752**	**6.911**	**7.049**	**0.000**	**7.049**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**821.555**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)	**Modification Number / Title:** 1 / 3216 Navy Multiband Terminal (NMT) - Afloat
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: 3216 Navy Multiband Terminal (NMT) - Afloat

Installation Information

Method of Implementation: Method:: Installation Name: Navy Multiband Terminal (NMT) - Afloat

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	121 / 276.009	4 / 11.060	2 / 5.641	2 / 5.754	0 / 0.000	2 / 5.754	- / -	- / -	- / -	- / -	0 / 0.000	129 / 298.464
FY 2022	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2023	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	121 / 276.009	4 / 11.060	2 / 5.641	2 / 5.754	0 / 0.000	2 / 5.754	- / -	- / -	- / -	- / -	0 / 0.000	129 / 298.464

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	121	-	2	2	-	-	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	129
Out	120	1	-	2	2	-	-	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	129

Footnotes:

(3) 1.Fielding plan updates are Fleet driven and are dependent on limited ship and submarine availabilities to meet Full Operational Capability (FOC). 2.Integration, Assembly and Test (IA&T) and System Operational Verification Test (SOVT) engineering services are required to deliver and install the NMT Terminal System. IA&T costs are budgeted in the year of the hardware delivery. Procurement Lead Time (PLT) is 15 months to deliver the first terminal. Deliveries continue over a 12-month period with the last delivery occurring 27 months after award. System Operational Verification Test (SOVT) costs are tied to the end of the installation availability. 3. Design Services Allocation (DSA) consists of installation design and post installation support. Installation design work consists of Ship Check and Installation Drawings that are integral in the planning of an installation and performed 6-12 months prior to installation start. Post Installation support includes Integrated Logistics Support (ILS) updates and Ship Selected Record (SSR) updates. DSA cost fluctuate from year to year based on the number of installations occurring. 4. Install cost fluctuations are driven by the configuration of the NMT system and the platform type. For example, estimated installation cost for a LHD 1 class (large deck) platform with dual Q/X/Ka capability is approximately three times greater than a DDG 51 class platform (small deck) with the same Q/X/Ka capability. Large deck ships consist of 2 Terminal Communication Groups with 4, 5, or 6 antennas. The antenna mix is dependent on the specific configuration requirement for each ship. For example, Small deck ships consist of 1 Terminal Communication Group with 2, 3, or 4 antennas. There are 13 variants of the NMT and antenna size varies by class (ranging from 54" to 96").

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)	**Modification Number / Title:** 2 / NMT Service Life Extension Modernization (SLEMOD) Kits
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	0.000	6.107	17.329	21.461	0.000	21.461	27.085	5.755	3.003	11.699	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	0.000	6.107	17.329	21.461	0.000	21.461	27.085	5.755	3.003	11.699	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**0.000**	**6.107**	**17.329**	**21.461**	**0.000**	**21.461**	**27.085**	**5.755**	**3.003**	**11.699**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Service Life Extension and Modernization (SLEMOD) Kits provide sustainment and capability enhancements to the Fleet in order to establish system resilience while maintaining perpetual readiness. The NMT Program of Record(POR) has been tasked with extending the lifespan of the Terminal 20 plus years longer than originally planned. Sustainment and capability enhancement packages fielded as SLEMOD kits allow the NMT PoR to pace the threat while enhancing NMT performance and capability in order to support the Warfighter.

SLEMOD kit is comprised of hardware and software components. Integration, Assembly and Test (IA&T) and System Operational Verification Test (SOVT) engineering services are required to deliver and install the SLEMOD Kits. IA&T costs are budgeted in the year of the hardware delivery and require pre-installation integration and testing. System Operational Verification Test (SOVT) costs are tied to the end of the installation availability and verify SLEMOD Kit is operational.

Design Services Allocation (DSA) consists of installation design and post installation support. Installation design work consists of Ship Check and Installation Drawings that are integral in the planning of an installation and performed 6-12 months prior to installation start. Post Installation support includes Integrated Logistics Support (ILS) updates and Ship Selected Record (SSR) updates. DSA cost fluctuate from year to year based on the number of installations occurring.

Production support consists of financial, contractual, and programmatic cost associated with the production and installation of the SLEMOD Kits.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)	**Modification Number / Title:** 2 / NMT Service Life Extension Modernization (SLEMOD) Kits
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: [No Model Specified]	**Modification Type:** TBD	**Related RDT&E PEs:**

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: NMT Service Life Extension Modernization (SLEMOD) Kits												
B Kits												
Recurring												
1.1.1) NMT SLE Modernization Kit Afloat - NonOrganic (4)	- / -	10 / 2.512	30 / 7.687	39 / 10.193	- / -	39 / 10.193	47 / 12.529	8 / 2.175	4 / 1.109	18 / 5.092	Continuing	Continuing
1.1.2) NMT SLE Modernization Kit Ashore - NonOrganic	- / -	2 / 0.502	3 / 0.769	2 / 0.523	- / -	2 / 0.523	5 / 1.333	3 / 0.816	1 / 0.277	2 / 0.566	Continuing	Continuing
Subtotal: Recurring	*- / 0.000*	*- / 3.014*	*- / 8.456*	*- / 10.716*	*- / -*	*- / 10.716*	*- / 13.862*	*- / 2.991*	*- / 1.386*	*- / 5.658*	*Continuing*	*Continuing*
Subtotal: NMT Service Life Extension Modernization (SLEMOD) Kits	*- / -*	*12 / 3.014*	*33 / 8.456*	*41 / 10.716*	*- / -*	*41 / 10.716*	*52 / 13.862*	*11 / 2.991*	*5 / 1.386*	*20 / 5.658*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 0.000*	*- / 3.014*	*- / 8.456*	*- / 10.716*	*- / -*	*- / 10.716*	*- / 13.862*	*- / 2.991*	*- / 1.386*	*- / 5.658*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) NMT SLEMOD Integration, Assembly, & Test (5)	- / -	- / 0.408	- / 1.191	- / 1.451	- / -	- / 1.451	- / 1.877	- / 0.331	- / 0.188	- / 0.728	Continuing	Continuing
2.2) NMT SLEMOD Production Support Afloat (6)	- / -	- / 0.035	- / 0.568	- / 0.612	- / -	- / 0.612	- / 0.752	- / 0.127	- / 0.063	- / 0.306	Continuing	Continuing
2.3) NMT SLEMOD Kit Production Support Ashore	- / -	- / 0.007	- / 0.054	- / 0.031	- / -	- / 0.031	- / 0.080	- / 0.049	- / 0.017	- / 0.034	Continuing	Continuing
2.4) DSA Ship & Sub (7)	- / -	- / 0.462	- / 0.996	- / 0.983	- / -	- / 0.983	- / 0.539	- / 0.114	- / 0.336	- / 0.904	Continuing	Continuing
2.5) NMT SLEMOD Kit SOVT Afloat and Ashore (8)	- / -	- / 0.099	- / 0.278	- / 0.352	- / -	- / 0.352	- / 0.456	- / 0.045	- / 0.046	- / 0.176	Continuing	Continuing
Subtotal: Support	*- / 0.000*	*- / 1.011*	*- / 3.087*	*- / 3.429*	*- / -*	*- / 3.429*	*- / 3.704*	*- / 0.666*	*- / 0.650*	*- / 2.148*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: NMT Service Life Extension Modernization (SLEMOD) Kits	- / 0.000	- / 2.082	- / 5.786	- / 7.316	- / 0.000	- / 7.316	- / 9.519	- / 2.098	- / 0.967	- / 3.893	Continuing	Continuing
Subtotal: Installation	*- / 0.000*	*- / 2.082*	*- / 5.786*	*- / 7.316*	*- / -*	*- / 7.316*	*- / 9.519*	*- / 2.098*	*- / 0.967*	*- / 3.893*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**0.000**	**6.107**	**17.329**	**21.461**	**0.000**	**21.461**	**27.085**	**5.755**	**3.003**	**11.699**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)	**Modification Number / Title:** 2 / NMT Service Life Extension Modernization (SLEMOD) Kits

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: NMT Service Life Extension Modernization (SLEMOD) Kits

Manufacturer Information

Manufacturer Name: Raytheon | Manufacturer Location: Marlborough, MA

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 2

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023	Jan 2024				
Delivery Dates	Mar 2022	Mar 2023	Mar 2024				

Installation Information

Method of Implementation: Method:: Installation Name: NMT SLE Modernization Kit Afloat

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	10 / 1.700	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	10 / 1.700
FY 2023	- / -	- / -	30 / 5.202	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	30 / 5.202
FY 2024	- / -	- / -	- / -	39 / 6.919	0 / 0.000	39 / 6.919	- / -	- / -	- / -	- / -	0 / 0.000	39 / 6.919
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	47 / 8.506	- / -	- / -	- / -	0 / 0.000	47 / 8.506
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	8 / 1.478	- / -	- / -	0 / 0.000	8 / 1.478
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 0.756	- / -	0 / 0.000	4 / 0.756
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	18 / 3.463	0 / 0.000	18 / 3.463
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	- / -	10 / 1.700	30 / 5.202	39 / 6.919	0 / 0.000	39 / 6.919	47 / 8.506	8 / 1.478	4 / 0.756	18 / 3.463	Continuing	Continuing

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	8	2	-	-	18	12	-	-	20	19	-	-	27	20	-	-	5	3	-	-	2	2	-	-	10	8	Cont.	Cont.
Out	-	-	-	-	10	-	-	-	30	-	-	-	39	-	-	-	47	-	-	-	8	-	-	-	4	-	-	-	18	Cont.	Cont.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)	**Modification Number / Title:** 2 / NMT Service Life Extension Modernization (SLEMOD) Kits
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: NMT Service Life Extension Modernization (SLEMOD) Kits

Installation Information

Method of Implementation: Method:: Installation Name: NMT SLE Modernization Kit Ashore

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2022	- / -	2 / 0.382	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	2 / 0.382
FY 2023	- / -	- / -	3 / 0.584	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	3 / 0.584
FY 2024	- / -	- / -	- / -	2 / 0.397	0 / 0.000	2 / 0.397	- / -	- / -	- / -	- / -	0 / 0.000	2 / 0.397
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	5 / 1.013	- / -	- / -	- / -	0 / 0.000	5 / 1.013
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 0.620	- / -	- / -	0 / 0.000	3 / 0.620
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 0.211	- / -	0 / 0.000	1 / 0.211
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 0.430	0 / 0.000	2 / 0.430
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	- / -	2 / 0.382	3 / 0.584	2 / 0.397	0 / 0.000	2 / 0.397	5 / 1.013	3 / 0.620	1 / 0.211	2 / 0.430	Continuing	Continuing

Installation Schedule

	PYS	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				TC	Tot
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
In	-	-	-	2	-	-	-	3	-	-	-	2	-	-	-	3	2	-	-	3	-	-	-	1	-	-	-	2	-	Cont.	Cont.
Out	-	-	-	-	2	-	-	-	3	-	-	-	2	-	-	-	5	-	-	-	3	-	-	-	1	-	-	-	2	Cont.	Cont.

Footnotes:

(4) NMT SLEMOD Kits Afloat and Ashore - FY24 request includes funding to support NMT Service Life Extension Modernization (SLEMOD) Kits (Qty41). SLEMOD Kits provide sustainment and capability enhancements to the Fleet in order to establish system resilience while maintaining perpetual readiness. The NMT PoR has been tasked with extending the lifespan of the Terminal +20 years longer than originally planned. Capability enhancement packages fielded as SLEMOD kits allow the NMT PoR to pace the threat while enhancing NMT performance and capability in order to support the Warfighter. SLEMOD kit is comprised of Hardware and Software components. Integration, Assembly and Test (IA&T) and System Operational Verification Test (SOVT) engineering services are required to deliver and install the SLEMOD Kits. IA&T costs are budgeted in the year of the hardware delivery and require pre-installation integration and testing. System Operational Verification Test (SOVT) costs are tied to the end of the installation availability and verify SLEMOD Kit is operational. Design Services Allocation (DSA) consists of installation design and post installation support. Installation design work consists of Ship Check and Installation Drawings that are integral in the planning of an installation and performed 6-12 months prior to installation start. Post Installation support includes Integrated Logistics Support (ILS) updates and Ship Selected Record (SSR) updates. DSA cost fluctuate from year to year based on the number of installations occurring. Production support consists of financial, contractual, and programmatic cost associated with the production and installation of the SLEMOD Kits.

(5) Increase in SLEMOD Integration, Assembly, & Test (IA&T) is due to an increase in the quantity of SLEMOD kits being procured in FY24 compared to FY23.

(6) Increase in SLEMOD Production Support is due to an increase in the quantity of SLEMOD kits being procured in FY24 compared to FY23.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 13	**P-1 Line Item Number / Title:** 3216 / Navy Multiband Terminal (NMT)	**Modification Number / Title:** 2 / NMT Service Life Extension Modernization (SLEMOD) Kits
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(7) Design Services Allocation (DSA) consists of installation design and post installation support. Installation design work consists of Ship Check and Installation Drawings that are integral in the planning of an installation and performed 6-12 months prior to installation start. Post Installation support includes Integrated Logistics Support (ILS) updates and Ship Selected Record (SSR) updates. DSA cost fluctuate from year to year based on the number of installations occurring.

(8) Increase in FY24 is due to additional SLEMOD installations occurring in FY24.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 14: Shore Communications	**P-1 Line Item Number / Title:** 3302 / Joint Communications Support Element (JCSE)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	41.376	2.651	2.651	5.065	0.000	5.065	4.561	4.740	4.831	4.947	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	41.376	2.651	2.651	5.065	0.000	5.065	4.561	4.740	4.831	4.947	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**41.376**	**2.651**	**2.651**	**5.065**	**0.000**	**5.065**	**4.561**	**4.740**	**4.831**	**4.947**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE): JCSE, aligned under Joint Enabling Capabilities Command (JECC), US Transportation Command, is the only Department of Defense (DoD) organization specifically formed to provide contingency and crisis communications to meet the operational support needs of the Joint Chiefs of Staff (JCS), Combatant Commands (CC), DOD agencies and non-DOD agencies. JCSE mission is to provide rapidly deployable, enroute, early entry, and scalable coalition command, as well as control, computers, intelligence, surveillance, and reconnaissance (C4ISR) capability to Combatant Commands and other agencies as directed. This facilitates rapid establishment of Joint Forces Head Quarters (JFHQs) and bridges joint communication requirements. JCSE seamlessly scales C4ISR support for up to four conventional or unconventional JFHQs. JCSE has a robust 24/7 reach back capability through its Global Enterprise Network and has access to a full range of DOD and commercial networks to consistently deliver state of the art technology solutions to meet emergent CC operational communications requirements. JCSE relies on the Modernization Program as outlined in the Director, Joint Staff Memorandum (DJSM) 0148-20 whereby services are mandated to apportion and program procurement funds each year to support JCSE's Modernization Program. Per Defense Planning Guidance (DPG) and DJSM 0148-20, the Navy is mandated to fund 1/3rd of $16.390M fair share of JCSEs validated Modernization Program. JCSE's Modernization Program is based on CC and Service Components requirements and emerging technologies. The Services and JCSEs make recommendations in concert with Major Defense Acquisition Program (MDAP) schedules, ensuring the Service investments meet Joint Service Requirements.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 14: Shore Communications	**P-1 Line Item Number / Title:** 3302 / Joint Communications Support Element (JCSE)

ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	Joint Communications Support Element				- / 41.376	- / 2.651	- / 2.651	- / 5.065	- / -	- / 5.065
P-40	**Total Gross/Weapon System Cost**				**- / 41.376**	**- / 2.651**	**- / 2.651**	**- / 5.065**	**- / 0.000**	**- / 5.065**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

FY24 Base funding in the amount of $5.065 million supports the procurement of communications equipment. This funding level is required due to the mandate to fund 1/3rd of fair share of JCSEs validated Modernization Program as documented in the Defense Planning Guidance and DJSM 0148-20. The program is jointly funded by Army, Navy and Air Force in support of Joint Tactical Force (JTF) and Joint Special Operations Task Force Headquarters.

FY24 base funding procures communications equipment in concert with Strategic Planning Guidance, Joint All Domain Command and Control (JADC2) architecture and CC JTF capability requests. This includes maximum capabilities for narrowband, wide band and protected satellite communications (SATCOM) terminals and systems, tactical radios, terrestrial communications systems, satellite hubs, networking elements, virtual appliances, Video Teleconferencing (VTC) capabilities, alternative power solutions, Airborne/En route, Forced entry, Cyber Security, Denied, Degraded C2 Environments (D2C2E), and mobile joint C2 requirements. Advancements in technology, especially in commercial off-the-shelf solutions, continue to provide opportunities to modernize JCSEs equipment sets with enhanced capabilities to support Delayed/Disconnected Intermittent Low Bandwidth (DDIL) and zero trust capabilities with the smallest footprint, enhanced cyber security, reduced operations and maintenance costs and seamless integration with the Department of Defense Information Network (DODIN) and the Joint Information Environment (JIE). The equipment is a critical part of delivering scalable C4ISR across the full spectrum of operations for the JFHQ that is in line with the JADC2 framework and the direction of C3 modernization. The Services influence JCSEs spending plan through recommendations in concert with Major Defense Acquisition Program (MDAP) schedules, ensuring the Service monies meet Joint Service Requirements.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 14	**P-1 Line Item Number / Title:** 3302 / Joint Communications Support Element (JCSE)	**Aggregated Items Title:** Joint Communications Support Element

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
1) Joint Communications Support Element Modernization																				
1.1) Joint Communications Support Element Modernization [1]	A		-	-	41.376	-	-	2.651	-	-	2.651	-	-	5.065	-	-	-	-	-	5.065
Subtotal: 1) Joint Communications Support Element Modernization			**-**	**-**	***41.376***	**-**	**-**	***2.651***	**-**	**-**	***2.651***	**-**	**-**	***5.065***	**-**	**-**	**-**	**-**	**-**	***5.065***
Total			**-**	**-**	**41.376**	**-**	**-**	**2.651**	**-**	**-**	**2.651**	**-**	**-**	**5.065**	**-**	**-**	**-**	**-**	**-**	**5.065**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

Footnotes:

[1] Quantities are not shown. Quantities and equipment type are determined by the Combatant Command (COCOM) on an annual basis based on Joint Task Force and Joint Special Operations Task Force operational requirements for critical communications.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 15: Cryptographic Equipment	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0303140N, 0305327N

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	2,247.509	145.311	156.034	154.890	0.000	154.890	151.996	154.781	160.353	161.978	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	2,247.509	145.311	156.034	154.890	0.000	154.890	151.996	154.781	160.353	161.978	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**2,247.509**	**145.311**	**156.034**	**154.890**	**0.000**	**154.890**	**151.996**	**154.781**	**160.353**	**161.978**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.907	1.138	1.390	-	1.390	0.858	1.509	2.227	2.316	Continuing	Continuing
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Information Systems Security Program (ISSP) ensures the protection of Navy and joint cyberspace systems from exploitation and attack. Systems include wired and wireless telecommunications systems, cybersecurity systems, and the content processed, stored, or transmitted therein. ISSP includes protection of the Navy's National Security Systems (NSS).

The rapid change in the underlying commercial and government cyber infrastructures makes cybersecurity an increasingly complex and dynamic problem. ISSP provides the Navy's warfighter the essential information trust characteristics of availability, confidentiality, integrity, authentication, and non-repudiation. Cybersecurity capabilities must evolve quickly to meet the rapidly evolving threats and vulnerabilities.

Programs within the ISSP budget include:

Public Key Infrastructure (PKI): PKI implements a secure infrastructure for the generation, management, and delivery of digital certificates for secure electronic transactions, hardware certificate-based two-way authentication to networks, applications, web servers, and secure email. PKI equipment includes: Navy Certificate Validation Infrastructure (NCVI) Secret Internet Protocol Router Network (SIPRNet) & Non-Classified Internet Protocol Router Network (NIPRNet) hardware/software, and hardware token product end items.

Navy Cyber Situational Awareness (NCSA): NCSA is a command and control infrastructure that provides Navy commanders with timely, trusted, and comprehensive Situational Awareness (SA) of the cyberspace domain to include tailored, near real-time visualization of network health, vulnerabilities, and operational readiness through the correlation of data from multiple sources. NCSA enables early threat detection and timely decision making. The NCSA software suite includes the Navy Commander's Cyber Dashboard (NCCD), a single view into the platform's cyber readiness, providing better visibility into Information Warfare readiness trends and drivers, as well as current cyber risk to mission; this view is provided by the Readiness Analytics and Visualization Environment (RAVEN) capability. RAVEN is a visualization capability that ingests a variety of readiness and cybersecurity inputs to create visual dashboards. NCSA implements hybrid cloud based modernized Navy Big Data Platform (BDP) instances, including pre-production development and operational instances, that enable data sharing between Navy DCO data and analytics fabric and joint DCO and cyber situational awareness systems as described in the Joint Cyber Warfighting Architecture (JCWA). NCSA ashore systems will enable Navy commanders to monitor, assess, plan, and direct Navy networks to provide a high-level of confidence that operational missions can be executed as planned in adverse cyber conditions. Cyber SA will be provided via web-accessible services generated from a primary core suite fielded at Navy Cyber Defense Operations Command (NCDOC). Visualizations and analytics will be customized based on end user needs, shareable and tailorable between different end users. End users include Fleet Cyber Command/Commander Tenth Fleet (FCC/C10F), Fleet Maritime Operations Centers (MOCs), NCDOC, and Navy Network Warfare Command (NNWC). NCSA procures equipment to collect, curate, analyze, and visualize maritime operations critical for providing Navy commanders with timely, trusted, and comprehensive SA of the cyberspace domain; Data as a Service (DaaS) which provides the ability to ingest disparate data from numerous data sources; analytics suite of software and logic to integrate and translate the data ingested by the DaaS component; visualization/user interface to display cyber SA data that are relevant to the unique needs

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 15: Cryptographic Equipment	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0303140N, 0305327N
Line Item MDAP/MAIS Code: N/A		

of the Cyber Commander and for display via common visual services; as well as equipment for platforms conducting Ballistic Missile Defense (BMD) and other mission requirements (details held at a higher classification). The data that is collected and analyzed via SHARKCAGE will be presented and visualized via the NCSA capability.

Computer Network Defense (CND): The CND afloat capability will remain until all systems have transitioned to Consolidated Afloat Networks and Enterprise Services (CANES). CND afloat Operating System Environment (OSE) includes host-based protection tools, system vulnerability tools, cyber remediation tools, supporting hardware and software for Department of Defense (DoD) mandated tools, enhanced data correlation tools, switches, ancillary devices and other related security tools. CND ashore provides capabilities to secure the Cyber Domain. CND is a set of processes and protective measures that use computer networks to detect, monitor, protect, analyze, and defend against network infiltrations resulting in service/network denial, degradation and disruptions. CND enables a government or military institute/organization to defend against network attacks perpetrated by malicious or adversarial computer systems or networks. The Fixed Submarine Broadcast System (FSBS) includes other mission requirements (details held at a higher classification).

Navy Cryptography (Crypto): Navy Crypto modernizes legacy cryptographic equipment which includes families of Communications Security (COMSEC) and Transmission Security (TRANSEC) devices that are divided into crypto voice, crypto data, crypto products and associated ancillary devices. These devices provide modern cryptographic solutions to replace obsolete, legacy devices within the crypto categories in order to meet mandated National Security Agency (NSA) cease key dates for modernized encryption. Advanced Cryptographic Capabilities (ACC), will provide NSA mandated cryptographic security software modernization of various communications security devices by cease key dates (details held at a higher classification). Cryptographic Modernization (CM) provides NSA mandated cryptographic modernization of various communications security devices (details held at a higher classification).

Key Management (KM): KM is a combination of Tier 1 Key Management Infrastructure (KMI), Tier 2 security equipment, and Tier 3 equipment and software (SW) for Key distribution and loading into End Cryptographic Units (ECUs). KMI is a single, automated, network-accessible, electronic based infrastructure that focuses on delivery of electronic key material. It provides Net Centric operations that are reliable, timely, and secure for COMSEC material management. KMI also provides the means for secure ordering, generation, production, distribution, management and auditing of secure key of cryptographic products.

SHARKCAGE: SHARKCAGE is the U.S. Navy's Defensive Cyberspace Operations (DCO) analysis enclave and means to achieve cyberspace detection-in-depth for maritime forces afloat and ashore. SHARKCAGE is the mechanism by which units, groups, and fleets will gain an attack sensing and warning (AS&W) capability and how Commander, Task Force 1020/Navy Cyber Defense Operations Command (NCDOC) will achieve unity of effort and economy of force across the Navy's DCO forces. SHARKCAGE is a Navy-specific platform to complement where existing and future theater, joint, and national capabilities are insufficient for detection of adversary activities onboard maritime warfighting platforms that are located at the tactical-edge and distributed across the globe. The data that is collected and analyzed via SHARKCAGE will be presented and visualized via the NCSA capability.

[P5 / CND - Train-the-Trainer]: Funding provided to transition initial training (train the trainer) to an approved solution at the schoolhouses.

[P3A - 4 / Key Load Device]: Formerly known as Simple Key Loader (SKL), the nomenclature changed to Key Load Devices to account for all devices including Tactical Key Loader (TKL), Simple Key Loader (SKL) and the Next Generation Load Device (NGLD) which will replace legacy systems.

FY24 funds provided Key Loader Device procurements which are required to replenish the fleet with key-fill devices required to conduct secure, mission-critical communications. Quantities fluctuate to remain within the Inventory Objective Capability (IOC).

[P3A - 5 / Key Load Device]: Formerly known as Simple Key Loader (SKL), the nomenclature changed to Key Load Devices to account for all devices including Tactical Key Loader (TKL), Simple Key Loader (SKL) and the Next Generation Load Device (NGLD) which will replace legacy systems.

FY24 funds provided Key Loader Device procurements which are required to replenish the fleet with key-fill devices required to conduct secure, mission-critical communications. Quantities fluctuate to remain within the Inventory Objective Capability (IOC).

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 15: Cryptographic Equipment	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)

ID Code (A=Service Ready, B=Not Service Ready): A | **Program Elements for Code B Items:** N/A | **Other Related Program Elements:** 0303140N, 0305327N

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Info Systems Security Program (ISSP)	P-5a			- / 1,242.843	- / 3.027	- / 4.773	- / 4.886	- / 0.000	- / 4.886
P-3a	1 / Computer Network Defense (CND) Increment 2- Ashore (DA070) (Various)				- / 272.923	- / 26.343	- / 29.873	- / 29.831	- / 0.000	- / 29.831
P-3a	2 / Navy Cryptography (Crypto) - Afloat (DA071) (Various)				- / 296.676	- / 35.135	- / 38.923	- / 29.311	- / 0.000	- / 29.311
P-3a	3 / Navy Cryptography (Crypto) - Ashore (DA071) (Initial)				- / 158.630	- / 32.391	- / 32.193	- / 42.552	- / 0.000	- / 42.552
P-3a	4 / Key Management (KM) - Afloat (DA005) (Various)				- / 83.947	- / 7.407	- / 6.137	- / 8.158	- / 0.000	- / 8.158
P-3a	5 / Key Management (KM) - Ashore (DA005) (Various)				- / 56.967	- / 4.591	- / 6.116	- / 7.254	- / 0.000	- / 7.254
P-3a	6 / SHARKCAGE - Afloat (DA070) (Initial)				- / 84.926	- / 31.612	- / 28.818	- / 3.025	- / 0.000	- / 3.025
P-3a	7 / SHARKCAGE - Ashore (DA070) (Various)				- / 50.597	- / 4.805	- / 9.201	- / 29.873	- / 0.000	- / 29.873
P-40	**Total Gross/Weapon System Cost**				**- / 2,247.509**	**- / 145.311**	**- / 156.034**	**- / 154.890**	**- / 0.000**	**- / 154.890**

Exhibits Schedule					FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Info Systems Security Program (ISSP)	P-5a			- / -	- / -	- / -	- / -	- / -	- / -
P-3a	1 / Computer Network Defense (CND) Increment 2- Ashore (DA070) (Various)				- / 27.717	- / 27.688	- / 28.173	- / 29.074	Continuing	Continuing
P-3a	2 / Navy Cryptography (Crypto) - Afloat (DA071) (Various)				- / 38.540	- / 37.522	- / 38.491	- / 39.940	Continuing	Continuing
P-3a	3 / Navy Cryptography (Crypto) - Ashore (DA071) (Initial)				- / 34.008	- / 36.477	- / 36.989	- / 37.050	Continuing	Continuing
P-3a	4 / Key Management (KM) - Afloat (DA005) (Various)				- / 8.212	- / 8.231	- / 9.364	- / 10.007	Continuing	Continuing
P-3a	5 / Key Management (KM) - Ashore (DA005) (Various)				- / 8.090	- / 8.390	- / 10.123	- / 7.872	Continuing	Continuing
P-3a	6 / SHARKCAGE - Afloat (DA070) (Initial)				- / 13.994	- / 14.725	- / 14.494	- / 16.297	Continuing	Continuing
P-3a	7 / SHARKCAGE - Ashore (DA070) (Various)				- / 16.530	- / 16.878	- / 17.683	- / 16.939	Continuing	Continuing
P-40	**Total Gross/Weapon System Cost**				**- / 151.996**	**- / 154.781**	**- / 160.353**	**- / 161.978**	**Continuing**	**Continuing**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The FY 2024 budget will procure the following:

P5 / Public Key Infrastructure (PKI) Support: FY24 increase ($0.031M) is due to Design Services Allocation (DSA) costs attributed to requirements of specific platforms, which is associated to the (10) PKI systems (DA018) procured.

P5 / Navy Cyber Situational Awareness (NCSA) Hardware, Installations, and Support: FY24 overall increase ($0.032M) is driven by installation ($0.023M) and support ($0.009M) cost fluctuations associated with the procurement of (1) NCSA Suite (DA070). Installation and support costs fluctuate based on installation site.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 15: Cryptographic Equipment	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** 0303140N, 0305327N
Line Item MDAP/MAIS Code: N/A		

P5 / Support - Computer Network Defense (CND) (DA070) Hardware, Installations and Support: FY24 overall increase ($0.050M) is due to an additional system being procured in FY24, totaling (13) CND afloat systems.

P3a / Computer Network Defense (CND) - (27) Ashore Systems (DA070): Various equipment to secure Navy Ashore networks, i.e., hardware and software such as host-based protection tools, Department of Defense (DoD) mandated cyber security tools, cyber security capabilities, servers, laptops, ancillary devices and CND Deployer Toolkits (CDTs). FY24 increase ($0.107M) is driven by cost fluctuation.

P3a / Navy Cryptography (Crypto) - Afloat (DA071): (163) In-Line Network Encryptors (INE) (Organic), (5) Advanced Cryptographic Capabilities (Organic), (39) Cryptographic Modernization (CM) (Organic); FY24 decrease ($9.190M) aligns to reallocating VACM Afloat procurements funding to Cryptographic Modernization procurements. Also, aligns KGV-11M to inventory levels in accordance with the NSA cease key dates (classified) for TS and S circuits.

P3a / Navy Cryptography (Crypto) - Ashore (DA071): (1,370) VACM devices (Organic), (4) ACC (Organic), (41) Cryptographic Modernization (CM); FY24 increase ($10.711M) aligns to CM procurements.

P3a / Key Management (KM) - Afloat (DA005): (400) Key Load Device, (54) KMI Tech Refresh; FY24 increase ($2.421M) is required for Key Loader Device to replenish the fleet with key-fill devices required to conduct secure, mission-critical communications. Quantities fluctuate to remain within the Inventory Objective Capability (IOC).

P3a / Key Management (KM) - Ashore (DA005): (617) Key Load Device (SKL), (50) Key Management Infrastructure (KMI) Tech Refresh. FY24 increase ($1.463M) is required for Key Loader Device to replenish the fleet with key-fill devices required to conduct secure, mission-critical communications. Quantities fluctuate to remain within the Inventory Objective Capability (IOC).

P3a / SHARKCAGE - Afloat (DA070): (2) SHARKCAGE Afloat Suite 2.0. FY24 decrease ($25.793M) is driven by a reduction of the SHARKCAGE Afloat Suite which aligns to the current fielding requirements to support new production Afloat variant 2.0.

P3a / SHARKCAGE - Ashore (DA070): (5) SHARKCAGE Analytic Suite 2.0, (2) SHARKCAGE Sensor Suite 2.0. FY24 increase ($20.672M) is driven by the procurement of the new production Ashore variants which aligns to the current site requirements for both Analytic 2.0 and Sensor 2.0 Suites.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	P-1 Line Item Number / Title: 3415 / Info Systems Security Program (ISSP)	Item Number / Title [DODIC]: 1 / Info Systems Security Program (ISSP)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	1,242.843	3.027	4.773	4.886	0.000	4.886
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	1,242.843	3.027	4.773	4.886	0.000	4.886
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**1,242.843**	**3.027**	**4.773**	**4.886**	**0.000**	**4.886**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - Consolidated Prior Year Requirements Cost																		
Non Recurring Cost																		
1.1.1) Consolidated Prior Year Requirements (1)	-	-	1,133.929	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000	-	-	0.000
Subtotal: Non Recurring Cost	-	-	*1,133.929*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*	-	-	*0.000*
Subtotal: Hardware - Consolidated Prior Year Requirements Cost	**-**	**-**	***1,133.929***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***	**-**	**-**	***0.000***
Hardware - Public Key Infrastructure (PKI) (DA018) Cost																		
Recurring Cost																		
2.1.1) PKI - Procurement(†)	0.824	45,356	37.369	88.500	10	0.885	88.500	10	0.885	88.500	10	0.885	-	-	0.000	88.500	10	0.885
Subtotal: Recurring Cost	-	-	*37.369*	-	-	*0.885*	-	-	*0.885*	-	-	*0.885*	-	-	*0.000*	-	-	*0.885*
Subtotal: Hardware - Public Key Infrastructure (PKI) (DA018) Cost	**-**	**-**	***37.369***	**-**	**-**	***0.885***	**-**	**-**	***0.885***	**-**	**-**	***0.885***	**-**	**-**	***0.000***	**-**	**-**	***0.885***
Hardware - Navy Cyber Situational Awareness (NCSA) (DA070) Cost																		
Recurring Cost																		
3.1.1) NCSA - Procurement(†)	940.000	5	4.700	-	-	0.000	900.000	1	0.900	900.000	1	0.900	-	-	0.000	900.000	1	0.900
Subtotal: Recurring Cost	-	-	*4.700*	-	-	*0.000*	-	-	*0.900*	-	-	*0.900*	-	-	*0.000*	-	-	*0.900*

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	P-1 Line Item Number / Title: 3415 / Info Systems Security Program (ISSP)	Item Number / Title [DODIC]: 1 / Info Systems Security Program (ISSP)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Subtotal: Hardware - Navy Cyber Situational Awareness (NCSA) (DA070) Cost	**-**	**-**	***4.700***	**-**	**-**	***0.000***	**-**	**-**	***0.900***	**-**	**-**	***0.900***	**-**	**-**	***0.000***	**-**	**-**	***0.900***
Hardware - Computer Network Defense (CND) Afloat Procurement Cost																		
Recurring Cost																		
4.1.1) CND - Afloat Procurement(†)	35.146	321	11.282	37.500	10	0.375	37.500	12	0.450	39.214	13	0.510	-	-	0.000	39.214	13	0.510
Subtotal: Recurring Cost	-	-	*11.282*	-	-	*0.375*	-	-	*0.450*	-	-	*0.510*	-	-	*0.000*	-	-	*0.510*
Subtotal: Hardware - Computer Network Defense (CND) Afloat Procurement Cost	**-**	**-**	***11.282***	**-**	**-**	***0.375***	**-**	**-**	***0.450***	**-**	**-**	***0.510***	**-**	**-**	***0.000***	**-**	**-**	***0.510***
Hardware - Public Key Infrastructure (PKI) Installations Cost																		
Recurring Cost																		
5.1.1) PKI - Installations	-	-	11.092	-	-	0.300	-	-	0.300	-	-	0.300	-	-	0.000	-	-	0.300
Subtotal: Recurring Cost	-	-	*11.092*	-	-	*0.300*	-	-	*0.300*	-	-	*0.300*	-	-	*0.000*	-	-	*0.300*
Subtotal: Hardware - Public Key Infrastructure (PKI) Installations Cost	**-**	**-**	***11.092***	**-**	**-**	***0.300***	**-**	**-**	***0.300***	**-**	**-**	***0.300***	**-**	**-**	***0.000***	**-**	**-**	***0.300***
Hardware - Navy Cyber Situational Awareness (NCSA) Installations Cost																		
Recurring Cost																		
6.1.1) NCSA - Installations (2)	-	-	1.441	-	-	0.000	-	-	0.321	-	-	0.344	-	-	0.000	-	-	0.344
Subtotal: Recurring Cost	-	-	*1.441*	-	-	*0.000*	-	-	*0.321*	-	-	*0.344*	-	-	*0.000*	-	-	*0.344*
Subtotal: Hardware - Navy Cyber Situational Awareness (NCSA) Installations Cost	**-**	**-**	***1.441***	**-**	**-**	***0.000***	**-**	**-**	***0.321***	**-**	**-**	***0.344***	**-**	**-**	***0.000***	**-**	**-**	***0.344***
Hardware - Computer Network Defense (CND) Afloat Installations Cost																		
Recurring Cost																		
7.1.1) CND - Afloat Installations	-	-	22.062	-	-	0.750	-	-	0.812	-	-	0.806	-	-	0.000	-	-	0.806
Subtotal: Recurring Cost	-	-	*22.062*	-	-	*0.750*	-	-	*0.812*	-	-	*0.806*	-	-	*0.000*	-	-	*0.806*
Subtotal: Hardware - Computer Network Defense (CND) Afloat Installations Cost	**-**	**-**	***22.062***	**-**	**-**	***0.750***	**-**	**-**	***0.812***	**-**	**-**	***0.806***	**-**	**-**	***0.000***	**-**	**-**	***0.806***
Support - Public Key Infrastructure (PKI) Cost																		
8.1) PKI - Production Support	-	-	5.940	-	-	0.023	-	-	0.023	-	-	0.023	-	-	0.000	-	-	0.023

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	P-1 Line Item Number / Title: 3415 / Info Systems Security Program (ISSP)	Item Number / Title [DODIC]: 1 / Info Systems Security Program (ISSP)
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
8.2) PKI - Design Services Allocations (DSA)	-	-	5.884	-	-	0.307	-	-	0.337	-	-	0.368	-	-	0.000	-	-	0.368
Subtotal: Support - Public Key Infrastructure (PKI) Cost	**-**	**-**	***11.824***	**-**	**-**	***0.330***	**-**	**-**	***0.360***	**-**	**-**	***0.391***	**-**	**-**	***0.000***	**-**	**-**	***0.391***
Support - Navy Cyber Situational Awareness (NCSA) Cost																		
9.1) NCSA - Production Support	-	-	0.189	-	-	0.000	-	-	0.028	-	-	0.029	-	-	0.000	-	-	0.029
9.2) NCSA - DSA	-	-	0.667	-	-	0.000	-	-	0.349	-	-	0.357	-	-	0.000	-	-	0.357
Subtotal: Support - Navy Cyber Situational Awareness (NCSA) Cost	**-**	**-**	***0.856***	**-**	**-**	***0.000***	**-**	**-**	***0.377***	**-**	**-**	***0.386***	**-**	**-**	***0.000***	**-**	**-**	***0.386***
Support - Computer Network Defense (CND) Afloat Cost																		
10.1) CND - Train-the-Trainer	-	-	6.006	-	-	0.317	-	-	0.300	-	-	0.313	-	-	0.000	-	-	0.313
10.2) CND - Production Support	-	-	0.800	-	-	0.030	-	-	0.029	-	-	0.035	-	-	0.000	-	-	0.035
10.3) CND - DSA	-	-	1.482	-	-	0.040	-	-	0.039	-	-	0.016	-	-	0.000	-	-	0.016
Subtotal: Support - Computer Network Defense (CND) Afloat Cost	**-**	**-**	***8.288***	**-**	**-**	***0.387***	**-**	**-**	***0.368***	**-**	**-**	***0.364***	**-**	**-**	***0.000***	**-**	**-**	***0.364***
Gross/Weapon System Cost	**-**	**-**	**1,242.843**	**-**	**-**	**3.027**	**-**	**-**	**4.773**	**-**	**-**	**4.886**	**-**	**-**	**0.000**	**-**	**-**	**4.886**

(†) indicates the presence of a P-5a

Footnotes:

(1) Funding consolidated into one line and include the following programs: Computer Network Defense (CND) Increment 1, Navy Cryptography (Crypto), Key Management (KM), Cyber Virtual System Enclave (VSE), and Counter Insider Threat Capability (CITC).

(2) FY24 installation increase due to fluctuation of install costs associated with the various sets of tools required by site.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	P-1 Line Item Number / Title: 3415 / Info Systems Security Program (ISSP)	Item Number / Title [DODIC]: 1 / Info Systems Security Program (ISSP)

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2.1.1) PKI - Procurement		2022	Defense Manpower Data Center / Alexandria, VA	WR	Alexandria, VA	Feb 2022	Mar 2022	10	88.500	Y		
2.1.1) PKI - Procurement		2023	Defense Manpower Data Center / Alexandria, VA	WR	Alexandria, VA	Feb 2023	Mar 2023	10	88.500	Y		
2.1.1) PKI - Procurement		2024	Defense Manpower Data Center / Alexandria, VA	WR	Alexandria, VA	Feb 2024	Mar 2024	10	88.500	Y		
3.1.1) NCSA - Procurement		2023	Naval Information Warfare Center (NIWC) Pacific / San Diego, CA	WR	San Diego, CA	Dec 2022	Mar 2023	1	900.000	Y		
3.1.1) NCSA - Procurement		2024	Naval Information Warfare Center (NIWC) Pacific / San Diego, CA	WR	San Diego, CA	Dec 2023	Mar 2024	1	900.000	Y		
4.1.1) CND - Afloat Procurement		2022	Naval Information Warfare Center (NIWC) Atlantic / Charleston, SC	WR	San Diego, CA	Dec 2021	Jan 2022	10	37.500	Y		
4.1.1) CND - Afloat Procurement		2023	Naval Information Warfare Center (NIWC) Atlantic / Charleston, SC	WR	San Diego,CA	Dec 2022	Jan 2023	12	37.500	Y		
4.1.1) CND - Afloat Procurement		2024	Naval Information Warfare Center (NIWC) Atlantic / Charleston, SC	WR	San Diego,CA	Dec 2023	Jan 2024	13	39.214	Y		

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 1 / Computer Network Defense (CND) Increment 2- Ashore (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	272.923	26.343	29.873	29.831	0.000	29.831	27.717	27.688	28.173	29.074	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	272.923	26.343	29.873	29.831	0.000	29.831	27.717	27.688	28.173	29.074	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**272.923**	**26.343**	**29.873**	**29.831**	**0.000**	**29.831**	**27.717**	**27.688**	**28.173**	**29.074**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Computer Network Defense (CND) ashore sites represent multiple CND architectures/capabilities within each build that are specifically procured for each site based on the site mission and latest cyber threat. CND builds and variants are specifically designed to each site in accordance with CND's rapid Information Technology (IT) fielding construct.

CND ashore sites include: IT 21st Century (IT-21) Networks Operation Centers (NOCs) which provide regional protection to shore and afloat assets within their area of responsibility; Navy Cyber Defense Operations Command (NCDOC), the designated Navy CND service provider, whose mission is to coordinate, monitor, analyze, and oversee the defense of Navy computer networks and NOCs who are responsible for accomplishing CND missions; Theater Network Operations and Security Centers (TNOSCs) and Outside the Continental United States (OCONUS) Navy Enterprise Network (ONE-Net) Local Network Service Centers (LNSCs). The ONE-Net security initiative consolidates LNSCs to their parent TNOSCs for more efficient operation and enables greater failover capability between ONE-Net sites; Broadcast Control Authorities (BCAs); Fixed Submarine Broadcast System (FSBS) which supports enhancements of other mission requirements (details held at a higher classification); P-913: Shore Based Enterprise Network Enhancements for the Naval Computer and Telecommunications Area Master Station Atlantic (NCTAMSLANT) Facility (MILCON P-913), which requires the CND capability; Pre-Planned Product Improvement (P3I) NCDOC upgrade which replaces end-of-life equipment with more robust capability at NCDOC to enhance the command's Cyber Defense Mission Support System (CDMSS) architectural framework to provide the necessary storage capability and processing power to ingest and analyze increased volumes of data from additional sources; The Virtual Training Environment (VTE) initiative which will transition equipment to an approved solution at the schoolhouses. CND is designated Training Support Agent (TSA); and CND Production Labs that provide CND architecture for production representative systems.

CND also provides ashore infrastructure to provision the latest cyber security updates to all afloat tactical units; including Consolidated Afloat Networks and Enterprise Services (CANES), Integrated Shipboard Network System (ISNS) and other networks, which roll up cyber network data to NCDOC. CND will deploy technologies to shore commands and the shore-based afloat infrastructure to improve network defense and security wholeness, countering intruders and attacks aimed at disrupting tactical communications at the afloat gateways and shore commands; this will help the Navy's ability to prevent, constrain, and mitigate cyber-attacks and critical vulnerabilities, as well as provide greater resiliency, awareness, data analytics, redundancy, and diversity into the Navy's Defense-in-Depth (DiD) strategy. CND shore sites will have modern network sensors, improving the ability to detect unusual network patterns and prevent/deter malicious attacks.

CND procurement/installation quantities represent multiple CND architectures with an assortment of builds that are specifically designed to each site. Costs may vary by site and variant.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 1 / Computer Network Defense (CND) Increment 2- Ashore (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Shore	**Modification Type:** Various	**Related RDT&E PEs:** 0303140N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Computer Network Defense (CND) Increment 2- Ashore (DA070)												
B Kits												
Recurring												
1.1.1) Networks Operation Centers (NOC) - NonOrganic (3)	45 / 46.635	4 / 3.872	4 / 3.956	4 / 4.040	- / -	4 / 4.040	3 / 3.093	3 / 3.093	3 / 3.093	4 / 4.124	Continuing	Continuing
1.1.2) Navy Cyber Defense Operations Command (NCDOC) - NonOrganic (4)	21 / 23.139	1 / 1.005	1 / 1.015	2 / 2.046	- / -	2 / 2.046	2 / 2.070	2 / 2.070	2 / 2.070	2 / 2.070	Continuing	Continuing
1.1.3) Theater Network Operations & Security Center (TNOSC) - NonOrganic (5)	33 / 34.788	3 / 2.925	3 / 2.940	2 / 2.049	- / -	2 / 2.049	2 / 2.141	2 / 2.238	2 / 2.339	2 / 2.339	Continuing	Continuing
1.1.4) Broadcast Control Authorities (BCA) - NonOrganic (6)	36 / 9.441	2 / 0.350	3 / 0.528	2 / 0.368	- / -	2 / 0.368	3 / 0.577	3 / 0.603	3 / 0.631	2 / 0.420	Continuing	Continuing
1.1.5) Navy Enterprise Network (ONE-Net) Local Network Service Centers (LNSC) - NonOrganic (7)	27 / 2.483	- / -	2 / 0.150	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
1.1.6) Fixed Submarine Broadcast System (FSBS) - NonOrganic (8)	39 / 11.670	11 / 3.311	11 / 3.328	11 / 3.478	- / -	11 / 3.478	11 / 3.635	11 / 3.799	11 / 3.971	11 / 4.151	Continuing	Continuing
1.1.7) P-913: Shore Based Enterprise Network Enhancements - NonOrganic	2 / 3.856	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2 / 3.856
1.1.8) Pre-Planned Product Improvement (P3I): NCDOC Upgrade - Organic (9)	8 / 22.082	1 / 2.135	1 / 2.226	1 / 2.227	- / -	1 / 2.227	1 / 2.228	1 / 2.228	1 / 2.229	1 / 2.229	Continuing	Continuing
1.1.9) Virtual Training Environment (VTE) - Organic (10)	7 / 6.794	1 / 0.878	1 / 0.897	1 / 0.907	- / -	1 / 0.907	1 / 0.918	1 / 0.930	1 / 0.942	1 / 0.942	Continuing	Continuing
1.1.10) CND Production Labs - Organic (11)	30 / 41.123	3 / 4.420	3 / 4.617	3 / 4.652	- / -	3 / 4.652	3 / 4.690	3 / 4.729	3 / 4.769	3 / 4.769	Continuing	Continuing
1.1.11) NCDOC COOP Site - NonOrganic	- / -	- / -	1 / 2.000	1 / 2.000	- / -	1 / 2.000	- / -	- / -	- / -	- / -	- / -	2 / 4.000
Subtotal: Recurring	*- / 202.011*	*- / 18.896*	*- / 21.657*	*- / 21.767*	*- / -*	*- / 21.767*	*- / 19.352*	*- / 19.690*	*- / 20.044*	*- / 21.044*	*Continuing*	*Continuing*
Subtotal: Computer Network Defense (CND) Increment 2- Ashore (DA070)	*248 / 202.011*	*26 / 18.896*	*30 / 21.657*	*27 / 21.767*	*- / -*	*27 / 21.767*	*26 / 19.352*	*26 / 19.690*	*26 / 20.044*	*26 / 21.044*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 202.011*	*- / 18.896*	*- / 21.657*	*- / 21.767*	*- / -*	*- / 21.767*	*- / 19.352*	*- / 19.690*	*- / 20.044*	*- / 21.044*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Train-the-Trainer (12)	- / 7.935	- / 1.045	- / 1.013	- / 1.010	- / 0.000	- / 1.010	- / 1.390	- / 1.035	- / 1.153	- / 1.106	Continuing	Continuing
2.2) Production Support (13)	- / 9.002	- / 0.884	- / 0.949	- / 0.840	- / 0.000	- / 0.840	- / 1.008	- / 0.996	- / 1.009	- / 1.010	Continuing	Continuing
2.3) Design Services Allocation (DSA) (14)	- / 7.104	- / 0.757	- / 0.845	- / 0.954	- / 0.000	- / 0.954	- / 0.957	- / 0.957	- / 0.957	- / 0.904	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 1 / Computer Network Defense (CND) Increment 2- Ashore (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Shore	**Modification Type:** Various	**Related RDT&E PEs:** 0303140N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Subtotal: Support	- / *24.041*	- / *2.686*	- / *2.807*	- / *2.804*	- / -	- / *2.804*	- / *3.355*	- / *2.988*	- / *3.119*	- / *3.020*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: Computer Network Defense (CND) Increment 2- Ashore (DA070)	- / 46.871	- / 4.761	- / 5.409	- / 5.260	- / 0.000	- / 5.260	- / 5.010	- / 5.010	- / 5.010	- / 5.010	Continuing	Continuing
Subtotal: Installation	- / *46.871*	- / *4.761*	- / *5.409*	- / *5.260*	- / -	- / *5.260*	- / *5.010*	- / *5.010*	- / *5.010*	- / *5.010*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**272.923**	**26.343**	**29.873**	**29.831**	**0.000**	**29.831**	**27.717**	**27.688**	**28.173**	**29.074**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 1 / Computer Network Defense (CND) Increment 2- Ashore (DA070)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Computer Network Defense (CND) Increment 2- Ashore (DA070)

Manufacturer Information

Manufacturer Name: CND Equipment - Naval Information Warfare Center (NIWC) Atlantic | Manufacturer Location: Charleston, SC

Administrative Leadtime *(in Months)*: 2 | Production Leadtime *(in Months)*: 4

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023				
Delivery Dates	Mar 2022	Mar 2023	Apr 2024				

Installation Information

Method of Implementation: Installed:: Installation Name: Computer Network Defense (CND) Increment 2- Ashore

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	203 / 46.871	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	203 / 46.871
FY 2022	- / -	21 / 4.761	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	21 / 4.761
FY 2023	- / -	- / -	25 / 5.409	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	25 / 5.409
FY 2024	- / -	- / -	- / -	22 / 5.260	0 / 0.000	22 / 5.260	- / -	- / -	- / -	- / -	0 / 0.000	22 / 5.260
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	21 / 5.010	- / -	- / -	- / -	0 / 0.000	21 / 5.010
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	21 / 5.010	- / -	- / -	0 / 0.000	21 / 5.010
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	21 / 5.010	- / -	0 / 0.000	21 / 5.010
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	21 / 5.010	0 / 0.000	21 / 5.010
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	203 / 46.871	21 / 4.761	25 / 5.409	22 / 5.260	0 / 0.000	22 / 5.260	21 / 5.010	21 / 5.010	21 / 5.010	21 / 5.010	Continuing	Continuing

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	203	-	-	14	7	-	-	17	8	-	-	14	8	-	-	13	8	-	-	13	8	-	-	13	8	-	-	14	7	Cont.	Cont.
Out	203	-	-	14	7	-	-	17	8	-	-	14	8	-	-	13	8	-	-	13	8	-	-	13	8	-	-	14	7	Cont.	Cont.

Method of Implementation (Organic): Pre-Planned Product Improvement (P3I): NCDOC Upgrade - Not Installed | **Installation Quantity:** 0

Method of Implementation (Organic): Virtual Training Environment (VTE) - Not Installed | **Installation Quantity:** 0

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 1 / Computer Network Defense (CND) Increment 2- Ashore (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Modification Item 1 of 1: Computer Network Defense (CND) Increment 2- Ashore (DA070)		
Installation Information		
Method of Implementation (Organic): CND Production Labs - Not Installed	**Installation Quantity:** 0	

Footnotes:

(3) FY24 increase due to unit cost increase.

(4) FY24 increase due to increased quantity.

(5) FY24 unit cost increase is due to supply chain issues impacting modernization efforts.

(6) FY24 unit cost increase is due to supply chain issues impacting modernization efforts.

(7) No funding required in FY24.

(8) FY24 unit cost increase is due to supply chain issues impacting modernization efforts.

(9) FY24 increase due to inflation.

(10) FY24 increase due to unit cost increase.

(11) FY24 increase due to additional licenses at the production labs.

(12) FY24 decrease due to less requirements.

(13) FY24 decrease due to cost fluctuation.

(14) FY24 increase due to requirement increase.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 2 / Navy Cryptography (Crypto) - Afloat (DA071)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	296.676	35.135	38.923	29.311	0.000	29.311	38.540	37.522	38.491	39.940	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	296.676	35.135	38.923	29.311	0.000	29.311	38.540	37.522	38.491	39.940	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**296.676**	**35.135**	**38.923**	**29.311**	**0.000**	**29.311**	**38.540**	**37.522**	**38.491**	**39.940**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Navy Cryptography (Crypto) program is designated as Department of Navy's (DoN) Cryptographic Modernization Program Office (CMPO). CMPO procures, installs, and provides life-cycle support for National Security Agency (NSA) Type-1 end cryptographic units for United States Navy (USN) (to include Military Sealift Command (MSC) platforms), United States Marine Corps (USMC), and United States Coast Guard (USCG). Navy Crypto afloat equipment includes: Families of Communications Security (COMSEC) and Transmission Security (TRANSEC) devices that are divided into crypto voice, crypto data, crypto products and associated ancillary devices. These devices provide modern cryptographic solutions to replace obsolete, legacy devices within the crypto categories for all Services.

Crypto Data products include: Advanced Cryptographic Capabilities (ACC), which provide National Security Agency (NSA) mandated cryptographic security software modernization of various communications security devices by cease key dates (details held at a higher classification); In-Line Network Encryptors (INE); KIV-7M (COMSEC Serial Crypto Replacement); KW-46; Cryptographic Universal Enclosures (CUE), and KGV-11M TRANSEC. Cryptographic Modernization (CM) provides NSA mandated cryptographic modernization of various communications security devices (details held at a higher classification).

Crypto Voice products include: VINSON/Advanced Narrowband Digital Voice Terminal (ANDVT) Cryptographic Modernization (VACM). VACM is the modern cryptographic product replacement for legacy secure voice products.

Naval Information Warfare Systems Command (NAVWAR) is the VACM Central Procuring Agency for the USN to include the MSC, Naval Air Systems Command (NAVAIR), USMC and USCG.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 2 / Navy Cryptography (Crypto) - Afloat (DA071)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Ship	**Modification Type:** Various	**Related RDT&E PEs:** 0303140N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Navy Cryptography (Crypto) - Afloat (DA071)												
B Kits												
Recurring												
1.1.1) COMSEC Serial Crypto Replacement (Phase II) - NonOrganic	118 / 2.137	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	118 / 2.137
1.1.2) VINSON/Advanced Narrowband Digital Voice Terminal CM (VACM) - NonOrganic	373 / 85.790	83 / 19.090	74 / 17.020	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	530 / 121.900
1.1.3) In-Line Network Encryptors (INE) - Organic (15)	5,584 / 73.290	136 / 1.632	128 / 1.536	163 / 1.956	- / -	163 / 1.956	129 / 1.548	140 / 1.680	178 / 2.136	212 / 2.544	Continuing	Continuing
1.1.4) Advanced Cryptographic Capability (ACC) - Organic (16)	39 / 19.500	2 / 1.000	2 / 1.000	5 / 2.500	- / -	5 / 2.500	5 / 2.500	6 / 3.000	6 / 3.000	6 / 3.000	Continuing	Continuing
1.1.5) KGV-11M Transmission Security (TRANSEC) - Organic	565 / 10.170	394 / 7.092	712 / 12.816	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
1.1.6) Cryptographic Modernization (CM) - Organic (17)	- / -	- / -	- / -	39 / 19.500	- / -	39 / 19.500	65 / 32.500	65 / 32.500	66 / 33.000	68 / 34.000	Continuing	Continuing
Subtotal: Recurring	*- / 190.887*	*- / 28.814*	*- / 32.372*	*- / 23.956*	*- / -*	*- / 23.956*	*- / 36.548*	*- / 37.180*	*- / 38.136*	*- / 39.544*	*Continuing*	*Continuing*
Subtotal: Navy Cryptography (Crypto) - Afloat (DA071)	*6,679 / 190.887*	*615 / 28.814*	*916 / 32.372*	*207 / 23.956*	*- / -*	*207 / 23.956*	*199 / 36.548*	*211 / 37.180*	*250 / 38.136*	*286 / 39.544*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 190.887*	*- / 28.814*	*- / 32.372*	*- / 23.956*	*- / -*	*- / 23.956*	*- / 36.548*	*- / 37.180*	*- / 38.136*	*- / 39.544*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Production Support	- / 28.254	- / 1.186	- / 1.268	- / 0.823	- / -	- / 0.823	- / 0.667	- / 0.342	- / 0.355	- / 0.396	Continuing	Continuing
2.2) DSA	- / 43.821	- / 0.437	- / 0.464	- / 0.135	- / -	- / 0.135	- / -	- / -	- / -	- / -	Continuing	Continuing
Subtotal: Support	*- / 72.075*	*- / 1.623*	*- / 1.732*	*- / 0.958*	*- / -*	*- / 0.958*	*- / 0.667*	*- / 0.342*	*- / 0.355*	*- / 0.396*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: Navy Cryptography (Crypto) - Afloat (DA071)	- / 33.714	- / 4.698	- / 4.819	- / 4.397	- / 0.000	- / 4.397	- / 1.325	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 48.953
Subtotal: Installation	*- / 33.714*	*- / 4.698*	*- / 4.819*	*- / 4.397*	*- / -*	*- / 4.397*	*- / 1.325*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 48.953*
Total												
Total Cost (Procurement + Support + Installation)	**296.676**	**35.135**	**38.923**	**29.311**	**0.000**	**29.311**	**38.540**	**37.522**	**38.491**	**39.940**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 2 / Navy Cryptography (Crypto) - Afloat (DA071)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Navy Cryptography (Crypto) - Afloat (DA071)

Manufacturer Information

Manufacturer Name: VINSON/Advanced Narrowband Digital Voice Terminal CM (VACM) - Raytheon (USAF)
Manufacturer Location: Largo, FL
Administrative Leadtime *(in Months)*: 5
Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023					
Delivery Dates	Mar 2023	Mar 2024					

Manufacturer Name: In-Line Network Encryptors (INE) - NSA
Manufacturer Location: Fort Meade, MD
Administrative Leadtime *(in Months)*: 3
Production Leadtime *(in Months)*: 7

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023					
Delivery Dates	Aug 2022	Aug 2023					

Manufacturer Name: Advanced Cryptographic Capability (ACC) - NSA
Manufacturer Location: Fort Meade, MD
Administrative Leadtime *(in Months)*: 3
Production Leadtime *(in Months)*: 7

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023					
Delivery Dates	Aug 2022	Aug 2023					

Manufacturer Name: KGV-11M Transmission Security (TRANSEC) - VIASAT
Manufacturer Location: Carlsbad, CA
Administrative Leadtime *(in Months)*: 3
Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023					
Delivery Dates	Jan 2023	Jan 2024					

Manufacturer Name: Cryptographic Modernization (CM)
Manufacturer Location: TBD
Administrative Leadtime *(in Months)*: 5
Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Mar 2024				
Delivery Dates			Mar 2025				

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 2 / Navy Cryptography (Crypto) - Afloat (DA071)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Navy Cryptography (Crypto) - Afloat (DA071)

Installation Information

Method of Implementation: Installed:: Installation Name: Navy Cryptography (Crypto) - Afloat

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	395 / 33.714	78 / 4.698	18 / 1.084	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	491 / 39.496
FY 2022	- / -	- / -	62 / 3.735	21 / 1.265	0 / 0.000	21 / 1.265	- / -	- / -	- / -	- / -	0 / 0.000	83 / 5.000
FY 2023	- / -	- / -	- / -	52 / 3.132	0 / 0.000	52 / 3.132	22 / 1.325	- / -	- / -	- / -	0 / 0.000	74 / 4.457
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total	395 / 33.714	78 / 4.698	80 / 4.819	73 / 4.397	0 / 0.000	73 / 4.397	22 / 1.325	- / -	- / -	- / -	0 / 0.000	648 / 48.953

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	395	23	6	27	22	18	7	28	27	21	14	19	19	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	648
Out	395	23	6	27	22	18	7	28	27	21	14	19	19	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	648

Method of Implementation (Organic): In-Line Network Encryptors (INE) **Installation Quantity:** 0

Method of Implementation (Organic): Advanced Cryptographic Capability (ACC) **Installation Quantity:** 0

Method of Implementation (Organic): KGV-11M Transmission Security (TRANSEC) **Installation Quantity:** 0

Method of Implementation (Organic): Cryptographic Modernization (CM) **Installation Quantity:** 0

Footnotes:

(15) FY24 increase aligns to inventory levels in accordance with the NSA cease key dates (classified) for TS and S circuits.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 2 / Navy Cryptography (Crypto) - Afloat (DA071)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(16) FY24 increase due to change in requirement that increases the number of required devices to support ACC to meet the NSA mandated cryptographic security software modernization of various communications security devices.

(17) This is a new CE in FY24.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 3 / Navy Cryptography (Crypto) - Ashore (DA071)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	158.630	32.391	32.193	42.552	0.000	42.552	34.008	36.477	36.989	37.050	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	158.630	32.391	32.193	42.552	0.000	42.552	34.008	36.477	36.989	37.050	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**158.630**	**32.391**	**32.193**	**42.552**	**0.000**	**42.552**	**34.008**	**36.477**	**36.989**	**37.050**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Navy Cryptography (Crypto) ashore equipment includes: Families of Communication Security (COMSEC) and Transmission Security (TRANSEC) devices that are divided into crypto voice, crypto data, crypto products, and associated ancillary devices. These devices provide modern cryptographic solutions to replace obsolete, legacy devices within the crypto categories for all Services. Navy Crypto Ashore sites include: United States Navy (USN), United States Marine Corps (USMC), United States Coast Guard (USCG) facilities, and Ballistic Missile Defense facilities, production/integration sites, and training sites.

Crypto Data products include: Advanced Cryptographic Capabilities (ACC) which provide NSA mandated cryptographic security software modernization of various communications security devices by cease key dates (details held at a higher classification); Cryptographic Modernization (CM) provides NSA mandated cryptographic modernization of various communications security devices (details held at a higher classification).

Crypto Voice products include: VINSON/Advanced Narrowband Digital Voice Terminal (ANDVT) Cryptographic Modernization (VACM).

Naval Information Warfare Systems Command (NAVWAR) is the VACM Central Procuring Agency for the USN to include the Military Sealift Command (MSC), Naval Air Systems Command (NAVAIR), USMC and USCG.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 3 / Navy Cryptography (Crypto) - Ashore (DA071)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Shore	**Modification Type:** Initial	**Related RDT&E PEs:** 0303140N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Navy Cryptography (Crypto) - Ashore (DA071)												
B Kits												
Recurring												
1.1.1) VINSON/Advanced Narrowband Digital Voice Terminal CM (VACM) - Organic [18]	6,401 / 73.363	1,185 / 13.628	1,204 / 13.846	1,370 / 15.755	- / -	1,370 / 15.755	- / -	- / -	- / -	- / -	- / -	10,160 / 116.592
1.1.2) Advanced Cryptographic Capability (ACC) - Organic	28 / 14.000	4 / 2.000	4 / 2.000	4 / 2.000	- / -	4 / 2.000	6 / 3.000	11 / 5.500	11 / 5.500	11 / 5.500	Continuing	Continuing
1.1.3) VACM - NonOrganic	121 / 46.585	34 / 13.090	31 / 11.935	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	186 / 71.610
1.1.4) Cryptographic Modernization (CM) - Organic [19]	- / -	- / -	- / -	41 / 20.500	- / -	41 / 20.500	61 / 30.500	61 / 30.500	62 / 31.000	62 / 31.000	Continuing	Continuing
Subtotal: Recurring	*- / 133.948*	*- / 28.718*	*- / 27.781*	*- / 38.255*	*- / -*	*- / 38.255*	*- / 33.500*	*- / 36.000*	*- / 36.500*	*- / 36.500*	*Continuing*	*Continuing*
Subtotal: Navy Cryptography (Crypto) - Ashore (DA071)	*6,550 / 133.948*	*1,223 / 28.718*	*1,239 / 27.781*	*1,415 / 38.255*	*- / -*	*1,415 / 38.255*	*67 / 33.500*	*72 / 36.000*	*73 / 36.500*	*73 / 36.500*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 133.948*	*- / 28.718*	*- / 27.781*	*- / 38.255*	*- / -*	*- / 38.255*	*- / 33.500*	*- / 36.000*	*- / 36.500*	*- / 36.500*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Production Support	- / 15.555	- / 1.003	- / 1.050	- / 1.287	- / -	- / 1.287	- / 0.508	- / 0.477	- / 0.489	- / 0.550	Continuing	Continuing
Subtotal: Support	*- / 15.555*	*- / 1.003*	*- / 1.050*	*- / 1.287*	*- / -*	*- / 1.287*	*- / 0.508*	*- / 0.477*	*- / 0.489*	*- / 0.550*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: Navy Cryptography (Crypto) - Ashore (DA071)	- / 9.127	- / 2.670	- / 3.362	- / 3.010	- / 0.000	- / 3.010	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 18.169
Subtotal: Installation	*- / 9.127*	*- / 2.670*	*- / 3.362*	*- / 3.010*	*- / -*	*- / 3.010*	*- / -*	*- / -*	*- / -*	*- / -*	*- / 0.000*	*- / 18.169*
Total												
Total Cost (Procurement + Support + Installation)	**158.630**	**32.391**	**32.193**	**42.552**	**0.000**	**42.552**	**34.008**	**36.477**	**36.989**	**37.050**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 3 / Navy Cryptography (Crypto) - Ashore (DA071)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Navy Cryptography (Crypto) - Ashore (DA071)

Manufacturer Information

Manufacturer Name: VINSON/Advanced Narrowband Digital Voice Terminal CM (VACM) - Raytheon (USAF)
Manufacturer Location: Largo, FL
Administrative Leadtime *(in Months)*: 5
Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023					
Delivery Dates	Mar 2023	Mar 2024					

Manufacturer Name: Advanced Cryptographic Capability (ACC) - NSA
Manufacturer Location: Fort Meade, MD
Administrative Leadtime *(in Months)*: 3
Production Leadtime *(in Months)*: 7

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Jan 2022	Jan 2023					
Delivery Dates	Aug 2022	Aug 2023					

Manufacturer Name: Cryptographic Modernization (CM)
Manufacturer Location: TBD
Administrative Leadtime *(in Months)*: 5
Production Leadtime *(in Months)*: 12

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates			Mar 2024				
Delivery Dates			Mar 2025				

Installation Information

Method of Implementation: Installed:: Installation Name: Navy Cryptography (Crypto) - Ashore

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	94 / 9.127	27 / 2.670	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	121 / 11.797
FY 2022	- / -	- / -	34 / 3.362	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	34 / 3.362
FY 2023	- / -	- / -	- / -	31 / 3.010	0 / 0.000	31 / 3.010	- / -	- / -	- / -	- / -	0 / 0.000	31 / 3.010
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 3 / Navy Cryptography (Crypto) - Ashore (DA071)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Navy Cryptography (Crypto) - Ashore (DA071)

Installation Information

Method of Implementation: Installed:: Installation Name: Navy Cryptography (Crypto) - Ashore

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Total	94 / 9.127	27 / 2.670	34 / 3.362	31 / 3.010	0 / 0.000	31 / 3.010	- / -	- / -	- / -	- / -	0 / 0.000	186 / 18.169

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	94	-	27	-	-	-	12	11	11	-	10	14	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	186
Out	94	-	27	-	-	-	12	11	11	-	10	14	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	186

Method of Implementation (Organic): VINSON/Advanced Narrowband Digital Voice Terminal CM (VACM) **Installation Quantity:** 10160

Method of Implementation (Organic): Advanced Cryptographic Capability (ACC) **Installation Quantity:** 0

Method of Implementation (Organic): Cryptographic Modernization (CM) **Installation Quantity:** 0

Footnotes:

(18) FY24 increase aligns to the fielding plan which is in accordance with the National Security Agency (NSA) cease key dates (classified) for Top Secret (TS) and Secret (S) circuits.

(19) This is a new CE in FY24.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 4 / Key Management (KM) - Afloat (DA005)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	83.947	7.407	6.137	8.158	0.000	8.158	8.212	8.231	9.364	10.007	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	83.947	7.407	6.137	8.158	0.000	8.158	8.212	8.231	9.364	10.007	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**83.947**	**7.407**	**6.137**	**8.158**	**0.000**	**8.158**	**8.212**	**8.231**	**9.364**	**10.007**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

KM is a combination of Tier 1 Key Management Infrastructure (KMI), Tier 2 security equipment, and Tier 3 equipment and software (SW) for Key distribution and loading into End Cryptographic Units (ECUs).

KMI Tier 1 includes Navy management of central office of record functionality, key manager functions, and enrollment and registration functions utilizing Client Host Only (CHO) node equipment.

KMI Tier 2 security equipment includes the Management Client (MGC), Advanced Key Processor (AKP) and High Assurance Internet Protocol Equipment (HAIPE) devices. KMI provides a net-centric, web based architecture for the ordering, management, and distribution of all cryptographic key material to support Department of Navy users.

Key Load Devices include the Simple Key Loader (SKL), Tactical Key Loader (TKL), Next Generation Load Device (NGLD), and SW application for Key delivery.

The SKL is a ruggedized, portable, hand-held fill device, for securely receiving, storing, and transferring data between compatible cryptographic and communications equipment. The SKL is backward-compatible with existing End Cryptographic Units (ECU) and forward-compatible with future security equipment and systems, including KMI.

The NGLD is a NSA certified hand-portable electronic cryptographic key fill device. It receives, stores, protects, and loads NSA generated cryptographic key and mission configuration files into End Cryptographic Units (ECUs). Additionally, the NGLD will display stored signal operating instructions (SOI). In the future, the NGLD will replace the legacy SKL.

The SW application for Key delivery plans to provide remote key distribution.

KMI Tech Refresh is a hardware and software upgrade to KMI Capability Increments (CI) 2&3 that is mandated by National Security Agency (NSA) to occur every five-years.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 4 / Key Management (KM) - Afloat (DA005)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Ship	**Modification Type:** Various	**Related RDT&E PEs:** 0303140N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Key Management (KM) - Afloat (DA005)												
B Kits												
Recurring												
1.1.1) Key Load Device - Organic [20]	11,306 / 52.696	598 / 2.131	732 / 2.614	400 / 1.945	- / -	400 / 1.945	300 / 1.488	310 / 1.902	309 / 1.934	305 / 1.947	Continuing	Continuing
1.1.2) Key Management Infrastructure (KMI) Tech Refresh - NonOrganic [21]	111 / 3.814	35 / 1.209	22 / 0.760	54 / 2.676	- / -	54 / 2.676	35 / 1.735	43 / 2.174	49 / 2.527	51 / 2.683	Continuing	Continuing
Subtotal: Recurring	*- / 56.510*	*- / 3.340*	*- / 3.374*	*- / 4.621*	*- / -*	*- / 4.621*	*- / 3.223*	*- / 4.076*	*- / 4.461*	*- / 4.630*	*Continuing*	*Continuing*
Subtotal: Key Management (KM) - Afloat (DA005)	*11,417 / 56.510*	*633 / 3.340*	*754 / 3.374*	*454 / 4.621*	*- / -*	*454 / 4.621*	*335 / 3.223*	*353 / 4.076*	*358 / 4.461*	*356 / 4.630*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 56.510*	*- / 3.340*	*- / 3.374*	*- / 4.621*	*- / -*	*- / 4.621*	*- / 3.223*	*- / 4.076*	*- / 4.461*	*- / 4.630*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Production Support	- / 3.451	- / 0.131	- / 0.147	- / 0.277	- / -	- / 0.277	- / 0.190	- / 0.242	- / 0.264	- / 0.274	Continuing	Continuing
2.2) Train the Trainer	- / 0.733	- / 0.099	- / 0.104	- / 0.110	- / -	- / 0.110	- / 0.111	- / 0.113	- / 0.114	- / 0.115	Continuing	Continuing
2.3) DSA	- / 19.053	- / 1.837	- / 1.262	- / 2.300	- / -	- / 2.300	- / 1.988	- / 2.050	- / 2.375	- / 2.538	Continuing	Continuing
Subtotal: Support	*- / 23.237*	*- / 2.067*	*- / 1.513*	*- / 2.687*	*- / -*	*- / 2.687*	*- / 2.289*	*- / 2.405*	*- / 2.753*	*- / 2.927*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: Key Management (KM) - Afloat (DA005)	- / 4.200	- / 2.000	- / 1.250	- / 0.850	- / 0.000	- / 0.850	- / 2.700	- / 1.750	- / 2.150	- / 2.450	Continuing	Continuing
Subtotal: Installation	*- / 4.200*	*- / 2.000*	*- / 1.250*	*- / 0.850*	*- / -*	*- / 0.850*	*- / 2.700*	*- / 1.750*	*- / 2.150*	*- / 2.450*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**83.947**	**7.407**	**6.137**	**8.158**	**0.000**	**8.158**	**8.212**	**8.231**	**9.364**	**10.007**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 4 / Key Management (KM) - Afloat (DA005)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Key Management (KM) - Afloat (DA005)

Manufacturer Information

Manufacturer Name: Simple Key Loader (SKL) - Sierra Nevada Corporation (22) | Manufacturer Location: Sparks, NV

Administrative Leadtime *(in Months)*: 8 | Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Feb 2022	Feb 2023	Jun 2024				
Delivery Dates	Apr 2022	Apr 2023	Dec 2024				

Manufacturer Name: Key Management Infrastructure (KMI) Tech Refresh - NSA (23) | Manufacturer Location: Fort Meade, MD

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 9

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023	Jan 2024				
Delivery Dates	Jul 2022	Jul 2023	Oct 2024				

Installation Information

Method of Implementation: Installed:: Installation Name: Key Management (KM) - Afloat

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	86 / 4.200	25 / 1.250	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	111 / 5.450
FY 2022	- / -	15 / 0.750	20 / 1.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	35 / 1.750
FY 2023	- / -	- / -	5 / 0.250	17 / 0.850	0 / 0.000	17 / 0.850	- / -	- / -	- / -	- / -	0 / 0.000	22 / 1.100
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	54 / 2.700	- / -	- / -	- / -	0 / 0.000	54 / 2.700
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	35 / 1.750	- / -	- / -	0 / 0.000	35 / 1.750
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	43 / 2.150	- / -	0 / 0.000	43 / 2.150
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	49 / 2.450	0 / 0.000	49 / 2.450
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	51 / 2.550	51 / 2.550
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	86 / 4.200	40 / 2.000	25 / 1.250	17 / 0.850	0 / 0.000	17 / 0.850	54 / 2.700	35 / 1.750	43 / 2.150	49 / 2.450	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 4 / Key Management (KM) - Afloat (DA005)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Key Management (KM) - Afloat (DA005)

Installation Information

Method of Implementation: Installed:: Installation Name: Key Management (KM) - Afloat

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	86	7	7	8	18	8	7	5	5	5	6	6	-	14	14	13	13	10	9	9	7	12	12	10	9	13	13	12	11	Cont.	Cont.
Out	86	7	7	8	18	8	7	5	5	5	6	6	-	14	14	13	13	10	9	9	7	12	12	10	9	13	13	12	11	Cont.	Cont.

Method of Implementation (Organic): Key Load Device - Not Installed **Installation Quantity:** 0

Footnotes:

(20) FY24 decreased Key Loader quantity due to increased costs of Key Load Devices and the need to procure and install more KMI TR. Increased cost includes inflation and varies due to economy of scale procurement buys.

(21) FY24 increase in quantity reflects current projected need and planned installations to Fleet due to NSA mandate. KMI TR cost increases account for inflation, increased engineering & integration costs, and varies due to economy of scale procurement buys.

(22) FY24 Administrative and Production leadtimes have been adjusted to match the revised ARMY procurement cycles

(23) FY24 increased Administrative and Production leadtimes due to delays with NSA contract awards and production/availability of components required

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 5 / Key Management (KM) - Ashore (DA005)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	56.967	4.591	6.116	7.254	0.000	7.254	8.090	8.390	10.123	7.872	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	56.967	4.591	6.116	7.254	0.000	7.254	8.090	8.390	10.123	7.872	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**56.967**	**4.591**	**6.116**	**7.254**	**0.000**	**7.254**	**8.090**	**8.390**	**10.123**	**7.872**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Key Management (KM) ashore sites include: United States Navy (USN), United States Marine Corps (USMC), United States Coast Guard (USCG) facilities, production integration sites, and training sites. KM ashore systems include: Simple Key Loader (SKL), Key Management Infrastructure (KMI) Tech Refresh and capability increments.

KMI Tier 1 includes Navy management of central office of record functionality, key manager functions, and enrollment and registration functions utilizing Client Host Only (CHO) node equipment.

KMI Tier 2 security equipment includes the Management Client (MGC), Advanced Key Processor (AKP) and High Assurance Internet Protocol Equipment (HAIPE) devices. KMI provides a net-centric, web based architecture for the ordering, management, and distribution of all cryptographic key material to support Department of Navy users.

Key Load Devices include the Simple Key Loader (SKL), Tactical Key Loader (TKL), Next Generation Load Device (NGLD), and SW application for Key delivery.

The SKL is a ruggedized, portable, hand-held fill device, for securely receiving, storing, and transferring data between compatible cryptographic and communications equipment. The SKL is backward-compatible with existing End Cryptographic Units (ECU) and forward-compatible with future security equipment and systems, including KMI.

The NGLD is a NSA certified hand-portable electronic cryptographic key fill device. It receives, stores, protects, and loads NSA generated cryptographic key and mission configuration files into End Cryptographic Units (ECUs). Additionally, the NGLD will display stored signal operating instructions (SOI). In the future, the NGLD will replace the legacy SKL.

The SW application for Key delivery plans to provide remote key distribution.

KMI Tech Refresh is a hardware and software upgrade to KMI Capability Increments (CI) 2&3 that is mandated by National Security Agency (NSA) to occur every five-years.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 5 / Key Management (KM) - Ashore (DA005)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Shore	**Modification Type:** Various	**Related RDT&E PEs:** 0303140N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: Key Management (KM) - Ashore (DA005)												
B Kits												
Recurring												
1.1.1) Key Management Infrastructure (KMI) Tech Refresh - NonOrganic [24]	177 / 6.078	34 / 1.175	22 / 0.761	50 / 2.182	- / -	50 / 2.182	40 / 1.781	46 / 2.089	28 / 1.297	31 / 1.465	Continuing	Continuing
1.1.2) Key Load Device - Organic [25]	12,373 / 38.240	506 / 1.803	1,072 / 3.828	617 / 3.000	- / -	617 / 3.000	737 / 3.656	607 / 3.725	1,024 / 6.409	701 / 4.476	Continuing	Continuing
Subtotal: Recurring	*- / 44.318*	*- / 2.978*	*- / 4.589*	*- / 5.182*	*- / -*	*- / 5.182*	*- / 5.437*	*- / 5.814*	*- / 7.706*	*- / 5.941*	*Continuing*	*Continuing*
Subtotal: Key Management (KM) - Ashore (DA005)	*12,550 / 44.318*	*540 / 2.978*	*1,094 / 4.589*	*667 / 5.182*	*- / -*	*667 / 5.182*	*777 / 5.437*	*653 / 5.814*	*1,052 / 7.706*	*732 / 5.941*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 44.318*	*- / 2.978*	*- / 4.589*	*- / 5.182*	*- / -*	*- / 5.182*	*- / 5.437*	*- / 5.814*	*- / 7.706*	*- / 5.941*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Production Support [26]	- / 4.547	- / 0.118	- / 0.176	- / 0.311	- / -	- / 0.311	- / 0.310	- / 0.337	- / 0.462	- / 0.350	Continuing	Continuing
2.2) Train the Trainer	- / 0.825	- / 0.097	- / 0.117	- / 0.123	- / -	- / 0.123	- / 0.123	- / 0.123	- / 0.126	- / 0.129	Continuing	Continuing
2.3) DSA	- / 3.577	- / 0.748	- / 0.484	- / 1.213	- / -	- / 1.213	- / 0.970	- / 1.116	- / 0.679	- / 0.752	Continuing	Continuing
Subtotal: Support	*- / 8.949*	*- / 0.963*	*- / 0.777*	*- / 1.647*	*- / -*	*- / 1.647*	*- / 1.403*	*- / 1.576*	*- / 1.267*	*- / 1.231*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: Key Management (KM) - Ashore (DA005)	- / 3.700	- / 0.650	- / 0.750	- / 0.425	- / 0.000	- / 0.425	- / 1.250	- / 1.000	- / 1.150	- / 0.700	Continuing	Continuing
Subtotal: Installation	*- / 3.700*	*- / 0.650*	*- / 0.750*	*- / 0.425*	*- / -*	*- / 0.425*	*- / 1.250*	*- / 1.000*	*- / 1.150*	*- / 0.700*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**56.967**	**4.591**	**6.116**	**7.254**	**0.000**	**7.254**	**8.090**	**8.390**	**10.123**	**7.872**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 5 / Key Management (KM) - Ashore (DA005)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Key Management (KM) - Ashore (DA005)

Manufacturer Information

Manufacturer Name: Simple Key Loader (SKL) - Sierra Nevada Corporation (27) | Manufacturer Location: Sparks, NV

Administrative Leadtime *(in Months)*: 8 | Production Leadtime *(in Months)*: 6

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Feb 2022	Feb 2023	Jun 2024				
Delivery Dates	Apr 2022	Apr 2023	Dec 2024				

Manufacturer Name: Key Management Infrastructure (KMI) Tech Refresh - NSA (28) | Manufacturer Location: Fort Meade, MD

Administrative Leadtime *(in Months)*: 3 | Production Leadtime *(in Months)*: 9

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Mar 2022	Mar 2023	Jan 2024				
Delivery Dates	Jul 2022	Jul 2023	Oct 2024				

Installation Information

Method of Implementation: Installed:: Installation Name: Key Management (KM) - Ashore

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	160 / 3.700	17 / 0.425	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	177 / 4.125
FY 2022	- / -	9 / 0.225	25 / 0.625	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	34 / 0.850
FY 2023	- / -	- / -	5 / 0.125	17 / 0.425	0 / 0.000	17 / 0.425	- / -	- / -	- / -	- / -	Continuing	Continuing
FY 2024	- / -	- / -	- / -	- / -	- / -	- / -	50 / 1.250	- / -	- / -	- / -	0 / 0.000	50 / 1.250
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	- / -	40 / 1.000	- / -	- / -	0 / 0.000	40 / 1.000
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	46 / 1.150	- / -	0 / 0.000	46 / 1.150
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	28 / 0.700	0 / 0.000	28 / 0.700
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	31 / 0.775	31 / 0.775
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	160 / 3.700	26 / 0.650	30 / 0.750	17 / 0.425	0 / 0.000	17 / 0.425	50 / 1.250	40 / 1.000	46 / 1.150	28 / 0.700	Continuing	Continuing

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 5 / Key Management (KM) - Ashore (DA005)

ID Code (A=Service Ready, B=Not Service Ready) : **MDAP/MAIS Code:**

Modification Item 1 of 1: Key Management (KM) - Ashore (DA005)

Installation Information

Method of Implementation: Installed:: Installation Name: Key Management (KM) - Ashore

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	160	6	6	5	9	8	8	9	5	7	6	4	-	12	13	13	12	10	11	11	8	13	12	11	10	8	9	6	5	Cont.	Cont.
Out	160	6	6	5	9	8	8	9	5	7	6	4	-	12	13	13	12	10	11	11	8	13	12	11	10	8	9	6	5	Cont.	Cont.

Method of Implementation (Organic): Key Load Device - Not Installed **Installation Quantity:** 0

Footnotes:

(24) FY24 increase in quantity reflects current projected need and planned installations to Fleet due to NSA mandate. KMI TR cost increases account for inflation, increased engineering & integration costs, and varies due to economy of scale procurement buys.

(25) FY24 decreased Key Loader quantity due to increased costs of Key Load Devices and the need to procure and install more KMI TR. Increased cost includes inflation and varies due to economy of scale procurement buys.

(26) FY24 increase in quantity reflects current projected need and planned installations to Fleet due to NSA mandate. FY24 KMI TR cost increases account for inflation, increased engineering & integration costs, and varies due to economy of scale procurement buys. Ashore KMI TR costs differ from Afloat KMI TR because they do not require Rack mount kits/ brackets.

(27) FY24 Administrative and Production leadtimes have been adjusted to match the revised ARMY procurement cycles

(28) FY24 increased Administrative and Production leadtimes due to delays with NSA contract awards and production/availability of components required

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 6 / SHARKCAGE - Afloat (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	84.926	31.612	28.818	3.025	0.000	3.025	13.994	14.725	14.494	16.297	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	84.926	31.612	28.818	3.025	0.000	3.025	13.994	14.725	14.494	16.297	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**84.926**	**31.612**	**28.818**	**3.025**	**0.000**	**3.025**	**13.994**	**14.725**	**14.494**	**16.297**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

SHARKCAGE is a global, federated Defensive Cyberspace Operations (DCO) enclave consisting of sensor nodes, DCO analysis workbenches, and analytic nodes. Utilizing one-way passive taps in a protected, isolated, classified environment, SHARKCAGE consolidates cyber event data from multiple platforms and networks, providing Navy DCO forces with a shared environment and common platform for integrated workflow, collaboration, and analysis. SHARKCAGE efficiently detects, correlates, and analyzes nation and non-nation state attacks against maritime data and the Naval Networking Environment (NNE).

SHARKCAGE afloat suites includes laptops, servers, switches, storage, network taps/cables, and forensic equipment to enable deployed DCO forces to conduct localized mobile analysis. Afloat suites also include hardware and software for enhanced data correlation tools, ancillary devices, and other related security tools.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 6 / SHARKCAGE - Afloat (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Ship, Sub	**Modification Type:** Initial	**Related RDT&E PEs:** 0303140N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SHARKCAGE - Afloat (DA070)												
A Kits												
Recurring												
1.1.1) SHARKCAGE Afloat Suite - NonOrganic [29]	116 / 29.000	43 / 10.750	39 / 9.750	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
1.1.2) SHARKCAGE Afloat Suite 2.0 - NonOrganic [30]	- / -	- / -	- / -	2 / 1.700	- / -	2 / 1.700	10 / 8.500	10 / 8.500	10 / 8.500	11 / 9.350	Continuing	Continuing
Subtotal: Recurring	*- / 29.000*	*- / 10.750*	*- / 9.750*	*- / 1.700*	*- / -*	*- / 1.700*	*- / 8.500*	*- / 8.500*	*- / 8.500*	*- / 9.350*	*Continuing*	*Continuing*
Subtotal: SHARKCAGE - Afloat (DA070)	*116 / 29.000*	*43 / 10.750*	*39 / 9.750*	*2 / 1.700*	*- / -*	*2 / 1.700*	*10 / 8.500*	*10 / 8.500*	*10 / 8.500*	*11 / 9.350*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 29.000*	*- / 10.750*	*- / 9.750*	*- / 1.700*	*- / -*	*- / 1.700*	*- / 8.500*	*- / 8.500*	*- / 8.500*	*- / 9.350*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Train-the-Trainer	- / 0.520	- / 0.150	- / 0.150	- / 0.150	- / -	- / 0.150	- / 0.150	- / 0.150	- / 0.150	- / 0.150	Continuing	Continuing
2.2) Production Support	- / 0.768	- / 0.331	- / 0.393	- / 0.075	- / -	- / 0.075	- / 0.344	- / 0.345	- / 0.344	- / 0.351	Continuing	Continuing
2.3) DSA	- / 11.218	- / 4.256	- / 3.900	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
2.4) DSA 2.0	- / -	- / -	- / -	- / 0.100	- / -	- / 0.100	- / 0.500	- / 0.500	- / 0.500	- / 0.550	- / -	- / 2.150
Subtotal: Support	*- / 12.506*	*- / 4.737*	*- / 4.443*	*- / 0.325*	*- / -*	*- / 0.325*	*- / 0.994*	*- / 0.995*	*- / 0.994*	*- / 1.051*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SHARKCAGE - Afloat (DA070)	- / 43.420	- / 16.125	- / 14.625	- / 1.000	- / 0.000	- / 1.000	- / 4.500	- / 5.230	- / 5.000	- / 5.896	Continuing	Continuing
Subtotal: Installation	*- / 43.420*	*- / 16.125*	*- / 14.625*	*- / 1.000*	*- / -*	*- / 1.000*	*- / 4.500*	*- / 5.230*	*- / 5.000*	*- / 5.896*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**84.926**	**31.612**	**28.818**	**3.025**	**0.000**	**3.025**	**13.994**	**14.725**	**14.494**	**16.297**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 6 / SHARKCAGE - Afloat (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SHARKCAGE - Afloat (DA070)

Manufacturer Information

Manufacturer Name: SHARKCAGE Equipment - Naval Information Warfare Center (NIWC) Pacific	Manufacturer Location: San Diego, CA
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 3

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023				
Delivery Dates	Mar 2022	Mar 2023	Mar 2024				

Installation Information

Method of Implementation: Installed:: Installation Name: SHARKCAGE - Afloat (DA070)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	116 / 43.420	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	116 / 43.420
FY 2022	- / -	43 / 16.125	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	43 / 16.125
FY 2023	- / -	- / -	39 / 14.625	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	39 / 14.625
FY 2024	- / -	- / -	- / -	2 / 1.000	0 / 0.000	2 / 1.000	- / -	- / -	- / -	- / -	0 / 0.000	2 / 1.000
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	10 / 4.500	- / -	- / -	- / -	0 / 0.000	10 / 4.500
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 5.230	- / -	- / -	0 / 0.000	10 / 5.230
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	10 / 5.000	- / -	0 / 0.000	10 / 5.000
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 5.896	0 / 0.000	11 / 5.896
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	116 / 43.420	43 / 16.125	39 / 14.625	2 / 1.000	0 / 0.000	2 / 1.000	10 / 4.500	10 / 5.230	10 / 5.000	11 / 5.896	Continuing	Continuing

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	116	-	20	9	14	-	18	12	9	-	2	-	-	-	10	-	-	-	10	-	-	-	10	-	-	-	11	-	-	Cont.	Cont.
Out	116	-	16	8	19	-	18	7	14	-	2	-	-	-	10	-	-	-	10	-	-	-	10	-	-	-	11	-	-	Cont.	Cont.

Footnotes:

(29) FY24 decrease is driven by a reduction of SHARKCAGE Afloat Suite which aligns to the current fielding requirements to support the new production contract for the Afloat 2.0, Analytic 2.0, and Sensor 2.0 Suites.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 6 / SHARKCAGE - Afloat (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(30) FY24 increase is due to the production unit that will now be fielding due to the SHARKCAGE production contract. These afloat units are a permanent solution that include more hardware and software to detect emerging threats in the tactical environment, provide the capability to analyze active cyber threats and take actions to contain/stop actual or potential cyber threat activities. Increases reflected in Production Support and DSA accordingly and align to new fielding plan.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 7 / SHARKCAGE - Ashore (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	50.597	4.805	9.201	29.873	0.000	29.873	16.530	16.878	17.683	16.939	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	50.597	4.805	9.201	29.873	0.000	29.873	16.530	16.878	17.683	16.939	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**50.597**	**4.805**	**9.201**	**29.873**	**0.000**	**29.873**	**16.530**	**16.878**	**17.683**	**16.939**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

SHARKCAGE ashore suites represent multiple SHARKCAGE architectures and variants that are specifically designed to each site in accordance with Fleet and Defensive Cyber Operations (DCO) requirements based on emergent threats in the tactical environment. Capabilities provided include network tapping, sensing, and analytic toolsets for passively monitoring multiple Navy networks to detect and assess cyber threats across multiple security enclaves. Ashore sites include Navy Cyber Defense Operations Command (NCDOC), Navy Information Operations Commands (NIOC), Fleet Cyber Command/Commander Tenth Fleet (FCC/C10F), other mission requirements (Details held at a Higher Classification), Ballistic Missile Defense (BMD) (i.e., Aegis Ashore), and SHARKCAGE production labs, as well as other network concentration facilities.

SHARKCAGE procures equipment to include: hardware, software, servers, data storage, taps, switches, laptops, and ancillary systems that provide the following capabilities: passive network sensor nodes that collect live network traffic and use signature-based and heuristic Intrusion Detection Systems (IDS) to conduct initial analysis and alerting; analytic nodes which consist primarily of systems supporting ingest, storage, retention, retrieval, correlation, and real-time alerting of network traffic Packet Capture (PCAP) and event data; and analysis workbenches which provide an environment of tools for DCO analysts to support all aspects of the DCO mission, local to DCO forces at FCC/C10F, NCDOC, NIOC, Naval Computer and Telecommunications Stations (NCTS), and Naval Computer and Telecommunications Area Master Stations (NCTAMS).

SHARKCAGE NCDOC Suite is the primary ashore site that supports the entire Navy enterprise and provides the capability to analyze active cyber threats and take actions to contain/stop actual or potential threat activities.

SHARKCAGE Analytic Suite provides a regional/Area of Responsibility (AoR) capability to analyze active cyber threats and take actions to contain/stop actual or potential threat activities.

SHARKCAGE Sensor Suite provide operators with the ability to conduct data ingest, data storage, data retention, data retrieval, data correlation, and real-time alerting of event-based data to support the DCO mission.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 7 / SHARKCAGE - Ashore (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	
Models of Systems Affected: Shore	**Modification Type:** Various	**Related RDT&E PEs:** 0303140N

Financial Plan	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Procurement												
Modification Item 1 of 1: SHARKCAGE - Ashore (DA070)												
B Kits												
Recurring												
1.1.1) SHARKCAGE NCDOC Suite - NonOrganic (31)	1 / 7.200	- / -	1 / 7.200	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
1.1.2) SHARKCAGE Analytic Suite - NonOrganic	5 / 24.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
1.1.3) SHARKCAGE Sensor Suite - NonOrganic (32)	18 / 5.850	6 / 1.950	1 / 0.325	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
1.1.4) SHARKCAGE Analytic Suite 2.0 - NonOrganic (33)	- / -	- / -	- / -	5 / 24.000	- / -	5 / 24.000	3 / 14.400	3 / 14.400	3 / 14.400	3 / 14.400	- / -	17 / 81.600
1.1.5) SHARKCAGE Sensor Suite 2.0 - NonOrganic (34)	- / -	- / -	- / -	2 / 0.650	- / -	2 / 0.650	- / -	- / -	1 / 0.325	- / -	- / -	3 / 0.975
Subtotal: Recurring	*- / 37.050*	*- / 1.950*	*- / 7.525*	*- / 24.650*	*- / -*	*- / 24.650*	*- / 14.400*	*- / 14.400*	*- / 14.725*	*- / 14.400*	*Continuing*	*Continuing*
Subtotal: SHARKCAGE - Ashore (DA070)	*24 / 37.050*	*6 / 1.950*	*2 / 7.525*	*7 / 24.650*	*- / -*	*7 / 24.650*	*3 / 14.400*	*3 / 14.400*	*4 / 14.725*	*3 / 14.400*	*Continuing*	*Continuing*
Subtotal: Procurement, All Modification Items	*- / 37.050*	*- / 1.950*	*- / 7.525*	*- / 24.650*	*- / -*	*- / 24.650*	*- / 14.400*	*- / 14.400*	*- / 14.725*	*- / 14.400*	*Continuing*	*Continuing*
Support *(All Modification Items)*												
2.1) Train-the-Trainer	- / 0.600	- / 0.150	- / 0.150	- / 0.150	- / -	- / 0.150	- / 0.150	- / 0.150	- / 0.150	- / 0.150	Continuing	Continuing
2.2) Production Support (35)	- / 1.200	- / 0.101	- / 0.325	- / 1.211	- / -	- / 1.211	- / 0.550	- / 0.550	- / 0.569	- / 0.550	Continuing	Continuing
2.3) DSA	- / 2.329	- / 0.504	- / 0.326	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
2.4) DSA Analytic Suite 2.0	- / -	- / -	- / -	- / 0.530	- / -	- / 0.530	- / 0.300	- / 0.338	- / 0.339	- / 0.339	- / -	- / 1.846
2.5) DSA Sensor Suite 2.0	- / -	- / -	- / -	- / 0.190	- / -	- / 0.190	- / -	- / -	- / 0.100	- / -	- / -	- / 0.290
Subtotal: Support	*- / 4.129*	*- / 0.755*	*- / 0.801*	*- / 2.081*	*- / -*	*- / 2.081*	*- / 1.000*	*- / 1.038*	*- / 1.158*	*- / 1.039*	*Continuing*	*Continuing*
Installation												
Modification Item 1 of 1: SHARKCAGE - Ashore (DA070)	- / 9.418	- / 2.100	- / 0.875	- / 3.142	- / 0.000	- / 3.142	- / 1.130	- / 1.440	- / 1.800	- / 1.500	Continuing	Continuing
Subtotal: Installation	*- / 9.418*	*- / 2.100*	*- / 0.875*	*- / 3.142*	*- / -*	*- / 3.142*	*- / 1.130*	*- / 1.440*	*- / 1.800*	*- / 1.500*	*Continuing*	*Continuing*
Total												
Total Cost (Procurement + Support + Installation)	**50.597**	**4.805**	**9.201**	**29.873**	**0.000**	**29.873**	**16.530**	**16.878**	**17.683**	**16.939**	**Continuing**	**Continuing**

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 7 / SHARKCAGE - Ashore (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Modification Item 1 of 1: SHARKCAGE - Ashore (DA070)

Manufacturer Information

Manufacturer Name: SHARKCAGE Equipment - Naval Information Warfare Center (NIWC) Pacific	Manufacturer Location: San Diego, CA
Administrative Leadtime *(in Months)*: 2	Production Leadtime *(in Months)*: 3

Dates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Contract Dates	Dec 2021	Dec 2022	Dec 2023				
Delivery Dates	Mar 2022	Mar 2023	Mar 2024				

Installation Information

Method of Implementation: Installed:: Installation Name: SHARKCAGE - Ashore (DA070)

Installation Cost	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*	Qty *(Each)* / Total Cost *($ M)*
Prior Years	24 / 9.418	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	24 / 9.418
FY 2022	- / -	6 / 2.100	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	0 / 0.000	6 / 2.100
FY 2023	- / -	- / -	2 / 0.875	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
FY 2024	- / -	- / -	- / -	7 / 3.142	0 / 0.000	7 / 3.142	- / -	- / -	- / -	- / -	0 / 0.000	7 / 3.142
FY 2025	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.130	- / -	- / -	- / -	0 / 0.000	3 / 1.130
FY 2026	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.440	- / -	- / -	0 / 0.000	3 / 1.440
FY 2027	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	4 / 1.800	- / -	0 / 0.000	4 / 1.800
FY 2028	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	3 / 1.500	Continuing	Continuing
To Complete	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
Total	24 / 9.418	6 / 2.100	2 / 0.875	7 / 3.142	0 / 0.000	7 / 3.142	3 / 1.130	3 / 1.440	4 / 1.800	3 / 1.500	Continuing	Continuing

Installation Schedule

		FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028					
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	24	-	6	-	-	-	2	-	-	-	7	-	-	-	3	-	-	-	3	-	-	-	4	-	-	-	3	-	-	Cont.	Cont.
Out	24	-	6	-	-	-	2	-	-	-	7	-	-	-	3	-	-	-	3	-	-	-	4	-	-	-	3	-	-	Cont.	Cont.

Footnotes:

(31) FY24 NCDOC Suite decrease is driven by current fielding requirements required to support the SHARKCAGE variants.

(32) FY24 Sensor Suite decrease is driven by current fielding requirements required to support the SHARKCAGE variants.

(33) FY24 increase is due to the new SHARKCAGE variants and the initial fielding of these production suites. These shore suites will provide a regional/Area of Responsibility (AOR) capability to analyze active cyber threats and take actions to contain/stop actual or potential threat activities.

Exhibit P-3a, Individual Modification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3415 / Info Systems Security Program (ISSP)	**Modification Number / Title:** 7 / SHARKCAGE - Ashore (DA070)
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

(34) FY24 increase is due to the new SHARKCAGE variants and the initial fielding of these production suites. These shore suites will provide a regional/Area of Responsibility (AOR) capability to analyze active cyber threats and take actions to contain/stop actual or potential threat activities.

(35) FY24 production support increase is driven by the procurement of the initial Analytic 2.0 and Sensor 2.0 Suites required to support the new production variants.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 15: Cryptographic Equipment	**P-1 Line Item Number / Title:** 3417 / MIO Intel Exploitation Team

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	7.288	0.977	1.055	1.079	0.000	1.079	1.100	1.125	1.147	1.174	-	14.945
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	7.288	0.977	1.055	1.079	0.000	1.079	1.100	1.125	1.147	1.174	-	14.945
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**7.288**	**0.977**	**1.055**	**1.079**	**0.000**	**1.079**	**1.100**	**1.125**	**1.147**	**1.174**	**-**	**14.945**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

[P40A / 343SA - Maritime Interdiction Operations Intel Exploitation Team]: Tactical Electronic Warfare (EW) equipment is used in support of indications, warning, and force protection. Tactical EW systems provide the capability to collect data in both digital and analogue Radio Frequency (RF) environments. Specific collection capabilities include digital and analogue data collection with wireless signal exploitations; Specific Emitter Identification (SEI), which discerns unique attributes of specific radar; Satellite Communication capability; Wireless signal receiving capabilities to conduct surveys, to include telecom network mapping and geolocation, and capturing tactical signals intelligence (SIGINT); and Document and Media Exploitation allowing capture of media from electronic devices.

[P40A / Digital Receiver Technology (DRT) 1301C+/Wireless Receiving Systems]: Funding will procure twelve (12) Digital Receiver Technology (DRT) Wireless Receiving Systems and replacement DRT kits. Wireless Receiving Systems provide the ability to capture wireless signals and sustain the Navy Expeditionary Intelligence Command (NEIC) tactical signals intelligence (SIGINT) mission. Maritime Interdiction Operations Intelligence Exploitation Teams (MIOIET) deployed units will use this equipment to fulfill theater Commander's requirements for high-demand electronic collection and tactical SIGINT against U.S. adversaries across multiple AORs. Intelligence Exploitation communication equipment is established on the Navy Expeditionary Combat Command (NECC) Table of Allowance (TOA). Additional procurement descriptions available via Secure Internet Protocol Router (SIPR).

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 15: Cryptographic Equipment	**P-1 Line Item Number / Title:** 3417 / MIO Intel Exploitation Team	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*	Quantity / Total Cost *(Each) I ($ M)*
P-40a	MIO Intel Exploitation Team	P-5a			- / 7.288	- / 0.977	- / 1.055	- / 1.079	- / -	- / 1.079
P-40	**Total Gross/Weapon System Cost**				**- / 7.288**	**- / 0.977**	**- / 1.055**	**- / 1.079**	**- / 0.000**	**- / 1.079**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
FY24 plan is to procure 12 Wireless Signal Receiving Systems for Navy Expeditionary Intelligence Command (NEIC). This will provide the ability to capture network signals, which is a core function of NEIC's tactical Signal Intelligence (SIGINT) mission and without this, deployed teams would not be unable to fulfill theater commander's requirements that are in high demand for electronic collection against U.S. adversaries across multiple Areas of Responsibility (AORs).

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	**P-1 Line Item Number / Title:** 3417 / MIO Intel Exploitation Team	**Aggregated Items Title:** MIO Intel Exploitation Team

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
1) 343SA - Maritime Interdiction Operations Intel Exploitation Team																				
1.1) 343SA - Satellite Communications Equipment	A		306.667	3	0.920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2) 343SA - Wireless Networks Mapping Equipment / Surveys	A		247.000	4	0.988	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.3) 343SA - Wireless Networks Telcom Equipment	A		151.000	3	0.453	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.4) 343SA - Specific Emitter Identification Devices(†)	A		287.429	7	2.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5) 343SA - Digital / Analog Collection Devices(†)	A		243.250	8	1.946	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.6) 343SA Tactical Electronic Warfare (TAC-EW) Dissemination (1)(†)	A		-	-	-	244.250	4	0.977	37.670	28	1.055	-	-	-	-	-	-	-	-	-
1.7) Digital Receiver Technology (DRT) 1301C+/Wireless Receiving Systems (2)(†)	A		875.000	1	0.875	-	-	-	-	-	-	89.917	12	1.079	-	-	-	89.917	12	1.079
1.8) LANSHARK 5	A		94.000	1	0.094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) 343SA - Maritime Interdiction Operations Intel Exploitation Team			**-**	**-**	***7.288***	**-**	**-**	***0.977***	**-**	**-**	***1.055***	**-**	**-**	***1.079***	**-**	**-**	**-**	**-**	**-**	***1.079***
Total			**-**	**-**	**7.288**	**-**	**-**	**0.977**	**-**	**-**	**1.055**	**-**	**-**	**1.079**	**-**	**-**	**-**	**-**	**-**	**1.079**

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) FY24 decrease of Tactical Electronic Warfare equipment to procure Digital Receiver Technology.

(2) FY24 increase to procure planned Digital Receiver Technology (DRT) Wireless Receiving Systems.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 15	P-1 Line Item Number / Title: 3417 / MIO Intel Exploitation Team	Aggregated Items: MIO Intel Exploitation Team

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1) 343SA - Maritime Interdiction Operations Intel Exploitation Team												
1.4) 343SA - Specific Emitter Identification Devices		2020	Prime Vendor / Various	MIPR	** NO PCO **	May 2020	Jan 2021	4	247.000	N	Sep 2020	
1.5) 343SA - Digital / Analog Collection Devices		2021 (3)	Digital Receiver Technology / UNKNOWN	C / CR	** NO PCO **	Jul 2021	Sep 2021	4	246.250	N	Sep 2021	
1.6) 343SA Tactical Electronic Warfare (TAC-EW) Dissemination (1)		2022	Gov of the shelf / Various	MIPR	DLA	Mar 2022	Sep 2023	4	244.250	Y		Mar 2022
1.6) 343SA Tactical Electronic Warfare (TAC-EW) Dissemination (1)		2023	TBD/TBD / TBD	C / TBD	** NO PCO **	Mar 2023	Mar 2024	28	37.670	N	Jan 2023	Feb 2023
1.7) Digital Receiver Technology (DRT) 1301C+/Wireless Receiving Systems (2)		2024	TBD/TBD / TBD	C / TBD	** NO PCO **	Mar 2024	Aug 2025	12	89.917	N	Jan 2024	Feb 2024

Footnotes:

(3) Initial buy through Systems Command (SYSCOM)

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 16: Cryptologic Equipment	**P-1 Line Item Number / Title:** 3501 / Cryptologic Communications Equip

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	176.688	17.809	28.832	17.483	0.000	17.483	15.642	15.844	15.875	16.226	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	176.688	17.809	28.832	17.483	0.000	17.483	15.642	15.844	15.875	16.226	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**176.688**	**17.809**	**28.832**	**17.483**	**0.000**	**17.483**	**15.642**	**15.844**	**15.875**	**16.226**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Cryptologic Carry-On-Program (CCOP) procures state-of-the-art, commercial off-the-shelf Signals Intelligence (SIGINT) equipment (hardware and software) in response to combatant commander requirements for a quick-reaction surface, subsurface, and airborne cryptologic carry-on capability. The equipment is procured in accordance with requirements detailed in the shipboard Information Warfare / Cryptologic System Operational Requirements Document and specific execution year fleet requirements. These requirements are defined by Fleet Cyber Command (FCC)/Commander TENTH Fleet (C10F) Fleet Signals Development Working Group (FSDWG), in concert with Shipboard Signals Exploitation Space (SSES) programs (includes Ship's Signal Exploitation Equipment Family of Systems) to ensure synergy and seamless transition to permanently installed systems. The FSDWG meets to determine which signals of interest (SOI)s/Targets on the FSDWG list need to be addressed. Due to a continually changing threat environment, detailed requirements are dynamic and equipment procured varies each year by quantity and type. Equipment suites can be configured for many targets and tasking. Target specific subsystems can either operate as stand-alone within the cryptologic spaces or as an add-on to existing equipment. Hardware procurements includes: receivers, recorders, tactical computers and related peripherals, antennas, electronic-warfare support measures systems, precision geolocation equipment, advanced signal and search equipment including spectrum analyzers and associated portable special intelligence communications equipment. CCOP equipment is installed as an augment to cryptologic capabilities on subsurface, surface, and air platforms. There are approximately 124 cryptologic capable surface ships and shore sites in the current Navy inventory. Each of these are potential users of this carry-on equipment, as are subsurface and air platforms. The temporary installation of equipment is coordinated through fleet augmentation requests and installed by fleet electronic support personnel. A primary system in inventory is the Carry On Radio Spectrum Analysis & Intelligence Reporting (CORSAIR) system. Funds continue to procure CORSAIR core architecture system upgrades to provide additional affordable functionality to the combatant commands. Additional signal acquisition equipment to address specific combatant command requirements include such systems as Digital Receiver Technology (DRT), Hostile forces Integrated Targeting Service (HITS), Maritime Toxic Pen (MTP), TURBULENTWAVE / TURBULENTWIND / TURBULENTSAIL / BLUESTREAM servers, RED FALCON, FIREFLY, NIMBLE TRACKER, SHEARWATER, CARBON STORM, XML to JREAP-C (X2J), TOXIC SMOKE, QUICKSHOT, SHOCKWAVE/WSTL, and Remote Analytical SIGINT Capability (RASCAL) equipment.

Signals Analysis Laboratories (SAL) provide integration for security and new technology requirements to facilitate highly technical analysis in a highly diverse, constantly changing, and contested electromagnetic environment. The Global Signals Analysis Laboratory (GSAL) program supports procurement to facilitate the data handling subsystem. The GSAL program, under project name CLASSIC SENSEI, provides for the timely analysis of data derived from maritime Information Warfare (IW) operations. This architecture known as LABLINK provides advanced manipulation, forwarding, and exchanges of data while providing connectivity with collaborating military, national, and international partners throughout the intelligence community. The GSAL program office equips the eight (8) SAL's with advanced signals analysis capabilities in order to accomplish the in-depth signals analysis required to effectively address processing and exploitation requirements in support of both maritime tactical and national strategic IW objectives. SALs are integral components of the Tech Signal Intelligence (SIGINT) Revitalization initiatives that provide a collaborative enterprise.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 16: Cryptologic Equipment	**P-1 Line Item Number / Title:** 3501 / Cryptologic Communications Equip	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

Fleet Information Operations Centers (FIOC) provide regionally focused Information Operation (IO) and Signal Intelligence (SIGINT) support to Fleet Commanders. FIOCs provide support for IO and SIGINT personnel augmentation in theater, analytical requests, and planning in support of deliberate and crisis action planning. FIOCs leverage capabilities, analysis, and manpower to support requirements. Additionally, FIOCs provide mission support for the CLASSIC REACH (CR) program by establishing a common, Integration Backbone (DIB)-compliant, Service Oriented Architecture framework for the hosting of network services enabling Distributed Signals Intelligence/Information Operations (SIGINT/IO). CR is the key enabler of SIGINT/IO future reach back and remoting operations from surface, airborne, and subsurface manned/unmanned platforms.

Electronic Warfare (EW) Fleet Synthetic Trainer Consolidation provides architecture, systems and required life cycle management to improve staff operational planning and tactical decision-making, and overall intelligence team readiness and certification throughout the Optimized-Fleet Response Plan (O-FRP). This capability enhances units and strike groups in exercising integrated kinetic and non-kinetic capabilities to include operations and intelligence fusion required for comprehensive maritime operations and operational proficiency in Signals Intelligence (SIGINT), Electromagnetic Maneuver Warfare (EMW), and cyberspace operations. The capability supports Assured Command and Control (C2) and Cyber Situational Awareness/Cyber Defense and Enhanced Naval Network Environment (NNE) Information Dominance Integrated Prioritized Capabilities Lists (IPCLs).

Fleet Synthetic Training (FST) Signals Intelligence / Counter - Intelligence, Surveillance, and Reconnaissance (SIGINT / C-ISR) provides the capability to exercise shipboard Top Secret-Sensitive Compartmented Information (TS-SCI) capabilities by expanding upon General Service (GENSER) Navy Continuous Training Environment (NCTE) capabilities to add Above GENSER architecture/capabilities. The capability enables staff operational planning and tactical decision-making and overall Intelligence team readiness and certification throughout the Optimized - Fleet Response Plan (O-FRP).

[P5 / [USFFC CY] Global Signal Analysis Laboratory (GSAL)]: Funding sustains Signals Analysis Laboratories (SAL) integration for security and new technology requirements that facilitate technical analysis in diverse and contested electromagnetic environments. SALs are integral components of the Tech Signal Intelligence (SIGINT) Revitalization initiatives.

[P5 / NAVIFOR System Integration & Installation of Hardware (FIOC) (09S)]: Funds provided for procurement and life cycle maintenance for Command/Control (C2) systems connected to Sensitive Compartmented Information (SCI) networks. Funds will maintain a common baseline of analytical intelligence software tools.

[P5 / NAVIFOR EW Fleet Synthetic Trainer Consolidation (86D)]: Funds provided for Counter-Intelligence, Surveillance, Reconnaissance, Targeting (C-ISRT), Long-Range Fires and Live, Virtual, Constructive (LVC) Integrated Prioritized Capabilities Lists (IPCLs).This will give the ability to exercise shipboard Top Secret/Sensitive Compartmented Information (TS/SCI) capabilities in an environment not subject to counter-detection.

[P5 / [USFFC N7] Tier 1 TS/SCI NCTE & VOIP Procurement & Installation]: Funding in FY24 is zero, because no installs are planned.

[P5 / [USFFC N7] Tier 1 Life Cycle Management (LCM)]: Life cycle technical refresh must be completed every three (3) years for the life of the node.

[P5 / [USFFC N7] SIGINT / C-ISR Systems - Permanent Shipboard Installation]: Includes shipboard installations that provide capability for comprehensive maritime operations and operational proficiency in SIGINT, Electromagnetic Maneuver Warfare (EMW), and cyberspace operations.

[P5 / [USFFC N7] Fleet Training Wholeness (FTW)]: Includes installation support for permanent shipboards systems, technical refresh of interim capability Portable Embarkation Kits (PEKs), and fluctuations in the locations of installations.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 16: Cryptologic Equipment	**P-1 Line Item Number / Title:** 3501 / Cryptologic Communications Equip

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)	Quantity / Total Cost (Each) / ($ M)
P-5	1 / Cryptologic Communications Equip	P-5a, P-21			- / 176.688	- / 17.809	- / 28.832	- / 17.483	- / 0.000	- / 17.483
P-40	**Total Gross/Weapon System Cost**				**- / 176.688**	**- / 17.809**	**- / 28.832**	**- / 17.483**	**- / 0.000**	**- / 17.483**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
The FY 2024 budget will procure the following:

(1.1.1) Cryptologic Carry-on Program (CCOP) Systems & Subsystems: FY 2024 decrease (-$1.546M) due to the procurement of (7) less CCOP systems in alignment with current requirements and fielding plan. The FY24 procurement of CCOP systems will continue to satisfy signals exploitation capability gaps as determined by the Cryptologic Carry-on Program (CCOP) Fleet Signals Development Working Group (FSDWG) and provide supplemental capability to host Signals Intelligence systems. Recommended procurements best suited to address identified gaps include: Digital Receiver Technology (DRT), Hostile forces Integrated Targeting Service (HITS), Maritime Toxic Pen (MTP), TURBULENTWAVE / TURBULENTWIND / TURBULENTSAIL / BLUESTREAM servers, RED FALCON, FIREFLY, NIMBLE TRACKER, SHEARWATER, CARBON STORM, X2J, TOXIC SMOKE, QUICKSHOT, SHOCKWAVE/WSTL, Carry On Radio Spectrum Analysis & Intelligence Reporting (CORSAIR), as well as Remote Analytical SIGINT (RASCAL).

(1.1.2) CCOP Service Tactical Signals Intelligence (SIGINT) Upgrades: FY 2024 decrease (-$9.696M) due to a one time Congressional plus up in FY23 for the procurement of SIGINT Upgrades. Funding will be used to satisfy an emergent INDOPACOM requirement. The planned solution is a Quick Reaction Capability (QRC) fielding of DOD Government-off-the-Shelf (GOTS) hardware/software with parallel engineering effort to integrate corporate solutions in outlying years. Details held at a higher classification.

(2.1) Global Signal Analysis Laboratory (GSAL):
- FY 2024 increase ($0.020M) due to current market cost of procure equipment items. - Funding sustains Signals Analysis Laboratories (SAL) integration for security and new technology requirements that facilitate technical analysis in diverse and contested electromagnetic environments. SALs are integral components of the Tech Signal Intelligence (SIGINT) Revitalization initiatives.

(3.1.1) System Integration and Installation of Hardware (FIOC):
- (1) System Integration & Installation of Hardware (FIOC); FY 2024 increase ($0.016M) due to inflation.

(4.1.1) Electronic Warfare (EW) Fleet Synthetic Trainer Consolidation:
- (1) EW Fleet Synthetic Trainer Consolidation; FY 2024 increase ($0.017M) due to inflation.

(5.1.1) Tier 1 TS/SCI NCTE & VOIP Procurement & Installation:
- (0) Tier 1 TS/SCI NCTE & VOIP Procurement & Installation; FY 2024 decrease ($0.841M) due to no node install.

(5.1.2) Tier 1 Life Cycle Management (LCM):
- (1) Tier 1 Life Cycle Management (LCM); FY 2024 increase ($0.037M) due to change in market price. Life cycle technical refresh must be completed every three (3) years for the life of the node.

(5.1.3) SIGINT / C-ISR Systems - Permanent Shipboard Installation:

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 16: Cryptologic Equipment	**P-1 Line Item Number / Title:** 3501 / Cryptologic Communications Equip	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

- (18) SIGINT / C-ISR Systems - Permanent Shipboard Installation; FY 2024 increase ($0.266M) due to increase from 15 to 18 shipboard installations that provide capability for comprehensive maritime operations and operational proficiency in SIGINT, Electromagnetic Maneuver Warfare (EMW), and cyberspace operations.

(5.1.4) SIGINT / C-ISR Systems - Life Cycle Management (LCM):
- (72) SIGINT / C-ISR Systems - Life Cycle Management (LCM); FY 2024 increase ($0.027M) due to increase from 66 to 72 units. Life cycle maintenance cost per unit decreases as number of units increases.

(5.1.5) Fleet Training Wholeness (FTW)
- (18) Fleet Training Wholeness (FTW); FY 2024 increase ($0.635M) due to increase in installation support for permanent shipboards systems, technical refresh of interim capability Portable Embarkation Kits (PEKs), and fluctuations in the locations of installations.

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 16	**P-1 Line Item Number / Title:** 3501 / Cryptologic Communications Equip	**Item Number / Title [DODIC]:** 1 / Cryptologic Communications Equip
ID Code (A=Service Ready, B=Not Service Ready) :	**MDAP/MAIS Code:**	

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	176.688	17.809	28.832	17.483	0.000	17.483
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	176.688	17.809	28.832	17.483	0.000	17.483
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**176.688**	**17.809**	**28.832**	**17.483**	**0.000**	**17.483**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)						
Initial Spares *($ in Millions)*	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Thousands)*	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
Hardware - 1V045 Access Systems & Subsystems Cost																		
Recurring Cost																		
1.1.1) CCOP Systems & Subsystems(†) (1)	253.095	599	151.604	243.738	42	10.237	248.614	44	10.939	253.865	37	9.393	-	-	-	253.865	37	9.393
1.1.2) CCOP SIGINT Upgrades(†) (2)	-	-	-	-	-	-	248.614	39	9.696	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	*151.604*	-	-	*10.237*	-	-	*20.635*	-	-	*9.393*	-	-	-	-	-	*9.393*
Subtotal: Hardware - 1V045 Access Systems & Subsystems Cost	**-**	**-**	***151.604***	**-**	**-**	***10.237***	**-**	**-**	***20.635***	**-**	**-**	***9.393***	**-**	**-**	**-**	**-**	**-**	***9.393***
Hardware - Global Signal Analysis Laboratory (60) Cost																		
Recurring Cost																		
2.1.1) [USFFC ID] Global Signal Analysis Laboratory (GSAL) (3)	1,125.125	8	9.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.1.2) [USFFC CY] Global Signal Analysis Laboratory (GSAL)(†) (4)	-	-	-	771.000	1	0.771	832.000	1	0.832	852.000	1	0.852	-	-	-	852.000	1	0.852
Subtotal: Recurring Cost	-	-	*9.001*	-	-	*0.771*	-	-	*0.832*	-	-	*0.852*	-	-	-	-	-	*0.852*
Subtotal: Hardware - Global Signal Analysis Laboratory (60) Cost	**-**	**-**	***9.001***	**-**	**-**	***0.771***	**-**	**-**	***0.832***	**-**	**-**	***0.852***	**-**	**-**	**-**	**-**	**-**	***0.852***
Hardware - [USFFC ID] GDX6D - System Integration and Installation of Hardware Cost																		
Recurring Cost																		

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 16	P-1 Line Item Number / Title: 3501 / Cryptologic Communications Equip	Item Number / Title [DODIC]: 1 / Cryptologic Communications Equip
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
3.1.1) NAVIFOR System Integration & Installation of Hardware (FIOC) (09S)(†) (5)	707.600	5	3.538	693.000	1	0.693	725.000	1	0.725	741.000	1	0.741	-	-	-	741.000	1	0.741
Subtotal: Recurring Cost	-	-	*3.538*	-	-	*0.693*	-	-	*0.725*	-	-	*0.741*	-	-	-	-	-	*0.741*
Subtotal: Hardware - [USFFC ID] GDX6D - System Integration and Installation of Hardware Cost	**-**	**-**	***3.538***	**-**	**-**	***0.693***	**-**	**-**	***0.725***	**-**	**-**	***0.741***	**-**	**-**	**-**	**-**	**-**	***0.741***
Hardware - [USFFC ID] EW Fleet Synthethic Trainer Consolidation Cost																		
Recurring Cost																		
4.1.1) NAVIFOR EW Fleet Synthetic Trainer Consolidation (86D)(†) (6)	291.333	3	0.874	573.000	1	0.573	638.000	1	0.638	655.000	1	0.655	-	-	-	655.000	1	0.655
Subtotal: Recurring Cost	-	-	*0.874*	-	-	*0.573*	-	-	*0.638*	-	-	*0.655*	-	-	-	-	-	*0.655*
Subtotal: Hardware - [USFFC ID] EW Fleet Synthethic Trainer Consolidation Cost	**-**	**-**	***0.874***	**-**	**-**	***0.573***	**-**	**-**	***0.638***	**-**	**-**	***0.655***	**-**	**-**	**-**	**-**	**-**	***0.655***
Hardware - [USFFC N7] Fleet Synthetic Training (FST) SIGINT / C-ISR Cost																		
Recurring Cost																		
5.1.1) [USFFC N7] Tier 1 TS/SCI NCTE & VOIP Procurement & Installation(†) (7)	447.000	3	1.341	-	-	-	841.000	1	0.841	-	-	-	-	-	-	-	-	-
5.1.2) [USFFC N7] Tier 1 Life Cycle Management (LCM)(†) (8)	226.000	4	0.904	202.000	1	0.202	267.000	1	0.267	304.000	1	0.304	-	-	-	304.000	1	0.304
5.1.3) [USFFC N7] SIGINT / C-ISR Systems - Permanent Shipboard Installation(†) (9)	53.231	26	1.384	57.742	31	1.790	64.400	15	0.966	68.444	18	1.232	-	-	-	68.444	18	1.232
5.1.4) [USFFC N7] SIGINT / C-ISR Systems - Life Cycle Management (LCM)(†) (10)	6.068	44	0.267	4.941	51	0.252	4.650	66	0.307	4.645	72	0.334	-	-	-	4.645	72	0.334

Exhibit P-5, Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 16	P-1 Line Item Number / Title: 3501 / Cryptologic Communications Equip	Item Number / Title [DODIC]: 1 / Cryptologic Communications Equip
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Cost Elements	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)	Unit Cost ($ K)	Qty (Each)	Total Cost ($ M)
5.1.5) [USFFC N7] Fleet Training Wholeness (FTW) (11)	-	-	1.334	-	-	2.830	-	-	2.817	-	-	3.452	-	-	-	-	-	3.452
Subtotal: Recurring Cost	-	-	*5.230*	-	-	*5.074*	-	-	*5.198*	-	-	*5.322*	-	-	-	-	-	*5.322*
Subtotal: Hardware - [USFFC N7] Fleet Synthetic Training (FST) SIGINT / C-ISR Cost	**-**	**-**	***5.230***	**-**	**-**	***5.074***	**-**	**-**	***5.198***	**-**	**-**	***5.322***	**-**	**-**	**-**	**-**	**-**	***5.322***
Support - 1V555 Production Support Cost																		
6.1) Production Support	-	-	6.441	-	-	0.461	-	-	0.804	-	-	0.520	-	-	-	-	-	0.520
Subtotal: Support - 1V555 Production Support Cost	**-**	**-**	***6.441***	**-**	**-**	***0.461***	**-**	**-**	***0.804***	**-**	**-**	***0.520***	**-**	**-**	**-**	**-**	**-**	***0.520***
Gross/Weapon System Cost	**-**	**-**	**176.688**	**-**	**-**	**17.809**	**-**	**-**	**28.832**	**-**	**-**	**17.483**	**-**	**-**	**0.000**	**-**	**-**	**17.483**

(†) indicates the presence of a P-5a

Footnotes:

(1) Cryptologic Carry-on Program (CCOP) system decrease from FY23 to FY24 due to decrease in procurement of (7) CCOP systems in alignment with current requirements and fielding plan.

(2) Cryptologic Carry-on Program (CCOP) Service Tactical Signal Intelligence (SIGINT) Upgrades decrease due to one time Congressional plus up in FY23 for the procurement of SIGINT Upgrades.

(3) Global Signal Analysis Laboratory (GSAL) funding transfers from Naval Information Forces(IFOR)(PEO ID) to Fleet Cyber Command(FCC)(PEO CY) beginning in FY2022.

(4) FY24 increase due market price cost inflation.

(5) FY24 increase due to market price cost inflation.

(6) FY24 increase due to market price cost inflation

(7) FY24 decrease ($0.841M) due to no node install.

(8) FY24 increase ($0.037M) due to change in market cost/inflation for node equipment.

(9) FY24 increase ($0.266M) due to increased number of permanent shipboard installations.

(10) FY24 increase ($0.027M) due to increase in units. Life cycle maintenance cost per unit decreases as number of units increases.

(11) FY24 increase ($0.635M) due to increased installation of permanent shipboards systems, technical refresh, and varied locations of installations.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 16	P-1 Line Item Number / Title: 3501 / Cryptologic Communications Equip	Item Number / Title [DODIC]: 1 / Cryptologic Communications Equip

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
1.1.1) CCOP Systems & Subsystems(†)		2022	VARIOUS (12) / VARIOUS	C / CPFF	NIWC PAC/ NIWC LANTNIWC PAC/NIWC LANT	Feb 2022	Jul 2022	42	243.738	N	Apr 2022	Oct 2021
1.1.1) CCOP Systems & Subsystems(†)		2023 (13)	VARIOUS (12) / VARIOUS	C / CPFF	NIWC PAC/NIWC LANT	Feb 2023	Jul 2023	44	248.614	N	Apr 2023	Oct 2022
1.1.1) CCOP Systems & Subsystems(†)		2024 (14)	VARIOUS (12) / VARIOUS	C / CPFF	NIWC PAC/NIWC LANT	Feb 2024	Jul 2024	37	253.865	N	Apr 2024	Oct 2023
1.1.2) CCOP SIGINT Upgrades		2023 (15)	VARIOUS (16) / VARIOUS	C / CPFF	NIWC PAC/NIWC LANT	Feb 2023	Jul 2023	39	248.614	N	Apr 2023	Oct 2022
2.1.2) [USFFC CY] Global Signal Analysis Laboratory (GSAL)		2022	Various / Various	C / FFP	Fort Meade, MD	Apr 2022	Apr 2022	1	771.000	Y		Apr 2022
2.1.2) [USFFC CY] Global Signal Analysis Laboratory (GSAL)		2023	Various / Various	C / FFP	Fort Meade, MD	Jan 2023	Jan 2023	1	832.000	Y		Dec 2022
2.1.2) [USFFC CY] Global Signal Analysis Laboratory (GSAL)		2024	Various / Various	C / FFP	Fort Meade, MD	Jan 2024	Jan 2024	1	852.000	Y		Dec 2023
3.1.1) NAVIFOR System Integration & Installation of Hardware (FIOC) (09S)		2022	National Security Agency (17) / NSA	C / FFP	NSA	Mar 2022	Mar 2022	1	693.000	N	Oct 2022	Oct 2021
3.1.1) NAVIFOR System Integration & Installation of Hardware (FIOC) (09S)		2023	National Security Agency (17) / NSA	C / FFP	NSA	Mar 2023	Mar 2023	1	725.000	N	Oct 2023	Oct 2022
3.1.1) NAVIFOR System Integration & Installation of Hardware (FIOC) (09S)		2024	NAVWAR / San Diego	C / TBD	** NO PCO **	Oct 2023	Oct 2023	1	741.000	N	Oct 2024	
4.1.1) NAVIFOR EW Fleet Synthetic Trainer Consolidation (86D)		2022	SSC PAC / San Diego	C / FFP	NAVWAR San Diego	Feb 2022	Feb 2022	1	573.000	N	Feb 2022	Oct 2021
4.1.1) NAVIFOR EW Fleet Synthetic Trainer Consolidation (86D)		2023	SSC PAC / San Diego	C / FFP	NAVWAR San Diego	Oct 2022	Oct 2022	1	638.000	N	Feb 2023	Oct 2022
4.1.1) NAVIFOR EW Fleet Synthetic Trainer Consolidation (86D)		2024	SSC PAC / San Diego	C / TBD	** NO PCO **	Oct 2023	Oct 2023	1	655.000	N	Feb 2024	
5.1.1) [USFFC N7] Tier 1 TS/SCI NCTE & VOIP Procurement & Installation		2023	Alion Science & Technology / McLean, VA	C / TBD	** NO PCO **	Oct 2022	Oct 2022	1	841.000	N	Oct 2022	
5.1.2) [USFFC N7] Tier 1 Life Cycle Management (LCM)		2022	Alion Science & Technology / McLean, VA	C / FFP	DTIC	Jan 2022	Jan 2022	1	202.000	N	Jan 2022	Oct 2021
5.1.2) [USFFC N7] Tier 1 Life Cycle Management (LCM)		2023	Alion Science & Technology / McLean, VA	C / TBD	DTIC	Oct 2022	Oct 2022	1	267.000	N	Oct 2022	Oct 2022

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 16	P-1 Line Item Number / Title: 3501 / Cryptologic Communications Equip	Item Number / Title [DODIC]: 1 / Cryptologic Communications Equip

Cost Elements	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
5.1.2) [USFFC N7] Tier 1 Life Cycle Management (LCM)		2024	Alion Science & Technology / McLean, VA	C / TBD	DTIC	Oct 2023	Oct 2023	1	304.000	N	Oct 2023	Oct 2023
5.1.3) [USFFC N7] SIGINT / C-ISR Systems - Permanent Shipboard Installation		2022	Alion Science & Technology / McLean, VA	C / FFP	DTIC	Jan 2022	Jan 2022	31	57.742	N	Jan 2022	Oct 2021
5.1.3) [USFFC N7] SIGINT / C-ISR Systems - Permanent Shipboard Installation		2023	Alion Science & Technology / McLean, VA	C / TBD	DTIC	Oct 2022	Oct 2022	15	64.400	N	Oct 2022	Oct 2022
5.1.3) [USFFC N7] SIGINT / C-ISR Systems - Permanent Shipboard Installation		2024	Alion Science & Technology / McLean, VA	C / TBD	DTIC	Oct 2023	Oct 2023	18	68.444	N	Oct 2023	Oct 2023
5.1.4) [USFFC N7] SIGINT / C-ISR Systems - Life Cycle Management (LCM)		2022	Alion Science & Technology / McLean, VA	C / FFP	DTIC	Jan 2022	Jan 2022	51	4.941	N	Jan 2022	Oct 2021
5.1.4) [USFFC N7] SIGINT / C-ISR Systems - Life Cycle Management (LCM)		2023	Alion Science & Technology / McLean, VA	C / TBD	DTIC	Oct 2022	Oct 2022	66	4.650	N	Oct 2022	Oct 2022
5.1.4) [USFFC N7] SIGINT / C-ISR Systems - Life Cycle Management (LCM)		2024	Alion Science & Technology / McLean, VA	C / TBD	DTIC	Oct 2023	Oct 2023	72	4.645	N	Oct 2023	Oct 2023

(†) indicates the presence of a P-21

Footnotes:

(12) Cryptologic Carry-on Program (CCOP) equipment is procured according to the overall requirements detailed in the Shipboard Information Warfare/Cryptologic System Operational Requirements Document and specific execution year fleet requirements as defined by Fleet Cyber Command (FCC)/Commander TENTH Fleet (C10F) Fleet Signals Development Working Group (FSDWG). Due to a continually changing threat environment, detailed requirements are dynamic, contract award timelines and equipment procured varies each year by quantity and type.

(13) CCOP Systems & Subsystems: Vendors include CACI, TICOM, Epsilon Systems, SRC, GRSi, Raytheon, DRT

(14) CCOP Systems & Subsystems: Vendors include CACI, Epsilon Systems, SRC, GRSi, Raytheon, DRT

(15) CCOP Systems & Subsystems: Vendors include CACI, TICOM, Epsilon Systems, SRC, GRSi, Raytheon, DRT

(16) Cryptologic Carry-on Program (CCOP) equipment is procured according to the overall requirements detailed in the Shipboard Information Warfare/Cryptologic System Operational Requirements Document and specific execution year fleet requirements as defined by Fleet Cyber Command (FCC)/Commander TENTH Fleet (C10F) Fleet Signals Development Working Group (FSDWG). Due to a continually changing threat environment, detailed requirements are dynamic, contract award timelines and equipment procured varies each year by quantity and type.

(17) Starting in FY 21

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 16	**P-1 Line Item Number / Title:** 3501 / Cryptologic Communications Equip	**Item Number / Title [DODIC]:** 1 / Cryptologic Communications Equip

Cost Elements (Units in Each)							Fiscal Year 2022												Fiscal Year 2023												BALANCE
							Calendar Year 2022												Calendar Year 2023												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2021	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.1.1) CCOP Systems & Subsystems [1]																															
Prior Years Deliveries: 599																															
	1	2022	NAVY	42	0	42					A -	-	-	-	-	5	5	5	5	5	5	5	5	2							0
	1	2023	NAVY	44	0	44																	A -	-	-	-	-	5	5	5	29
	1	2024	NAVY	37	0	37																									37
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 16	**P-1 Line Item Number / Title:** 3501 / Cryptologic Communications Equip	**Item Number / Title [DODIC]:** 1 / Cryptologic Communications Equip

Cost Elements (Units in Each)							Fiscal Year 2024												Fiscal Year 2025												BALANCE
							Calendar Year 2024												Calendar Year 2025												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1.1.1) CCOP Systems & Subsystems [1]																															
Prior Years Deliveries: 599																															
	1	2022	NAVY	42	42	0																									0
	1	2023	NAVY	44	15	29	5	5	5	5	5	4																			0
	1	2024	NAVY	37	0	37					A -	-	-	-	-	5	4	4	4	4	4	4	4	4							0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 16	**P-1 Line Item Number / Title:** 3501 / Cryptologic Communications Equip	**Item Number / Title [DODIC]:** 1 / Cryptologic Communications Equip

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2024	1-8-5 For 2024	MAX For 2024	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	VARIOUS (12) - VARIOUS	1	40	90	0	4	5	9	0	4	5	9

"A" in the Delivery Schedule indicates the Contract Award Date.
Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Footnotes:
(12) Cryptologic Carry-on Program (CCOP) equipment is procured according to the overall requirements detailed in the Shipboard Information Warfare/Cryptologic System Operational Requirements Document and specific execution year fleet requirements as defined by Fleet Cyber Command (FCC)/Commander TENTH Fleet (C10F) Fleet Signals Development Working Group (FSDWG). Due to a continually changing threat environment, detailed requirements are dynamic, contract award timelines and equipment procured varies each year by quantity and type.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 17: Other Electronic Support	**P-1 Line Item Number / Title:** 3620 / Coast Guard Equipment

ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Procurement Quantity *(Units in Each)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost *($ in Millions)*	256.395	81.464	63.347	77.458	0.000	77.458	76.901	73.160	74.469	75.069	Continuing	Continuing
Less PY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) *($ in Millions)*	256.395	81.464	63.347	77.458	0.000	77.458	76.901	73.160	74.469	75.069	Continuing	Continuing
Plus CY Advance Procurement *($ in Millions)*	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority *($ in Millions)*	**256.395**	**81.464**	**63.347**	**77.458**	**0.000**	**77.458**	**76.901**	**73.160**	**74.469**	**75.069**	**Continuing**	**Continuing**
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares *($ in Millions)*	-	0.286	0.381	3.941	-	3.941	0.320	0.413	3.672	0.890	Continuing	Continuing
Flyaway Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost *($ in Dollars)*	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Coast Guard Equipment line funds the sensors of the Navy-Type/Navy-Owned Coast Guard Combat System Suite for United States Coast Guard (USCG) cutters under the Coast Guard Surface Acquisition Program. Under an inter-service agreement (delineated in OPNAVINST 4000.79(Series)), Department of Navy (DON) plans, programs, and budgets for specific Navy military equipment, systems and logistic support requirements for Coast Guard units to ensure the Coast Guard is prepared to execute naval warfare tasks in consonance with US Navy units. Ship construction and installation costs are funded under the Department of Homeland Security appropriation.

The Combat System Suite including weapons and sensors will be aligned with future naval ship building programs to support commonality among the two Service's systems and meet National Fleet objectives. The Combat System Suite must compliment and integrate with Navy Combat Systems. The suite is an appropriate balance of equipment to ensure the Coast Guard is prepared to accomplish the assigned Naval Operational Capabilities in concert with US Navy units.

[P40A / CG001 - SPQ-9B RADAR]: Provides the AN/SPQ-9B radar for the Maritime Security Cutter, Large (WMSL) Class, aka the National Security Cutter (NSC), to track surface targets and low fliers in support of potential gun engagements.

[P40A / CG002 IFF AIMS]: Provides the AN/UPX-29A and AN/UPX-46 Identification Friend or Foe (IFF) System for the National Security Cutter (NSC), aka the Maritime Security Cutter, Large (WMSL), the Offshore Patrol Cuter (OPC) Class, aka the Maritime Security Cutter, Medium (WMSM) and the Polar Security Cutter (PSC), aka the Maritime Security Cutter, Polar (WMSP). The AN/APX-123 Transponder is procured for the Fast Response Cutter (FRC) aka Patrol Coastal Cutter (WPC).

[P40A / CG003 DECOYS MK 53]: Provides the MK 53 Mod 6 and Mod 10 Decoy Launching System (DLS) for the National Security Cutter (NSC), aka the Maritime Security Cutter, Large (WMSL), Polar Security Cutter (PSC) and the Offshore Patrol Cuter (OPC) Class, aka the Maritime Security Cutter, Medium (WMSM) to provide soft-kill capability.

[P40A / CG004 SLQ-32]: Provides the AN/SLQ-32 Electronic Warfare System and the Battle Force Electronic Warfare Trainer (BEWT) for the National Security Cutter (NSC) Class, aka the Maritime Security Cutter, Large (WMSL), to perform Electronic Support Measures to support soft-kill measures.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 17: Other Electronic Support	**P-1 Line Item Number / Title:** 3620 / Coast Guard Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A	**Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A		

[P40A / CG005 MK 46/MK 20 OPTICAL SIGHT]: Provides the MK 46 Mod 1 Optical Sighting System (OSS) for the National Security Cutter, hulls WMSL 750-753. The MK 20 Mod 0 Electro-Optical Sighting System (EOSS) is procured for the National Security Cutter, (NSC) hulls WMSL 754-760 and the Offshore Patrol Cutter (OPC). These sighting systems are components of the MK48 Gun Weapon System (GWS) and provide fire control optical daytime and thermal imaging (infrared) sensor, and laser range finding to support engagements of hostile surface and air targets.

[P40A / CG006 COMBAT SYSTEM INTEGRATION]: Ensures successful integration and system interoperability of Navy type equipment that affects the Combat System of USCG NSCs (WMSLs), FRCs (WPCs), OPC (WMSMs), PSCs (WMSPs) and the 270' Medium Endurance Cutter (WMEC) modernization effort.

[P40A / CG007 MULTI-MODE RADAR]: MMR will provide Air Surveillance, Surface Surveillance, GWS support and IFF Antenna functions for Offshore Patrol Cutter (OPC) and Polar Security Cutter (PSC).

[P40A / CG008 ATHENA CCD]: ATHENA Control, Correlation & Display (CCD) System for the Offshore Patrol Cutter (OPC) and Polar Security Cutter (PSC). The ATHENA CCD uses existing AEGIS BSL 9, Common Source Library (CSL) code to control and display MMR and IFF data. The systems will also provide target queuing for Gun Weapon System engagement.

ATHENA Combat System Control and Display integration supports software upgrade and hardware/software integration of the Technical Insertion (TI)-16 Common Display System for the MMR and IFF to provide data to the AN/SLQ-32(V)6 and the MK48 Gun Weapon System for target engagement on the Offshore Patrol Cutter (OPC), aka the Maritime Security Cutter, Medium (WMSM) and the Polar Security Cutter (PSC), aka the Maritime Security Cutter, Polar (WMSP). Includes safety, certification, technical documentation, and information assurance efforts.

[P40A / OPC C4I]: Funds are required for the procurement of Command, Control, Communications, Computers, and Intelligence (PEO C4I) for the new OPC/NSC/PSC Class, the Coast Guard's highest acquisition priority. Under inter-service agreement, the Navy budgets for specific Navy military equipment, systems and logistic support requirements for Coast Guard units to ensure the Coast Guard is prepared to execute naval warfare tasks in consonance with US Navy units. Ship construction and installation costs are funded under the Department of Homeland Security appropriation. Specific C4I systems to be procured include: ARC-210 Radios; OE-570D Antenna ; MIDS-On Ship(MOS) Mod; Navy Modular Automated Communications System (AN/SYQ-26); OA-9277A Antenna Coupler; FleetBroadcast; and Command and Control Processor (C2P) AN/UYQ-120.

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy	Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N: Other Procurement, Navy / BA 02: Communications & Electronics Equip / BSA 17: Other Electronic Support	**P-1 Line Item Number / Title:** 3620 / Coast Guard Equipment
ID Code (A=Service Ready, B=Not Service Ready): A	**Program Elements for Code B Items:** N/A / **Other Related Program Elements:** N/A
Line Item MDAP/MAIS Code: N/A	

Exhibits Schedule					Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)	Quantity / Total Cost (Each) I ($ M)
P-40a	Coast Guard Equipment	P-5a, P-21			- / 256.395	- / 81.464	- / 63.347	- / 77.458	- / -	- / 77.458
P-40	**Total Gross/Weapon System Cost**				**- / 256.395**	**- / 81.464**	**- / 63.347**	**- / 77.458**	**- / 0.000**	**- / 77.458**

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:

Funding and inter-service agreements are used to procure Navy-Type/Navy-Owned (NT/NO) combat systems, support equipment, Integrated Logistics Support (ILS), certification, test and production support for USCG National Security Cutter (NSC), aka the Maritime Security Cutter, Large (WMSL), the Offshore Patrol Cutter (OPC) Class, aka the Maritime Security Cutter, Medium (WMSM) and the Polar Security Cutter (PSC), aka the Maritime Security Cutter, Polar (WMSP), Fast Response Cutter (FRC), aka the Patrol Coastal Cutter (WPC), and the 270' Medium Endurance Cutter (WMEC) modernization effort being constructed under the Coast Guard's Surface Acquisition Program. Funding also supports C4I systems and associated logistic support for the Offshore Patrol Cutter. These efforts are ongoing.

FY 2024 funds provide AN/SPQ-9B ILS support for WMSLs; procure IFF AN/APX-123(V) equipment, ILS and certification support for WPCs; procure IFF UPX-46 equipment and ILS support for WMSMs and PSCs; procure MK53 MOD 10 DLS for WMSMs and PSCs; procure the MK20 EOSS and provide ILS/test support for WMSMs; provide combat system integration support for WMSLs, WPCs, PSCs and WMSMs; procure the Multi-mode Radar for the WMSM and PSC program; procure ATHENA Control, Correlation & Display (CCD) System for WMSMs and PSCs and provide combat system integration of the Technical Insertion (TI)-16 Common Display System and integration support for the ATHENA Control Correlation and Display (CCD) System; AN/SRC-65 VHF/ UHF Line of Sight Satellite Communication ARC-210 Radios; OE-570D Antenna; Navy Modular Automated Communications System (AN/SYQ-26); CRYPTO; Fleet Broadcast; OA-9277A Antenna Coupler and Command and Control Processor (C2P) AN/UYQ-120.

FY 2024 $14.11M funding increase attributed to first of kind installs on new WMSL, WMSM and PSC class ships ($8.2M) and $5.89M equipment funding increase for the procurements of NT/NO C4I equipment. Funding is provided for ARC-210 Radios Qty (22); OE-570D Antenna Qty (3); MIDS-On Ship (MOS) Mod Qty (2); CRYPTO Qty(2); Navy Modular Automated Communications System (AN/SYQ-26) Qty (3); OA-9277A Antenna Coupler Qty (4); Fleet Broadcast Qty (2); and Command and Control Processor (C2P) AN/UYQ-120 Qty (5).

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	P-1 Line Item Number / Title: 3620 / Coast Guard Equipment	Aggregated Items Title: Coast Guard Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
1) CG001 - SPQ-9B RADAR																				
1.1) SPQ-9B ILS/ TEST SUPPORT (1)	A		-	-	7.985	-	-	0.812	-	-	3.117	-	-	0.569	-	-	-	-	-	0.569
1.2) SPQ-9B RADAR	A		3,994K	3	11.982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 1) CG001 - SPQ-9B RADAR			**-**	**-**	***19.967***	**-**	**-**	***0.812***	**-**	**-**	***3.117***	**-**	**-**	***0.569***	**-**	**-**	**-**	**-**	**-**	***0.569***
2) CG002 IFF AIMS																				
2.1) IFF AIMS CERTIFICATION FRC	A		-	-	1.204	-	-	0.135	-	-	0.142	-	-	0.146	-	-	-	-	-	0.146
2.2) IFF AIMS ILS FRC	A		-	-	2.356	-	-	0.229	-	-	0.241	-	-	0.248	-	-	-	-	-	0.248
2.3) IFF AIMS EQUIPMENT FRC (2)(†)	A		100,829.79	47	4.739	81,847.00	3	0.246	83,000.00	3	0.249	83,667.00	3	0.251	-	-	-	83,667.00	3	0.251
2.4) IFF EQUIPMENT/ INCO SPARES OPC (3)(†)	A		431,333.33	6	2.588	527,277.00	2	1.055	532,500.00	2	1.065	-	-	-	-	-	-	-	-	-
2.5) IFF AIMS EQUIPMENT OPC (4)(†)	A		835,500.00	8	6.684	966,023.00	2	1.932	975,000.00	2	1.950	591,900.00	2	1.184	-	-	-	591,900.00	2	1.184
2.6) IFF ILS OPC	A		-	-	1.408	-	-	0.483	-	-	0.509	-	-	0.524	-	-	-	-	-	0.524
2.7) IFF AIMS EQUIPMENT PSC (5)(†)	A		-	-	-	600,000.00	1	0.600	-	-	-	624,000.00	1	0.624	-	-	-	624,000.00	1	0.624
2.8) IFF ILS PSC (6)	A		-	-	-	-	-	-	-	-	-	-	-	0.500	-	-	-	-	-	0.500
Subtotal: 2) CG002 IFF AIMS			**-**	**-**	***18.979***	**-**	**-**	***4.680***	**-**	**-**	***4.156***	**-**	**-**	***3.477***	**-**	**-**	**-**	**-**	**-**	***3.477***
3) CG003 DECOYS MK 53																				
3.1) MK53 MOD 6/10 DLS OPC(†)	A		951,285.71	7	6.659	585,710.00	2	1.171	615,000.00	2	1.230	621,150.00	2	1.242	-	-	-	621,150.00	2	1.242
3.2) MK53 MOD 6/10 DLS PSC (7)(†)	A		-	-	-	-	-	-	-	-	-	621,150.00	4	2.485	-	-	-	621,150.00	4	2.485
3.3) MK53 MOD 6/10 DLS NSC(†)	A		695,333.33	3	2.086	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.4) MK53 ILS/TEST SUPPORT (8)	A		-	-	6.637	-	-	0.894	-	-	0.938	-	-	0.948	-	-	-	-	-	0.948
Subtotal: 3) CG003 DECOYS MK 53			**-**	**-**	***15.382***	**-**	**-**	***2.065***	**-**	**-**	***2.168***	**-**	**-**	***4.675***	**-**	**-**	**-**	**-**	**-**	***4.675***
5) CG005 MK 46/MK 20 OPTICAL SIGHT																				
5.1) MK20 (EOSS) OPC (9)(†)	A		1,552K	8	12.420	1,790K	2	3.580	2,078K	1	2.078	1,965K	2	3.929	-	-	-	1,965K	2	3.929
5.2) ILS/TEST SUPPORT (10)	A		-	-	2.134	-	-	0.737	-	-	5.065	-	-	4.216	-	-	-	-	-	4.216

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	P-1 Line Item Number / Title: 3620 / Coast Guard Equipment	Aggregated Items Title: Coast Guard Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
5.3) MK 46/MK 20 NSC(†)	A		4,322K	5	21.612	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 5) CG005 MK 46/MK 20 OPTICAL SIGHT			**-**	**-**	***36.166***	**-**	**-**	***4.317***	**-**	**-**	***7.143***	**-**	**-**	***8.145***	**-**	**-**	**-**	**-**	**-**	***8.145***
6) CG006 COMBAT SYSTEM INTEGRATION																				
6.1) CSI (11)	A		-	-	28.140	-	-	2.972	-	-	3.762	-	-	5.776	-	-	-	-	-	5.776
6.2) IFF Mode 5 Integration	A		-	-	2.541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.3) SLQ 32 (V6) Integration	A		-	-	2.541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 6) CG006 COMBAT SYSTEM INTEGRATION			**-**	**-**	***33.222***	**-**	**-**	***2.972***	**-**	**-**	***3.762***	**-**	**-**	***5.776***	**-**	**-**	**-**	**-**	**-**	***5.776***
7) CG007 MULTI-MODE RADAR																				
7.1) MMR SYSTEM (12)(†)	A		7,811K	8	62.488	10,642K	2	21.284	12,075K	1	12.075	12,678K	1	12.678	-	-	-	12,678K	1	12.678
7.2) MMR ILS/TEST SUPPORT (13)	A		-	-	7.867	-	-	8.485	-	-	3.031	-	-	4.382	-	-	-	-	-	4.382
7.3) MMR TECH REFRESH	A		-	-	-	-	-	20.000	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: 7) CG007 MULTI-MODE RADAR			**-**	**-**	***70.355***	**-**	**-**	***49.769***	**-**	**-**	***15.106***	**-**	**-**	***17.060***	**-**	**-**	**-**	**-**	**-**	***17.060***
8) CG008 ATHENA CCD																				
8.1) ATHENA CCD INTEGRATION (14)	A		-	-	19.754	-	-	8.854	-	-	10.303	-	-	14.214	-	-	-	-	-	14.214
8.2) ATHENA TI-16 HW(†)	A		1,738K	4	6.953	1,545K	1	1.545	1,574K	2	3.148	1,603K	2	3.206	-	-	-	1,603K	2	3.206
Subtotal: 8) CG008 ATHENA CCD			**-**	**-**	***26.707***	**-**	**-**	***10.399***	**-**	**-**	***13.451***	**-**	**-**	***17.420***	**-**	**-**	**-**	**-**	**-**	***17.420***
9) OPC C4I (15)																				
9.1) CRYPTO(†)	A		62,666.67	6	0.376	58,250.00	4	0.233	63,433.00	2	0.127	63,433.00	2	0.127	-	-	-	63,433.00	2	0.127
9.2) C2P (16)(†)	A		1,167K	6	7.002	1,141K	2	2.282	1,163K	2	2.325	1,198K	5	5.988	-	-	-	1,198K	5	5.988
9.3) ARC-210 (17)(†)	A		282,651.52	66	18.655	301,800.00	5	1.509	276,302.00	33	9.118	283,910.00	22	6.246	-	-	-	283,910.00	22	6.246
9.4) OE-570D (18)(†)	A		449,800.00	5	2.249	576,000.00	2	1.152	575,531.00	2	1.151	592,796.00	3	1.778	-	-	-	592,796.00	3	1.778
9.5) OA-9277A (19)(†)	A		273,571.43	7	1.915	652,000.00	1	0.652	420,900.00	1	0.421	423,900.00	4	1.696	-	-	-	423,900.00	4	1.696
9.6) NAVMACs (20)(†)	A		319,833.33	6	1.919	311,000.00	2	0.622	312,629.00	1	0.313	305,296.00	3	0.916	-	-	-	305,296.00	3	0.916
9.7) FLEET BROADCAST(†)	A		389,000.00	9	3.501	-	-	-	494,387.00	2	0.989	493,880.00	2	0.988	-	-	-	493,880.00	2	0.988
9.8) MOS Mod (21)(†)	A		-	-	-	-	-	-	-	-	-	1,298K	2	2.597	-	-	-	1,298K	2	2.597
Subtotal: 9) OPC C4I			**-**	**-**	***35.617***	**-**	**-**	***6.450***	**-**	**-**	***14.444***	**-**	**-**	***20.336***	**-**	**-**	**-**	**-**	**-**	***20.336***

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	**P-1 Line Item Number / Title:** 3620 / Coast Guard Equipment	**Aggregated Items Title:** Coast Guard Equipment

Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Prior Years			FY 2022			FY 2023			FY 2024 Base			FY 2024 OCO			FY 2024 Total		
			Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)	Unit Cost ($)	Qty (Each)	Total Cost ($ M)
Total			-	-	256.395	-	-	81.464	-	-	63.347	-	-	77.458	-	-	-	-	-	77.458

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.

(†) indicates the presence of a P-5a

Footnotes:

(1) FY23 increase attributed to one time procurement of SPQ-9B Radar high failure repair parts. USCG is experiencing a high failure rate of high-cost replacement parts for the AN/SPQ-9B Radar install on WMSL Class cutters. To address immediate supply support shortfalls, funds will be provided as part of an economy of scale procurement. Decrease in FY24 attributed to no repair parts being procured.

(2) IFF Equipment suite for the WPC consists of MK XII equipment, Radar Control Transmitter (RCU), Radar Receiver-Transmitter shipping and installation fixtures which have various unit costs. The IFF AIMS Equipment unit price is an average unit cost for the various components being procured that year.

(3) No OPC INCO kits required in FY24 and out due to a changed approach for the OPC Platform INCO support. There will no longer be an INCO Kit procured for each platform as well as the CY-8882, C-12720 or interrogator remote as they are now virtual.

(4) Cost reduction beginning in FY2024 attributed to completion of ramping up and preparing for two OPCs per year.

(5) Increase in FY2024 for New USCG Polar Security Cutter class surface acquisition program requirement to procure IFF Equipment.

(6) New FY2024 Integrated Logistics Support Cost Element required for USCG Polar Security Cutter surface acquisition begins.

(7) Increase in FY2024 for New USCG Polar Security Cutter class surface acquisition program requirement to procure MK53 Decoy Launch System.

(8) Mk 53 ILS Test Support requirements fluctuate from year to year due to increased/decreased efforts based on required deliverables.

(9) Reduced quantity from two to one per year in FY2023 to avoid procuring ahead of US Coast Guard in yard need dates.

(10) Increase in FY2023 attributed to first of kind installs on new NSC and OPC class ships, initial sparing and system integration and testing efforts required for the MK48 Gun Weapon System. Decrease in FY24 due to no initial sparing procurements.

(11) Increased costs in FY2023 attributed to SLQ-32 BV2 integration on WMSL 760 (NSC 11). Additional increases in FY2023 and FY2024 due to first of kind installs on new NSC, OPC and PSC class ships.

(12) Increased unit cost in FY2024 attributed to newly identified INCO kits, integration and recurring hardware cost requirements.

(13) FY2024 cost increase attributed to first of kind installs, testing and evaluation on OPC and PSC class cutters.

(14) Beginning in late FY2022 and continuing into FY2024, Lockheed Martin will also be supporting the installation and testing for Baseline 9G hardware and software for OPCs 1 & 2, at which time Baseline 9G will transition to sustainment upon cutter delivery to the US Coast Guard. Additional FY2024 increase attributed to design and implementation of the tactical Infrastructure as a Service (IaaS) configuration in support of Baseline 9G.

(15) No associated equipment installation costs are incurred as USCG will fund the installation of the C4I systems.

(16) FY24 increase by three (3) units of C2Ps for the procurement of hulls NSC 10/11, and PSC 1. FY24 price increase due to increased material/labor cost.

(17) FY24 Unit cost increase was caused due to lost cost savings from procuring less units.

(18) FY24 quantity increased by 1 for OE-570D to support OPC in yard need date. FY24 price increase due to increase in material/labor cost.

(19) FY24 quantity increased by 3 for OA-9277A to support OPC in yard need date.

(20) FY24 quantity increased by 2 for NAVMACs in response to only procuring 1 system in FY23 in order to meet in yard need date.

(21) FY24 increase by two (2) units of MOS MOD for the procurement of hulls NSC 11 & PSC 1.

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	P-1 Line Item Number / Title: 3620 / Coast Guard Equipment	Aggregated Items: Coast Guard Equipment

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
2) CG002 IFF AIMS												
2.3) IFF AIMS EQUIPMENT FRC (2)		2021	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2021	Sep 2022	3	83,000.00	N		
2.3) IFF AIMS EQUIPMENT FRC (2)		2022	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2022	Sep 2023	3	81,847.00	N		
2.3) IFF AIMS EQUIPMENT FRC (2)		2023	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2023	Sep 2024	3	83,000.00	N		
2.3) IFF AIMS EQUIPMENT FRC (2)		2024	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2024	Sep 2025	3	83,667.00	N		
2.4) IFF EQUIPMENT/INCO SPARES OPC (3)		2022	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2022	Sep 2023	2	527,277.00	N		
2.4) IFF EQUIPMENT/INCO SPARES OPC (3)		2023	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2023	Sep 2024	2	532,500.00	N		
2.5) IFF AIMS EQUIPMENT OPC (4)		2021	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2021	Sep 2022	2	983,000.00	N		
2.5) IFF AIMS EQUIPMENT OPC (4)		2022	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2022	Sep 2023	2	966,023.00	N		
2.5) IFF AIMS EQUIPMENT OPC (4)		2023	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2023	Sep 2024	2	975,000.00	N		
2.5) IFF AIMS EQUIPMENT OPC (4)		2024	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2024	Sep 2025	2	591,900.00	N		
2.7) IFF AIMS EQUIPMENT PSC (5)		2022	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2022	Sep 2023	1	600,000.00	N		
2.7) IFF AIMS EQUIPMENT PSC (5)		2024	NAVAIR NAWC/AD / ST. INIGOES, MD	WR	NAVAIR	Mar 2024	Sep 2025	1	624,000.00	N		
3) CG003 DECOYS MK 53												
3.1) MK53 MOD 6/10 DLS OPC		2021	Sechan Electronics, Inc / Lititz, PA	C / FP	NAVSEA	Mar 2021	Dec 2022	1	1,075K	Y		
3.1) MK53 MOD 6/10 DLS OPC		2022	Sechan Electronics, Inc / Lititz, PA	C / FP	NAVSEA	Mar 2022	Dec 2023	2	585,710.00	Y		
3.1) MK53 MOD 6/10 DLS OPC		2023	Sechan Electronics, Inc / Lititz, PA	C / FP	NAVSEA	Mar 2023	Dec 2024	2	615,000.00	Y		
3.1) MK53 MOD 6/10 DLS OPC		2024	Sechan Electronics, Inc / Lititz, PA	C / FP	NAVSEA	Mar 2024	Dec 2025	2	621,150.00	Y		
3.2) MK53 MOD 6/10 DLS PSC (7)		2024	Sechan Electronics, Inc. / Lititz, PA	C / FP	NAVSEA	Mar 2024	Dec 2025	4	621,150.00	Y		
3.3) MK53 MOD 6/10 DLS NSC		2021	Sechan Electronics / Lititz, PA	C / FP	** NO PCO **	Mar 2021	Dec 2022	1	1,074K	Y		Sep 2016
5) CG005 MK 46/MK 20 OPTICAL SIGHT												
5.1) MK20 (EOSS) OPC (9)		2021	L3 KEO / NORTHAMPTON, MA	SS / FP	NAVSEA	Sep 2021	Sep 2023	2	1,822K	Y		Oct 2020

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	P-1 Line Item Number / Title: 3620 / Coast Guard Equipment	Aggregated Items: Coast Guard Equipment

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
5.1) MK20 (EOSS) OPC (9)		2022	L3 KEO / NORTHAMPTON, MA	SS / FP	NAVSEA	Apr 2022	Apr 2024	2	1,790K	Y		Oct 2020
5.1) MK20 (EOSS) OPC (9)		2023	L3 KEO / NORTHAMPTON, MA	SS / FP	NAVSEA	Apr 2023	Apr 2025	1	2,078K	Y		Oct 2020
5.1) MK20 (EOSS) OPC (9)		2024	L3 KEO / NORTHAMPTON, MA	SS / FP	NAVSEA	Apr 2024	Apr 2026	2	1,965K	Y		
5.3) MK 46/MK 20 NSC		2021	L3 KEO / NORTHAMPTON, MA	SS / FP	NAVSEA	Jul 2021	Jul 2023	1	1,822K	Y		Oct 2020
7) CG007 MULTI-MODE RADAR												
7.1) MMR SYSTEM (12)(†)		2021	SAAB USA / Syracuse, NY, USA	C / FFP	NAVSEA	Jan 2021	Jan 2023	2	9,184K	Y		Oct 2016
7.1) MMR SYSTEM (12)(†)		2022	SAAB USA / Syracuse, NY, USA	C / FFP	NAVSEA	Jun 2022	Jul 2024	2	10,642K	Y		Oct 2016
7.1) MMR SYSTEM (12)(†)		2023	SAAB USA / Syracuse, NY, USA	C / FFP	NAVSEA	Mar 2023	Mar 2025	1	12,075K	Y		Feb 2021
7.1) MMR SYSTEM (12)(†)		2024	SAAB USA / Syracuse, NY, USA	C / FFP	NAVSEA	Mar 2024	Mar 2026	1	12,678K	Y		Feb 2021
8) CG008 ATHENA CCD												
8.2) ATHENA TI-16 HW		2021 (22)	Global Technical Systems / Virginia Beach, VA	C / TBD	NAVSEA	Apr 2021	Apr 2023	2	1,828K	N	Apr 2021	
8.2) ATHENA TI-16 HW		2022 (23)	Global Technical Systems / Virginia Beach, VA	C / TBD	NAVSEA	May 2022	May 2024	1	1,545K	N	Apr 2022	
8.2) ATHENA TI-16 HW		2023	Global Technical Systems / Virginia Beach, VA	C / TBD	NAVSEA	May 2023	May 2024	2	1,574K	N	Apr 2023	
8.2) ATHENA TI-16 HW		2024	Global Technical Systems / Virginia Beach, VA	C / TBD	NAVSEA	May 2024	May 2025	2	1,603K	N	Apr 2024	
9) OPC C4I												
9.1) CRYPTO		2022	NIWC LANT/General Dynamics / Taunton, MA	WR	NIWC LANT	Jan 2022	Jan 2023	4	58,250.00	Y		
9.1) CRYPTO		2023	NIWC LANT/General Dynamics / Taunton, MA	WR	NIWC LANT	Jan 2023	Jan 2024	2	63,433.00	Y		
9.1) CRYPTO		2024	NIWC LANT/General Dynamics / Taunton, MA	WR	NIWC LANT	Jan 2024	Jan 2025	2	63,433.00	Y		
9.2) C2P (16)		2022	NIEF Contract (SERCO) / Herndon, VA	C / CPFF	NAVWAR	Jun 2022	Dec 2023	2	1,141K	Y		
9.2) C2P (16)		2023	NIEF Contract (SERCO) / Herndon, VA	C / CPFF	NAVWAR	Jun 2023	Dec 2024	2	1,163K	Y		
9.2) C2P (16)		2024	NIEF Contract (SERCO) / Herndon, VA	C / CPFF	NAVWAR	Jun 2024	Dec 2025	5	1,198K	Y		
9.3) ARC-210 (17)		2022	Collins Aerospace / Cedar Rapids, IA	C / FFP	NAWCAD	Jan 2022	Jul 2023	5	301,800.00	Y		
9.3) ARC-210 (17)		2023	Collins Aerospace / Cedar Rapids, IA	C / FFP	NAWCAD	Jan 2023	Jul 2024	33	276,302.00	Y		
9.3) ARC-210 (17)		2024	Collins Aerospace / Cedar Rapids, IA	C / CPFF	NAWCAD	Jan 2024	Jul 2025	22	283,910.00	Y		
9.4) OE-570D (18)		2022	Trivec Avant / Huntington Beach, CA	C / FFP	NAVWAR	Feb 2022	Feb 2023	2	576,000.00	Y		
9.4) OE-570D (18)		2023	Trivec Avant / Huntington Beach, CA	C / FFP	NAVWAR	Feb 2023	Feb 2024	2	575,531.00	Y		

Exhibit P-5a, Procurement History and Planning: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	P-1 Line Item Number / Title: 3620 / Coast Guard Equipment	Aggregated Items: Coast Guard Equipment

Item Number / Title [DODIC]	OCO	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost ($)	Specs Avail Now?	Date Revision Available	RFP Issue Date
9.4) OE-570D [18]		2024	Trivec Avant / Huntington Beach, CA	C / CPFF	NAVWAR	Feb 2024	Feb 2025	3	592,796.00	Y		
9.5) OA-9277A [19]		2022 [24]	Collins Aerospace/ Cedar Rapids / NAWCAD	C / FFP	NAVWAR	Apr 2022	Apr 2024	1	652,000.00	Y		
9.5) OA-9277A [19]		2023	Collins Aerospace/ Cedar Rapids / NAWCAD	C / FFP	NAVWAR	Jan 2023	Jan 2025	1	420,900.00	Y		
9.5) OA-9277A [19]		2024	Collins Aerospace/ Cedar Rapids / NAWCAD	C / FFP	NAVWAR	Jan 2024	Jan 2026	4	423,900.00	Y		
9.6) NAVMACs [20]		2022 [25]	General Dynamics / Taunton, MA	C / FFP	CECOM	Mar 2022	Oct 2022	2	311,000.00	Y		
9.6) NAVMACs [20]		2023	General Dynamics / Taunton, MA	C / FFP	CECOM	Mar 2023	Oct 2023	1	312,629.00	Y		
9.6) NAVMACs [20]		2024	General Dynamics / Taunton, MA	C / FFP	CECOM	Mar 2024	Oct 2024	3	305,296.00	Y		
9.7) FLEET BROADCAST		2023	NIWC PAC / San Diego	WR	NIWC PAC	Aug 2023	Feb 2024	2	494,387.00	Y		
9.7) FLEET BROADCAST		2024	NIWC PAC / San Diego	WR	NIWC PAC	Aug 2024	Feb 2025	2	493,880.00	Y		
9.8) MOS Mod [21]		2024	Viasat / Carlsbad, CA	C / FFP	NAVWAR	Jul 2024	Jul 2026	2	1,298K	Y		

[†] indicates the presence of a P-21

Footnotes:

[22] One ATHENA TI-16 Mod 1 CDP/NPS System consists of four separate components (three cabinets and one console), for which the individual manufacturer and lead times vary. Total system lead time 12 months.

[23] One ATHENA TI-16 Mod 1 CDP/NPS System consists of four separate components (three cabinets and one console), for which the individual manufacturer and lead times vary. Total system lead time 12 months.

[24] OA-9277A FY22 shifted from January to April (3 months) due to contract negotiation. Still meeting shipbuilders schedule - no impact.

[25] NAVMACS FY22 shifted from January to March (2 months) and is still meeting shipbuilders schedule - no impact

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	**P-1 Line Item Number / Title:** 3620 / Coast Guard Equipment	**Aggregated Items:** Coast Guard Equipment

Items (Units in Each)							Fiscal Year 2021												Fiscal Year 2022												BALANCE
										Calendar Year 2021												Calendar Year 2022									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2020	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
7) CG007 MULTI-MODE RADAR																															
7.1) MMR SYSTEM (12)																															
Prior Years Deliveries: 6																															
	9	2021	NAVY	2	0	2				A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	9	2022	NAVY	2	0	2																					A -	-	-	-	2
	9	2023	NAVY	1	0	1																									1
	9	2024	NAVY	1	0	1																									1
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	**P-1 Line Item Number / Title:** 3620 / Coast Guard Equipment	**Aggregated Items:** Coast Guard Equipment

Items (Units in Each)							Fiscal Year 2023												Fiscal Year 2024												BALANCE
										Calendar Year 2023												Calendar Year 2024									
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2022	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
7) CG007 MULTI-MODE RADAR																															
7.1) MMR SYSTEM (12)																															
Prior Years Deliveries: 6																															
	9	2021	NAVY	2	0	2	-	-	-	1	-	-	1																		0
	9	2022	NAVY	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1			0
	9	2023	NAVY	1	0	1						A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	9	2024	NAVY	1	0	1																		A -	-	-	-	-	-	-	1
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		**Date:** March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	**P-1 Line Item Number / Title:** 3620 / Coast Guard Equipment	**Aggregated Items:** Coast Guard Equipment

Items (Units in Each)							Fiscal Year 2025												Fiscal Year 2026												BALANCE
							Calendar Year 2025												Calendar Year 2026												
OCO	MFR #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2024	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
7) CG007 MULTI-MODE RADAR																															
7.1) MMR SYSTEM (12)																															
Prior Years Deliveries: 6																															
	9	2021	NAVY	2	2	0																									0
	9	2022	NAVY	2	2	0																									0
	9	2023	NAVY	1	0	1	-	-	-	-	-	1																			0
	9	2024	NAVY	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1							0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Exhibit P-21, Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1810N / 02 / 17	**P-1 Line Item Number / Title:** 3620 / Coast Guard Equipment	**Aggregated Items:** Coast Guard Equipment

MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Year)			Procurement Leadtime (Months)							
					Initial				Reorder			
		MSR For 2024	1-8-5 For 2024	MAX For 2024	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	SAAB USA - Syracuse, NY, USA	1	1	3	12	3	25	28	6	3	24	27

"A" in the Delivery Schedule indicates the Contract Award Date.
Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand).If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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