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**Department of Defense
Fiscal Year (FY) 2024 Budget Estimates**

March 2023



Navy

Justification Book Volume 1 of 1

Shipbuilding and Conversion, Navy

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Navy • Budget Estimates FY 2024 • Procurement

Volume 1 Table of Contents

Introduction and Explanation of Contents.....Volume 1 - iii

Comptroller Exhibit P-1.....Volume 1 - v

Line Item Table of Contents (by Appropriation then Line Number)..... Volume 1 - xxvii

Line Item Table of Contents (Alphabetically by Line Item Title)..... Volume 1 - xxxi

Exhibit P-40s..... Volume 1 - 1

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Department of Defense Appropriations Act, 2024

Shipbuilding and Conversion, Navy

For expenses necessary for the construction, acquisition, or conversion of vessels as authorized by law, including armor and armament thereof, plant equipment, appliances, and machine tools and installation thereof in public and private plants; reserve plant and Government and contractor-owned equipment layaway; procurement of critical, long lead time components and designs for vessels to be constructed or converted in the future; and expansion of public and private plants, including land necessary therefore, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title.

In all: \$32,848,950,000 to remain available for obligation until September 30, 2028: *Provided*, That additional obligations may be incurred after September 30, 2028, for engineering services, tests, evaluations, and other such budgeted work that must be performed in the final stage of ship construction: *Provided further*, That none of the funds provided under this heading for the construction or conversion of any naval vessel to be constructed in shipyards in the United States shall be expended in foreign facilities for the construction of major components of such vessel: *Provided further*, That none of the funds provided under this heading shall be used for the construction of any naval vessel in foreign shipyards.

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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)

Mar 2023

<u>Appropriation Summary</u>	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment	FY 2024 Request
Shipbuilding and Conversion, Navy	22,075,660	31,955,124		31,955,124	32,848,950
Total Department of the Navy	22,075,660	31,955,124		31,955,124	32,848,950
 Grand Total Department of Defense	 22,075,660	 31,955,124		 31,955,124	 32,848,950

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

Mar 2023

<u>Appropriation Summary</u>	FY 2022	FY 2023 Less	FY 2023	FY 2023 Total	FY 2024
	Actuals	Supplementals Enactment	Supplementals Enactment*	Enactment	Request
Shipbuilding and Conversion, Navy	22,075,660	31,955,124		31,955,124	32,848,950
Total Department of the Navy	22,075,660	31,955,124		31,955,124	32,848,950

*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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Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N BA Summary
(Dollars in Thousands)

Mar 2023

Appropriation: **Shipbuilding and Conversion, Navy**

	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment	FY 2024 Request
<u>Budget Activity</u>					
01. Fleet ballistic missile ships		5,857,776		5,857,776	5,834,332
02. Other warships	16,855,246	19,664,989		19,664,989	20,146,250
03. Amphibious ships	1,599,955	3,979,509		3,979,509	1,830,149
05. Auxiliaries, craft, and prior-year program costs	3,620,459	2,452,850		2,452,850	5,038,219
Total Shipbuilding and Conversion, Navy	22,075,660	31,955,124		31,955,124	32,848,950

*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
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enactment		FY 2023 Supplementals Enactment	
Line		Ident	Se						
No	Item Nomenclature	Code	c	Quantity	Cost	Quantity	Cost	Quantity	Cost ⁺
<u>Budget Activity 01: Fleet ballistic missile ships</u>									
Fleet Ballistic Missile Ships									
1	OHIO Replacement Submarine	A	U						
	Less: Advance Procurement (PY)								
	Less: Subsequent Full Funding (FY)								
	Subsequent Full Funding for FY 2021						3,079,223		
2	OHIO Replacement Submarine								
	Advance Procurement (CY)						2,778,553		
	C (FY 2023 for FY 2024) (M)						(769,075)		
	C (FY 2023 for FY 2026) (M)						(1,090,054)		
	C (FY 2023 for FY 2027) (M)						(176,530)		
	C (FY 2023 for FY 2028) (M)						(35,045)		
	C (FY 2023 for FY 2029) (M)						(9,204)		
	C (FY 2023 for FY 2030) (M)						(10,990)		
	C (FY 2023 for FY 2031) (M)						(3,579)		
	C (FY 2023 for FY 2032) (M)						(2,040)		
	C (FY 2023 for FY 2033) (M)						(55)		
	C (FY 2023 for FY 2034) (M)						(55)		

*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
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy

Line		Ident Code	Se c	FY 2023 Total Enactment		FY 2024 Request	
No	Item Nomenclature			Quantity	Cost	Quantity	Cost

Budget Activity 01: Fleet ballistic missile ships

Fleet Ballistic Missile Ships

1	OHIO Replacement Submarine	A	U			1	(9,285,283)
	Less: Advance Procurement (PY)						(-3,498,243)
	Less: Subsequent Full Funding (FY)					0	(-3,343,442)
						1	2,443,598
	Subsequent Full Funding for FY 2021				3,079,223		
2	OHIO Replacement Submarine						
	Advance Procurement (CY)				2,778,553	0	3,390,734
	C (FY 2023 for FY 2024) (M)				(769,075)		
	C (FY 2023 for FY 2026) (M)				(1,090,054)		
	C (FY 2023 for FY 2027) (M)				(176,530)		
	C (FY 2023 for FY 2028) (M)				(35,045)		
	C (FY 2023 for FY 2029) (M)				(9,204)		
	C (FY 2023 for FY 2030) (M)				(10,990)		
	C (FY 2023 for FY 2031) (M)				(3,579)		
	C (FY 2023 for FY 2032) (M)				(2,040)		
	C (FY 2023 for FY 2033) (M)				(55)		
	C (FY 2023 for FY 2034) (M)				(55)		

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Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enactment		FY 2023 Supplementals Enactment	
Line				Ident	Se				
No	Item	Nomenclature		Code	c	Quantity	Cost	Quantity	Cost
	C	(FY 2023 for FY 2035)	(M)						(681,926)
	C	(FY 2024 for FY 2026)	(M)						
	C	(FY 2024 for FY 2027)	(M)						
	C	(FY 2024 for FY 2028)	(M)						
	C	(FY 2024 for FY 2029)	(M)						
	C	(FY 2024 for FY 2030)	(M)						
	C	(FY 2024 for FY 2031)	(M)						
	C	(FY 2024 for FY 2032)	(M)						
	C	(FY 2024 for FY 2033)	(M)						
	C	(FY 2024 for FY 2034)	(M)						
	C	(FY 2024 for FY 2035)	(M)						
Total Fleet ballistic missile ships									5,857,776

Budget Activity 02: Other warships**Other Warships**

3	Carrier Replacement Program								
	Subsequent Full Funding for FY 2018					1,062,205		0	1,465,880
	Completion PY Shipbuild for FY 2013					291,000		0	461,700
4	CVN-81								
	Subsequent Full Funding for FY 2020					1,287,719			1,052,024

*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
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy

Line		Ident Code	Se c	FY 2023 Total Enactment		FY 2024 Request	
No	Item Nomenclature			Quantity	Cost	Quantity	Cost
	C (FY 2023 for FY 2035) (M)				(681,926)		
	C (FY 2024 for FY 2026) (M)					0	(949,654)
	C (FY 2024 for FY 2027) (M)					0	(1,299,280)
	C (FY 2024 for FY 2028) (M)					0	(306,938)
	C (FY 2024 for FY 2029) (M)					0	(134,009)
	C (FY 2024 for FY 2030) (M)					0	(110,841)
	C (FY 2024 for FY 2031) (M)					0	(7,953)
	C (FY 2024 for FY 2032) (M)					0	(2,708)
	C (FY 2024 for FY 2033) (M)					0	(4,930)
	C (FY 2024 for FY 2034) (M)					0	(4,930)
	C (FY 2024 for FY 2035) (M)					0	(569,491)
Total Fleet ballistic missile ships					5,857,776	1	5,834,332

Budget Activity 02: Other warships

Other Warships

3	Carrier Replacement Program						
	Subsequent Full Funding for FY 2018			0	1,465,880	0	1,115,296
	Completion PY Shipbuild for FY 2013			0	461,700		
4	CVN-81						
	Subsequent Full Funding for FY 2020				1,052,024	0	800,492

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Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enactment		FY 2023 Supplementals Enactment	
Line		Ident	Se						
No	Item Nomenclature	Code	c	Quantity	Cost	Quantity	Cost	Quantity	Cost ⁺
5	Virginia Class Submarine	B	U	2	(6,900,757)	2	(7,250,579)		
	Less: Advance Procurement (PY)				(-2,666,517)		(-2,716,395)		
				2	4,234,240	2	4,534,184		
	Completion PY Shipbuild for FY 2015					0	46,060		
	Completion PY Shipbuild for FY 2016					0	58,642		
	Completion PY Shipbuild for FY 2021					0	200,000		
6	Virginia Class Submarine								
	Advance Procurement (CY)				2,105,407		2,025,651		
	C (FY 2022 for FY 2023) (M)				(611,920)				
	C (FY 2022 for FY 2024) (M)				(1,493,487)				
	C (FY 2023 for FY 2024) (M)						(804,191)		
	C (FY 2023 for FY 2025) (M)						(1,221,460)		
	C (FY 2024 for FY 2025) (M)								
	C (FY 2024 for FY 2026) (M)								
	C (FY 2024 for FY 2027) (M)								
	C (FY 2024 for FY 2028) (M)								
	C (FY 2024 for FY 2029) (M)								
7	CVN Refueling Overhauls								
	Subsequent Full Funding for FY 2020				2,424,218				
	Completion PY Shipbuild for FY 2016				350,098	0	62,000		

*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).

UNCLASSIFIED

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy

Line No	Item Nomenclature	Ident Code	Se c	FY 2023 Total Enactment		FY 2024 Request	
				Quantity	Cost	Quantity	Cost
5	Virginia Class Submarine	B	U	2	(7,250,579)	2	(9,427,643)
	Less: Advance Procurement (PY)				(-2,716,395)		(-2,297,678)
				2	4,534,184	2	7,129,965
	Completion PY Shipbuild for FY 2015			0	46,060		
	Completion PY Shipbuild for FY 2016			0	58,642		
	Completion PY Shipbuild for FY 2021			0	200,000		
6	Virginia Class Submarine						
	Advance Procurement (CY)				2,025,651	0	3,215,539
	C (FY 2022 for FY 2023) (M)						
	C (FY 2022 for FY 2024) (M)						
	C (FY 2023 for FY 2024) (M)				(804,191)		
	C (FY 2023 for FY 2025) (M)				(1,221,460)		
	C (FY 2024 for FY 2025) (M)					0	(922,170)
	C (FY 2024 for FY 2026) (M)					0	(1,477,345)
	C (FY 2024 for FY 2027) (M)					0	(272,008)
	C (FY 2024 for FY 2028) (M)					0	(272,008)
	C (FY 2024 for FY 2029) (M)					0	(272,008)
7	CVN Refueling Overhauls						
	Subsequent Full Funding for FY 2020						
	Completion PY Shipbuild for FY 2016			0	62,000		

UNCLASSIFIED

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enactment		FY 2023 Supplementals Enactment	
Line		Ident	Se						
No	Item Nomenclature	Code	c	Quantity	Cost	Quantity	Cost	Quantity	Cost*
8	CVN Refueling Overhauls								
	Advance Procurement (CY)				66,262	0	612,081		
	C (FY 2022 for FY 2025) (M)				(66,262)				
	C (FY 2023 for FY 2025) (M)					0	(612,081)		
	C (FY 2024 for FY 2025) (M)								
9	DDG 1000	A	U		56,597		72,976		
10	DDG-51	A	U	2	(3,930,919)	3	(6,987,537)		
	Less: Advance Procurement (PY)				(-254,932)		(-41,000)		
				2	3,675,987	3	6,946,537		
	Completion PY Shipbuild for FY 2015				44,577	0	30,231		
	Completion PY Shipbuild for FY 2016				1,176	0	24,238		
	Completion PY Shipbuild for FY 2017					0	168,178		
	Completion PY Shipbuild for FY 2018					0	5,930		
11	DDG-51								
	Advance Procurement (CY)				120,000	0	695,652		
	C (FY 2022 for FY 2023) (M)				(41,000)				
	C (FY 2022 for FY 2024) (M)				(79,000)				
	C (FY 2023 for FY 2024) (M)						(154,588)		
	C (FY 2023 for FY 2025) (M)						(154,588)		

*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).

UNCLASSIFIED

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy

Line No	Item Nomenclature	Ident Code	Se c	FY 2023 Total Enactment		FY 2024 Request	
				Quantity	Cost	Quantity	Cost
8	CVN Refueling Overhauls						
	Advance Procurement (CY)			0	612,081	0	817,646
	C (FY 2022 for FY 2025) (M)						
	C (FY 2023 for FY 2025) (M)			0	(612,081)		
	C (FY 2024 for FY 2025) (M)					0	(817,646)
9	DDG 1000	A	U		72,976	0	410,400
10	DDG-51	A	U	3	(6,987,537)	2	(4,432,767)
	Less: Advance Procurement (PY)				(-41,000)		(-233,588)
				3	6,946,537	2	4,199,179
	Completion PY Shipbuild for FY 2015			0	30,231		
	Completion PY Shipbuild for FY 2016			0	24,238		
	Completion PY Shipbuild for FY 2017			0	168,178		
	Completion PY Shipbuild for FY 2018			0	5,930		
11	DDG-51						
	Advance Procurement (CY)			0	695,652	0	284,035
	C (FY 2022 for FY 2023) (M)						
	C (FY 2022 for FY 2024) (M)						
	C (FY 2023 for FY 2024) (M)				(154,588)		
	C (FY 2023 for FY 2025) (M)				(154,588)		

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enactment		FY 2023 Supplementals Enactment	
Line		Ident	Se						
No	Item Nomenclature	Code	c	Quantity	Cost	Quantity	Cost	Quantity	Cost ⁺
	C (FY 2023 for FY 2026) (M)						(154,588)		
	C (FY 2023 for FY 2027) (M)						(154,588)		
	C (FY 2023 for FY 2029) (M)					0	(77,300)		
	C (FY 2024 for FY 2025) (M)								
	C (FY 2024 for FY 2026) (M)								
	C (FY 2024 for FY 2027) (M)								
12	Littoral Combat Ship								
	Completion PY Shipbuild for FY 2015					0	4,250		
	Completion PY Shipbuild for FY 2016				24,860	0	18,000		
	Completion PY Shipbuild for FY 2017				20,000	0	29,030		
	Completion PY Shipbuild for FY 2018					0	9,538		
	Completion PY Shipbuild for FY 2019					0	6,983		
13	FFG-Frigate	A	U	1	(1,090,900)	1	(1,141,224)		
	Less: Advance Procurement (PY)						(-6,000)		
				1	1,090,900	1	1,135,224		
Total Other warships				5	16,855,246	6	19,664,989		

Budget Activity 03: Amphibious ships**Amphibious Ships**

*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
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy

Line		Ident Code	Se c	FY 2023 Total Enactment		FY 2024 Request	
No	Item Nomenclature			Quantity	Cost	Quantity	Cost
	C (FY 2023 for FY 2026) (M)				(154,588)		
	C (FY 2023 for FY 2027) (M)				(154,588)		
	C (FY 2023 for FY 2029) (M)			0	(77,300)		
	C (FY 2024 for FY 2025) (M)					0	(78,407)
	C (FY 2024 for FY 2026) (M)					0	(78,402)
	C (FY 2024 for FY 2027) (M)					0	(127,226)
12	Littoral Combat Ship						
	Completion PY Shipbuild for FY 2015			0	4,250		
	Completion PY Shipbuild for FY 2016			0	18,000		
	Completion PY Shipbuild for FY 2017			0	29,030		
	Completion PY Shipbuild for FY 2018			0	9,538		
	Completion PY Shipbuild for FY 2019			0	6,983		
13	FFG-Frigate	A	U	1	(1,141,224)	2	(2,173,698)
	Less: Advance Procurement (PY)				(-6,000)		
				1	1,135,224	2	2,173,698
Total Other warships				6	19,664,989	6	20,146,250

Budget Activity 03: Amphibious ships

Amphibious Ships

UNCLASSIFIED

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enactment		FY 2023 Supplementals Enactment	
Line		Ident	Se						
No	Item Nomenclature	Code	c	Quantity	Cost	Quantity	Cost	Quantity	Cost ⁺
14	LPD Flight II	A	U			1	(1,924,000)		
	Less: Advance Procurement (PY)						(-251,000)		
						1	1,673,000		
	Subsequent Full Funding for FY 2021				60,636				
15	LPD Flight II								
	Advance Procurement (CY)				250,000	0	250,000		
	C (FY 2022 for FY 2023) (M)				(250,000)				
	C (FY 2023 for FY 2025) (M)					0	(250,000)		
16	LPD-17								
	Completion PY Shipbuild for FY 2017				53,682	0	17,739		
17	Expeditionary Sea Base (ESB)	A	U	1	(650,000)				
	Less: Advance Procurement (PY)				(-73,000)				
				1	577,000				
18	LHA Replacement	A	U		(68,637)	1	(3,834,256)		
	Less: Advance Procurement (PY)						(-350,000)		
	Less: Subsequent Full Funding (FY)					0	(-2,398,786)		
					68,637	1	1,085,470		
	Subsequent Full Funding for FY 2023								
	Completion PY Shipbuild for FY 2017					0	19,300		

*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).

UNCLASSIFIED

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy

Line		Ident Code	Se c	FY 2023 Total Enactment		FY 2024 Request	
No	Item Nomenclature			Quantity	Cost	Quantity	Cost
14	LPD Flight II	A	U	1	(1,924,000)		
	Less: Advance Procurement (PY)				(-251,000)		
				1	1,673,000		
	Subsequent Full Funding for FY 2021						
15	LPD Flight II						
	Advance Procurement (CY)			0	250,000		
	C (FY 2022 for FY 2023) (M)						
	C (FY 2023 for FY 2025) (M)			0	(250,000)		
16	LPD-17						
	Completion PY Shipbuild for FY 2017			0	17,739		
17	Expeditionary Sea Base (ESB)	A	U				
	Less: Advance Procurement (PY)						
18	LHA Replacement	A	U	1	(3,834,256)		
	Less: Advance Procurement (PY)				(-350,000)		
	Less: Subsequent Full Funding (FY)			0	(-2,398,786)		
				1	1,085,470		
	Subsequent Full Funding for FY 2023					0	1,830,149
	Completion PY Shipbuild for FY 2017			0	19,300		

UNCLASSIFIED

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enactment		FY 2023 Supplementals Enactment	
Line		Ident	Se						
No	Item Nomenclature	Code	c	Quantity	Cost	Quantity	Cost	Quantity	Cost ⁺
19	LHA Replacement								
	Advance Procurement (CY)					0	289,000		
	C (FY 2023 for FY 2027) (M)					0	(289,000)		
20	Expeditionary Fast Transport (EPF)	A	U	2	590,000	2	645,000		
Total Amphibious ships				3	1,599,955	4	3,979,509		

Budget Activity 05: Auxiliaries, craft, and prior-year program costs**Auxiliaries, Craft and Prior Yr Program Cost**

21	As Submarine Tender		U						
22	TAO Fleet Oiler	A	U	2	1,463,784	1	782,588		
	Completion PY Shipbuild for FY 2016				23,358	0	9,200		
	Completion PY Shipbuild for FY 2018				43,342	0	12,500		
	Completion PY Shipbuild for FY 2019					0	106,400		
23	Tagos Surtass Ships	A	U	1	434,384				
24	Towing, Salvage, and Rescue Ship (ATS)	A	U	2	183,800	1	95,915		
	Completion PY Shipbuild for FY 2016					0	1,750		
	Completion PY Shipbuild for FY 2018					0	2,800		

*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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Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy

Line		Ident Code	Se c	FY 2023 Total Enactment		FY 2024 Request	
No	Item Nomenclature			Quantity	Cost	Quantity	Cost
19	LHA Replacement						
	Advance Procurement (CY)			0	289,000		
	C (FY 2023 for FY 2027) (M)			0	(289,000)		
20	Expeditionary Fast Transport (EPF)	A	U	2	645,000		
Total Amphibious ships				4	3,979,509	0	1,830,149

Budget Activity 05: Auxiliaries, craft, and prior-year program costs

Auxiliaries, Craft and Prior Yr Program Cost

21	As Submarine Tender		U			1	1,733,234
22	TAO Fleet Oiler	A	U	1	782,588	1	815,420
	Completion PY Shipbuild for FY 2016			0	9,200		
	Completion PY Shipbuild for FY 2018			0	12,500		
	Completion PY Shipbuild for FY 2019			0	106,400		
23	Tagos Surtass Ships	A	U				
24	Towing, Salvage, and Rescue Ship (ATS)	A	U	1	95,915		
	Completion PY Shipbuild for FY 2016			0	1,750		
	Completion PY Shipbuild for FY 2018			0	2,800		

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Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enactment		FY 2023 Supplementals Enactment	
Line				Ident	Se				
No	Item	Nomenclature		Code	c	Quantity	Cost	Quantity	Cost ⁺
		Completion PY Shipbuild for FY 2019						0	2,450
		Completion PY Shipbuild for FY 2021						0	15,727
25	LCU 1700			A	U	4	67,928		
		Completion PY Shipbuild for FY 2016					11,816		
26	Outfitting			A	U		614,731		707,412
27	Ship to Shore Connector			A	U	5	391,838	5	454,533
28	Service Craft			A	U		67,866	0	21,056
29	Auxiliary Personnel Lighter			A	U			0	71,218
30	LCAC SLEP			A	U	1	17,712	2	36,301
31	Auxiliary Vessels (Used Sealift)			A	U	5	299,900	2	133,000
32	Completion of PY Shipbuilding Programs			A	U				
	AUX (MEMO NON ADD)								
	MSAUX (MEMO NON ADD)								

*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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Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy

Line		Ident Code	Se c	FY 2023 Total Enactment		FY 2024 Request	
No	Item Nomenclature			Quantity	Cost	Quantity	Cost
	Completion PY Shipbuild for FY 2019			0	2,450		
	Completion PY Shipbuild for FY 2021			0	15,727		
25	LCU 1700	A	U			2	62,532
	Completion PY Shipbuild for FY 2016						
26	Outfitting	A	U		707,412	0	557,365
27	Ship to Shore Connector	A	U	5	454,533		
28	Service Craft	A	U	0	21,056	0	63,815
29	Auxiliary Personnel Lighter	A	U	0	71,218		
30	LCAC SLEP	A	U	2	36,301	1	15,286
31	Auxiliary Vessels (Used Sealift)	A	U	2	133,000	2	142,008
32	Completion of PY Shipbuilding Programs	A	U			0	1,648,559
	AUX (MEMO NON ADD)					0	(122,895)
	MSAUX (MEMO NON ADD)					0	(26,259)

Department of the Navy
FY 2024 President's Budget
Exhibit P-1 FY 2024 President's Budget
Total Obligational Authority
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy				FY 2022 Actuals		FY 2023 Less Supplementals Enactment		FY 2023 Supplementals Enactment	
Line		Ident	Se						
No	Item Nomenclature	Code	c	Quantity	Cost	Quantity	Cost	Quantity	Cost ⁺
	CVN (MEMO NON ADD)								
	SSN-774 (MEMO NON ADD)								
	TAGOS (MEMO NON ADD)								
	CVN RCOH (MEMO NON ADD)								
	LCS (MEMO NON ADD)								
	DDG (MEMO NON ADD)								
	LPD 17 (MEMO NON ADD)								
	LCAC (MEMO NON ADD)								
Total Auxiliaries, craft, and prior-year program costs				20	3,620,459	11	2,452,850		
Total Shipbuilding and Conversion, Navy				28	22,075,660	21	31,955,124		

*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
1611N Detail
(Dollars in Thousands)

Mar 2023

Appropriation: 1611 Shipbuilding and Conversion, Navy

Line		Ident Se		FY 2023 Total Enactment		FY 2024 Request	
No	Item Nomenclature	Code	c	Quantity	Cost	Quantity	Cost
	CVN (MEMO NON ADD)					0	(624,600)
	SSN-774 (MEMO NON ADD)					0	(168,180)
	TAGOS (MEMO NON ADD)						(355,166)
	CVN RCOH (MEMO NON ADD)					0	(42,422)
	LCS (MEMO NON ADD)					0	(23,000)
	DDG (MEMO NON ADD)					0	(225,917)
	LPD 17 (MEMO NON ADD)					0	(16,520)
	LCAC (MEMO NON ADD)					0	(43,600)
Total Auxiliaries, craft, and prior-year program costs				11	2,452,850	7	5,038,219
Total Shipbuilding and Conversion, Navy				21	31,955,124	14	32,848,950

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Navy • Budget Estimates FY 2024 • Procurement

Line Item Table of Contents (by Appropriation then Line Number)

Appropriation 1611N: Shipbuilding and Conversion, Navy

Line #	BA	BSA	Line Item Number	Line Item Title	Page
1	01	01	1045	COLUMBIA Class Submarine.....	Volume 1 - 1
2	01	01	1045	COLUMBIA Class Submarine, Advance Procurement.....	Volume 1 - 23

Appropriation 1611N: Shipbuilding and Conversion, Navy

Line #	BA	BSA	Line Item Number	Line Item Title	Page
3	02	01	2001	Carrier Replacement Program.....	Volume 1 - 37
4	02	01	2004	CVN-81.....	Volume 1 - 77
5	02	01	2013	Virginia Class Submarine.....	Volume 1 - 113
6	02	01	2013	Virginia Class Submarine, Advance Procurement.....	Volume 1 - 129
7	02	01	2086	CVN Refueling Overhauls.....	Volume 1 - 133
8	02	01	2086	CVN Refueling Overhauls, Advance Procurement.....	Volume 1 - 171
9	02	01	2119	DDG 1000.....	Volume 1 - 175
10	02	01	2122	DDG-51.....	Volume 1 - 201

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Navy • Budget Estimates FY 2024 • Procurement

Appropriation 1611N: Shipbuilding and Conversion, Navy

Line #	BA	BSA	Line Item Number	Line Item Title	Page
11	02	01	2122	DDG-51, Advance Procurement.....	Volume 1 - 231
12	02	01	2127	Littoral Combat Ship (LCS).....	Volume 1 - 233
13	02	01	2128	FFG-Frigate.....	Volume 1 - 237

Appropriation 1611N: Shipbuilding and Conversion, Navy

Line #	BA	BSA	Line Item Number	Line Item Title	Page
14	03	01	3010	LPD Flight II.....	Volume 1 - 267
15	03	01	3010	LPD Flight II, Advance Procurement.....	Volume 1 - 285
16	03	01	3036	LPD-17.....	Volume 1 - 287
17	03	01	3039	Expeditionary Sea Base (ESB).....	Volume 1 - 291
18	03	01	3041	LHA Replacement.....	Volume 1 - 299
19	03	01	3041	LHA Replacement, Advance Procurement.....	Volume 1 - 327
20	03	01	3043	Expeditionary Fast Transport (EPF).....	Volume 1 - 329

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Navy • Budget Estimates FY 2024 • Procurement

Appropriation 1611N: Shipbuilding and Conversion, Navy

Line #	BA	BSA	Line Item Number	Line Item Title	Page
21	05	01	5010	AS Submarine Tender.....	Volume 1 - 337
22	05	01	5025	TAO Fleet Oiler.....	Volume 1 - 347
23	05	01	5030	TAGOS Surtass Ships.....	Volume 1 - 357
24	05	01	5035	Towing, Salvage, and Rescue Ship (ATS).....	Volume 1 - 365
25	05	01	5100	LCU 1700.....	Volume 1 - 369
26	05	01	5110	Outfitting.....	Volume 1 - 375
27	05	01	5112	Ship to Shore Connector.....	Volume 1 - 389
28	05	01	5113	Service Craft.....	Volume 1 - 397
29	05	01	5114	Auxiliary Personnel Lighter.....	Volume 1 - 405
30	05	01	5139	LCAC SLEP.....	Volume 1 - 409
31	05	01	5201	Auxiliary Vessels (Used Sealift).....	Volume 1 - 413
32	05	01	5300	Completion of PY Shpbldg Progr.....	Volume 1 - 417
991	05	01	5087	Oceanographic Ships.....	Volume 1 - 425
992	05	01	5212	YP Craft Maintenance/ROH/SLEP.....	Volume 1 - 429

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Navy • Budget Estimates FY 2024 • Procurement

Line Item Table of Contents (Alphabetically by Line Item Title)

Line Item Title	Line Item Number	Line #	BA	BSA	Page
AS Submarine Tender	5010	21	05	01.....	Volume 1 - 337
Auxiliary Personnel Lighter	5114	29	05	01.....	Volume 1 - 405
Auxiliary Vessels (Used Sealift)	5201	31	05	01.....	Volume 1 - 413
COLUMBIA Class Submarine	1045	1	01	01.....	Volume 1 - 1
COLUMBIA Class Submarine, Advance Procurement	1045	2	01	01.....	Volume 1 - 23
CVN Refueling Overhauls	2086	7	02	01.....	Volume 1 - 133
CVN Refueling Overhauls, Advance Procurement	2086	8	02	01.....	Volume 1 - 171
CVN-81	2004	4	02	01.....	Volume 1 - 77
Carrier Replacement Program	2001	3	02	01.....	Volume 1 - 37
Completion of PY Shpbldg Progr	5300	32	05	01.....	Volume 1 - 417
DDG 1000	2119	9	02	01.....	Volume 1 - 175
DDG-51	2122	10	02	01.....	Volume 1 - 201
DDG-51, Advance Procurement	2122	11	02	01.....	Volume 1 - 231
Expeditionary Fast Transport (EPF)	3043	20	03	01.....	Volume 1 - 329
Expeditionary Sea Base (ESB)	3039	17	03	01.....	Volume 1 - 291
FFG-Frigate	2128	13	02	01.....	Volume 1 - 237
LCAC SLEP	5139	30	05	01.....	Volume 1 - 409

UNCLASSIFIED

UNCLASSIFIED

Navy • Budget Estimates FY 2024 • Procurement

Line Item Title	Line Item Number	Line #	BA	BSA	Page
LCU 1700	5100	25	05	01.....	Volume 1 - 369
LHA Replacement	3041	18	03	01.....	Volume 1 - 299
LHA Replacement, Advance Procurement	3041	19	03	01.....	Volume 1 - 327
LPD Flight II	3010	14	03	01.....	Volume 1 - 267
LPD Flight II, Advance Procurement	3010	15	03	01.....	Volume 1 - 285
LPD-17	3036	16	03	01.....	Volume 1 - 287
Littoral Combat Ship (LCS)	2127	12	02	01.....	Volume 1 - 233
Oceanographic Ships	5087	991	05	01.....	Volume 1 - 425
Outfitting	5110	26	05	01.....	Volume 1 - 375
Service Craft	5113	28	05	01.....	Volume 1 - 397
Ship to Shore Connector	5112	27	05	01.....	Volume 1 - 389
TAGOS Surtass Ships	5030	23	05	01.....	Volume 1 - 357
TAO Fleet Oiler	5025	22	05	01.....	Volume 1 - 347
Towing, Salvage, and Rescue Ship (ATS)	5035	24	05	01.....	Volume 1 - 365
Virginia Class Submarine	2013	5	02	01.....	Volume 1 - 113
Virginia Class Submarine, Advance Procurement	2013	6	02	01.....	Volume 1 - 129
YP Craft Maintenance/ROH/SLEP	5212	992	05	01.....	Volume 1 - 429

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy								Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 01: Fleet Ballistic Missile Ships / BSA 1: Fleet Ballistic Missile Ships						P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine						
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0603595N, 0603570N				
Line Item MDAP/MAIS Code: 444												
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)	1	-	-	1	-	1	-	1	1	1	7	12
Gross/Weapon System Cost (\$ in Millions)	15,179.058	0.000	0.000	9,285.283	0.000	9,285.283	0.000	8,265.235	8,200.770	8,295.201	63,425.505	112,651.052
Less PY Advance Procurement (\$ in Millions)	-	-	-	769.075	-	769.075	-	3,015.123	2,994.032	3,337.147	29,749.581	39,864.958
Less Subsequent Year Full Funding (\$ in Millions)	6,082.223	-	-	3,343.442	-	3,343.442	-	-	-	-	-	9,425.665
Less AP Transfer to NSBDF (\$ in Millions)	6,227.811	-	-	2,729.168	-	2,729.168	-	263.658	78.591	11.961	345.256	9,656.445
Less Full Funding Transfer to NSBDF (\$ in Millions)	2,869.024	-	-	-	-	-	-	-	-	-	-	2,869.024
Net Procurement (P-1) (\$ in Millions)	*,***	0.000	0.000	2,443.598	0.000	2,443.598	0.000	4,986.454	5,128.147	4,946.093	33,330.668	50,834.960
Plus Subsequent Year Full Funding (\$ in Millions)	-	-	3,079.223	-	-	-	3,343.442	-	-	-	-	6,422.665
Full Funding TOA (\$ in Millions)	-	-	3,079.223	2,443.598	-	2,443.598	3,343.442	4,986.454	5,128.147	4,946.093	33,330.668	57,257.625
Plus CY Advance Procurement (\$ in Millions)	-	-	2,778.553	3,390.734	-	3,390.734	3,932.378	3,481.110	3,660.061	3,782.709	18,839.413	39,864.958
Plus AP Transfer to NSBDF (\$ in Millions)	7,882.465	1,773.980	-	-	-	-	-	-	-	-	-	9,656.445
Plus Full Funding Transfer to NSBDF (\$ in Millions)	2,869.024	3,003.000	-	-	-	-	-	-	-	-	-	5,872.024
Total Obligation Authority (\$ in Millions)	10,751.489	4,776.980	5,857.776	5,834.332	0.000	5,834.332	7,275.820	8,467.564	8,788.208	8,728.802	52,170.081	112,651.052
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (\$ in Millions)	-	-	-	10.742	-	10.742	30.274	27.288	27.665	61.849	3,402.318	3,560.136
Total (\$ in Millions)	10,751.489	4,776.980	5,857.776	5,845.074	-	5,845.074	7,306.094	8,494.852	8,815.873	8,790.651	55,572.399	116,211.188
Gross/Weapon System Unit Cost (\$ in Millions)	15,179.058	-	-	9,285.283	-	9,285.283	-	8,265.235	8,200.770	8,295.201	9,060.786	9,387.588
Description: MISSION: Strategic Deterrence. The COLUMBIA Class Program is an Acquisition Category (ACAT) ID Major Defense Acquisition Program (MDAP) to design, construct, and deliver a replacement for the OHIO Class Fleet Ballistic Missile Submarines (SSBNs), which begins retiring at a rate of one per year beginning in 2027. The mission of the COLUMBIA SSBN is to maintain an appropriate state of readiness to assist in deterring nuclear attack on the United States and its allies. In the event deterrence should fail, the force must be capable of launching missiles against pre-planned or adaptively planned targets. To fulfill this mission COLUMBIA SSBNs must be capable of performing extended strategic deterrent patrols without requiring assistance or replenishment. It does not have a requirement for additional capabilities or other missions unrelated to survivable strategic nuclear deterrence. Armament: Torpedo Tubes Ballistic Missile Tubes Major Electronics: Trident D5 Strategic Weapons System												

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 01: Fleet Ballistic Missile Ships / BSA 1: Fleet Ballistic Missile Ships		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0603595N, 0603570N
Line Item MDAP/MAIS Code: 444		
Command, Control, Communications and Intelligence System - Open System Architecture - Twenty-three Subsystems		
Note: Note: FY2024 is the year of authorization for the second ship. Additionally, FY2024 continues to fund the COLUMBIA Class Program to the baseline, continuing Integrated Enterprise Plan (IEP) funding initiatives, material procurement for future ships, and funding for the Submarine Industrial Base (SIB) investment. This SIB investment is enterprise funding to support a generational increase in demand and includes supplier development, shipbuilder/supplier infrastructure, workforce development, technology advancements, and strategic sourcing.		
In August 2020, the COLUMBIA Class program completed its Construction Authorization In Progress Review (IPR). The Milestone Decision Authority (MDA) approved the program for entry into Build I construction on 28 August 2020, pending FY21 congressional authorization and appropriation. As a result of the IPR, the budget submission reflects SSBN826-837 requirements aligned to the NAVSEA 05C's 2020 cost estimate plus additional funding for SSBN826 based on the CAPE Lead Ship Assessment (LSA) cost estimate (+\$155M FY22-FY23). At the COLUMBIA Program Semi-Annual IPR held on August 30, 2021, the MDA directed COLUMBIA to be funded to the program baseline, including IEP funding.		
The Future Year's Defense Program (FY24-FY28) reflects funding to the 2021 Cost Estimate and includes rate adjustments. The requirements in FY28 are comparable to the prior fiscal year and reflect full funding of SSBN 830. The IEP funding leverages Congressional authorities and is aligned to OSD and Navy direction to execute COLUMBIA Class schedules needed to accelerate ship delivery schedules to reduce the strategic deterrence coverage gaps during transition from OHIO SSBNs to CLB SSBNs and the transition from D5LE to D5LE2 missiles. It is crucial to maintain force structure necessary to meet USSTRATCOM requirements for Sea-Based Strategic Deterrence (SBSD). \$1,617M of SIB funding is spread across FY23-27 (\$400M in FY24) on SSBN837 Plan Costs P-5c Cost Category to ensure it is visible and can be appropriately tracked and managed.		
FY2021 was the year of authorization for the lead ship, USS DISTRICT OF COLUMBIA. FY2022 and FY2023 were the second and third year of full funding for lead ship, USS DISTRICT OF COLUMBIA. FY2024 is the year of authorization for the second ship USS WISCONSIN and the first year of incremental funding. FY2025 is the second year of incremental funding. The budget request supports continued detailed design and construction of CFE and GFE systems to build, test, outfit, and deliver SSBN826 and SSBN827. Funding also supports Continuous Production of Missile Tubes, Advance Construction (AC), Economic Order Quantity (EOQ) for Multi-Program Procurement, Continuous Production of Shipyard Manufactured Items, and Supplier Development to reduce COLUMBIA Class construction schedule risk executed in accordance with enhanced acquisition authorities contained within the National Sea-Based Deterrence Fund (NSBDF), 10 U.S.C. 2218a. The Navy executed a Build I contract for the first two COLUMBIA class submarines (SSBN826 and SSBN827), detailed below. This strategy provides industrial base stability, production efficiencies, and cost savings when compared to an annual procurement with options cost estimate.		
A Contract Modification for ongoing design/advance construction efforts was awarded on 22 June 2020, which also included the Build I Option for the First Two Ships. This was a Pre-Priced Option for the two ships, SSBN 826 and SSBN 827, and associated design/support efforts. This was a modification of the current IPPD contract (N00024-17-C-2117) and is in line with the program's approved Acquisition Strategy. The program received authorization for SSBN 826 in FY21, funded with three years of incremental funding in FY21-23, and are requesting authorization of SSBN 827 in FY24, funded with two years of incremental funding in FY24-25. In December 2022, program awarded an additional pre-priced contract modification of IPPD to support Build II/III Advance Procurement / Advance Construction, EOQ for Build II, and SIB efforts. CLB and VCS Programs are executing an innovative contracting approach (similar to CLB Build I) which will coordinate CLB Build II (FY26-30) with VCS new construction contracting efforts (VCS FY24 ships and Block VI (FY25-29)) to maximize efficiency and stability across the industrial base. The coordination of three separate contract actions eliminates redundant effort by negotiating multiple contracts simultaneously while allowing the shipbuilders to place material orders for 17-ships (5 CLB, 2 VCS FY24 ships and 10 planned VCS Block VI ships) which improves stability for supplier base to de-risk schedules.		
Since the FY2023 submission, the COLUMBIA Class Program continues investment in initiatives to reduce construction schedule risk and enable cost savings (Multi-Program Material Procurement (MPMP), Continuous Production (CP) of Missile Tubes/Outfitting, Ordnance Systems and Shipyard Manufactured Components, Economic Order Quantity efforts, and Advance Construction). Increased investment in Strategic Weapons System (SWS) Shipboard Systems EOQ and Continuous Production leverages additional opportunities to mitigate obsolescence and construction schedule risks, and realize additional cost savings outside of the FYDP. The Navy in FY2024 continues to fund additional IEP initiatives (EOQ/MPMP, CP, Missile Tube Outfitting, AC/AP, and Production Backup Units) which is crucial to de-risk and		

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023																																																
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 01: Fleet Ballistic Missile Ships / BSA 1: Fleet Ballistic Missile Ships		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine																																																
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: 0603595N, 0603570N																																																
Line Item MDAP/MAIS Code: 444																																																		
execute IEP Objective schedules. Total class cost savings is \$2,006M. Details are contained in the P-10. The first Missile Tube Module (MTM) was funded through RD TEN Program Element 0603595N for \$584M.																																																		
<table style="width:100%; border: none;"> <tr> <td style="width:15%;">Characteristics:</td> <td style="width:15%;">SSBN</td> <td style="width:15%;"></td> <td style="width:15%;"></td> <td style="width:15%;"></td> <td style="width:15%;"></td> </tr> <tr> <td>Length Overall</td> <td>560 ft</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Beam</td> <td>43 ft</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Displacement</td> <td>20,800 TONS</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Draft</td> <td>36.9 ft</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>			Characteristics:	SSBN					Length Overall	560 ft					Beam	43 ft					Displacement	20,800 TONS					Draft	36.9 ft																						
Characteristics:	SSBN																																																	
Length Overall	560 ft																																																	
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<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>																																														
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Footnotes: ⁽¹⁾ A Contract Modification for ongoing design/advance construction efforts was awarded on June 22, 2020, which included the Build I Option for the First Two Ships. This was a Pre-Priced Option for the two ships, SSBN 826 and SSBN 827 (as noted in the P40). The start of construction dates reflect when Electric Boat starts full construction on each ship. The Lead Ship was authorized to start construction in October 2020 and Navy exercised the option for Build I (SSBN 826 and SSBN 827) in November 2020. ⁽²⁾ SSBN 827 is contingent on authority and appropriation for that ship.																																																		

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine		
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2021		FY 2024	
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>
Plan Costs	1	6,557.555	1	556.415
Basic Construction/Conversion		5,451.193		5,770.476
Change Orders		299.365		286.485
Electronics (†)		358.141		349.701
Propulsion Equipment		1,700.896		1,614.000
Hull, Mechanical, and Electrical (HM&E) (†)		174.348		119.108
Ordnance (†)		564.115		522.370
Other Cost		73.445		66.728
Total Ship Estimate		15,179.058		9,285.283
Less Advance Procurement FY 2023		-		769.075
Less Subsequent Full Funding FY 2023		3,079.223		-
Less Subsequent Full Funding FY 2025		-		3,343.442
Less AP Transfer to NSBDF FY 2017		773.138		-
Less AP Transfer to NSBDF FY 2018		802.288		59.537
Less AP Transfer to NSBDF FY 2019		3,016.029		139.101
Less AP Transfer to NSBDF FY 2020		1,636.356		148.450
Less AP Transfer to NSBDF FY 2021		-		1,110.652
Less AP Transfer to NSBDF FY 2022		-		1,271.428
Less Full Funding Transfer to NSBDF FY 2021		2,869.024		-
Less Full Funding Transfer to NSBDF FY 2022		3,003.000		-
Net P-1 Funding		-		2,443.598
Remarks: Note: (1) SSBN827 includes \$95M of the \$130M Congressional Add for Submarine industrial base expansion in FY21 in Plans and Basic. It also includes \$20M of the FY22 \$130M Congressional Add for supplier development in Basic.				

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 01 / 1

P-1 Line Item Number / Title:
1045 / COLUMBIA Class Submarine

Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
SSBN 826 ⁽¹⁾	General Dynamics Electric Boat	2021	Oct 2020	Oct 2020	Oct 2027
SSBN 827 ⁽²⁾	General Dynamics Electric Boat	2024	Oct 2020	Sep 2023	Apr 2030
SSBN 828	General Dynamics Electric Boat	2026	Nov 2025	Apr 2025	Aug 2031
SSBN 829	General Dynamics Electric Boat	2027	Nov 2025	Jun 2026	Sep 2032
SSBN 830 ⁽³⁾	General Dynamics Electric Boat	2028	Nov 2025	Jun 2027	Aug 2033

Footnotes:

⁽¹⁾ A Contract Modification for ongoing design/advance construction efforts was awarded on June 22, 2020, which included the Build I Option for the First Two Ships. This was a Pre-Priced Option for the two ships, SSBN 826 and SSBN 827 (as noted in the P40). The start of construction dates reflect when Electric Boat starts full construction on each ship. The Lead Ship was authorized to start construction in October 2020 and Navy exercised the option for Build I (SSBN 826 and SSBN 827) in November 2020.

⁽²⁾ SSBN 827 is contingent on authority and appropriation for that ship.

⁽³⁾ Start of construction date refers to full construction start date. Major advance construction for SSBN827 is scheduled to start in September 2023, for SSBN828 in April 2025, for SSBN829 in June 2026, and for SSBN830 in June 2027. Delivery dates for SSBN 827-SSBN 830 reflect IEP objective dates.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine		
Electronics	FY 2021		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
Sonar	1	95.117	1	96.649
Combat Control	1	15.512	1	16.346
CANES	1	16.306	1	15.642
Electronic Warfare	1	21.804	1	21.677
Photonics	1	22.104	1	24.149
Universal Modular Masts (UMM)	1	9.761	1	7.814
Exterior Communications	1	39.219	1	41.702
P-35 Items Subtotal		219.823		223.979
Major Items				
System Level Activities	1	46.642	1	43.803
RADAR	1	3.452	1	1.858
Navigation	1	2.075	1	2.081
CWITT	1	25.151	1	23.851
Non-Propulsion Electronics System, Systems Engineering and Integration (NPES SE&I)	1	27.119	1	31.400
BRR-6 System	1	17.916	1	14.922
BST-1 System	1	8.100	1	4.123
External Countermeasures, IFF	1	7.863	1	3.684
Major Items Subtotal		138.318		125.722
Total Electronics		358.141		349.701
Remarks: The NPES Systems Engineering and Integration (SE&I) scope increases slightly to reflect the additional effort required by the change in the SSBN 827 NPES configuration. The FY24 hull will be outfitted with a TI-24 pedigree Submarine Federated Warfare Tactical System (SWFTS), versus FY21 lead ship TI-20 configuration.				

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine		
Hull, Mechanical, and Electrical (HM&E)	FY 2021		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
Propulsor	1	98.235	1	88.651
Advanced Carbon Dioxide Removal Unit (ACRU)	1	9.877	1	8.340
P-35 Items Subtotal		108.112		96.991
Other Cost Elements				
HM&E Installation and testing		11.411		12.682
T&E		7.547		8.033
SUPSHIP responsible material		1.304		1.402
Naval Foundry Propeller Center (NFPC)		45.974		-
Other Cost Elements Subtotal		66.236		22.117
Total Hull, Mechanical, and Electrical (HM&E)		174.348		119.108

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine		
Ordnance	FY 2021		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
Strategic Weapons System (SWS) Launcher	1	275.294	1	257.159
SWS Fire Control	1	101.572	1	110.737
SWS Navigation	1	79.836	1	43.219
P-35 Items Subtotal		456.702		411.115
Major Items				
SWS System Level Activities		40.313		69.105
SWS Reentry Subsystem		4.114		-
SWS Guidance Subsystem		3.891		1.959
SWS Missile Integration Activities		39.960		38.700
SWS Test Instrumentation Subsystem		19.135		1.491
Major Items Subtotal		107.413		111.255
Total Ordnance		564.115		522.370

Remarks:
(1) This line does not fund any efforts related to the development and procurement of the TRIDENT II D5 Life Extension (D5LE) Missile or TRIDENT II D5 Life Extension 2 (D5LE2) Missile (however, CLB SWS is dependent on these efforts to ensure the system maintains demonstrated performance and remains survivable while facing a dynamic threat environment until COLUMBIA end of life.)
(2) Class-wide engineering and technical services transitioned from Plans to GFE beginning with SSBN 827 to consolidate Ordnance effort for execution purposes.
(3) One set of Test Instrumentation equipment (e.g., Radio Frequency Test Kit, Drill Fixtures, Mock-ups, etc.) is required to support the entire class. This GFE is procured under 826.

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Equipment Item: Sonar						PARM Code: N/A	
P-35 Category	FY 2021		FY 2024				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	60.875	1	61.855			
Technical Engineering Services		17.597		17.880			
Other Costs		16.645		16.914			
Total	1	95.117	1	96.649			
Description: The COLUMBIA ELECTRONICS budget funds procurement of the Non-Propulsion Electronics System (NPES), which is the collection of command and control subsystems required to provide all of the non-strategic warfighting, navigation, communications, and crew information technology functions. The Sonar P-35 item contains acoustic sensors and processing electronics required to detect, classify, track and localize surface and submerged contacts. This includes Large Aperture Bow (LAB) array hydrophones, outboard electronics bottles, the Low Cost Conformal Array (LCCA), the AN/WSQ-9 signal analysis system, acoustic intercept and miscellaneous single purpose function sensors, total ship monitoring system (TSMS) , two (2) tactical towed arrays, high frequency sail array, and inboard signal conditioning and display electronics capacity to support both GFE sensors and the CFE Large Vertical Array (LVA). The SONAR P-35 includes engineering services required to produce the sonar logistics products, perform equipment installation, provide construction window field support/troubleshooting/repair, and support platform compatibility engineering, integration, and testing. Other costs include software, initial spares, ship systems data, and SONAR program management labor.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	SSBN 826	Lockheed Martin	C/CPIF	Apr 2019	Option	1	60.875
FY 2024	SSBN 827	Various	C/CPIF	Feb 2022	Option	1	61.855
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	SSBN 826	Oct 2027	46	32	Apr 2021		
FY 2024	SSBN 827	Apr 2030	65	33	Feb 2022		
Competition/Second Source Initiatives: N/A							
Remarks: The SONAR P-35 exhibit includes funding for multiple subsystem contracts, field activities, and support efforts, not just system hardware. SSBN 826 award dates updated to reflect actuals. The SSBN 827 single award date shown represents the 2,288 long lead, early delivery DT-594 hydrophone order made using FY22 AP. The preponderance of remaining equipment is needed to meet contractual obligations to the shipbuilder in support of the Command and Control System Module (CCSM) Off-hull Assembly and Test Site (COATS) milestone in construction. Above does not contain award and delivery dates for every component, including those required earlier than the COATS period. The unit cost in the contract data section only reflects the major prime contractor HW/SW procurement and system integration cost, specifically Lockheed Martin: A-RCI, TSMS, AI&R, LWLCCA (CPIF), NSMA: WSQ-9 (FPI), and L-3: TB-34,TB-29 (CPIF).							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Equipment Item: Combat Control						PARM Code: N/A	
P-35 Category	FY 2021		FY 2024				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	4.886	1	5.149			
Technical Engineering Services		3.490		3.678			
Other Costs		7.136		7.519			
Total	1	15.512	1	16.346			
Description: The COLUMBIA ELECTRONICS budget funds procurement of the Non-Propulsion Electronics System (NPES), which is the collection of command and control subsystems required to provide all of the non-strategic warfighting, navigation, communications, and crew information technology functions. The Combat Control P-35 item contains processing electronics and attack center controls and displays required to support launch of non-strategic defensive weapons and fuse all contact data with own-ship navigational positioning. The hardware suite contains combat control processing and display electronics, and electronics specific to cyber security protection and monitoring of the entire NPES. The Combat Control P-35 includes engineering services required to produce the logistics products, perform equipment installation, provide construction window field support/troubleshooting/repair, and support platform compatibility engineering, integration, and system testing. Other costs include the extensive suite of individually procured software applications (Tactical Control, Weapons Control, Common Infrastructure Services, Voyage Management System, Information Assurance, On-Board Team Trainer Master Controller, Integrated System Maintenance Tool), initial spares, ship systems data, and Combat Control program management labor.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	SSBN 826	Leonardo Diagnostic/Retrieval Systems (DRS)	C/CPIF	May 2021	New	1	4.866
FY 2024	SSBN 827	Leonardo Diagnostic/Retrieval Systems (DRS)	C/CPIF	Jan 2024	Option	1	5.149
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	SSBN 826	Oct 2027	45	32	May 2021		
FY 2024	SSBN 827	Apr 2030	42	33	Jan 2024		
Competition/Second Source Initiatives: N/A							
Remarks: The Combat Control P-35 exhibit includes funding for the H/W suite, multiple software contracts, field activities, and support efforts, not just system hardware. The single award date shown represents when the placement for preponderance of equipment is needed to meet contractual obligations to the shipbuilder in support of the Command and Control System Module (CCSM) Off-hull Assembly and Test Site (COATS) milestone in construction. Above does not contain award and delivery dates for every component, including those required earlier than the COATS period. The unit cost in the contract data section only reflects the H/W prime contractor cost. SSBN 826 award dates updated to reflect actuals.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Equipment Item: CANES						PARM Code: N/A	
P-35 Category	FY 2021		FY 2024				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	4.484	1	4.302			
Technical Data and Documentation		4.810		4.614			
Other Costs		7.012		6.726			
Total	1	16.306	1	15.642			
Description: The COLUMBIA ELECTRONICS budget funds procurement of the Non-Propulsion Electronics System (NPES), which is the collection of command and control subsystems required to provide all of the non-strategic warfighting, navigation, communications, and crew information technology functions. This P-35 covers the procurement requirements for the Consolidated Afloat Networks and Enterprise Services (CANES) crew information technology hardware suite and the non-tactical data processing system (NTDPS) software. The hardware suite contains CANES processing and display electronics and peripherals (laptops, printers, data storage), and the software suite is inclusive of the NTDPS applications. The CANES P-35 includes engineering services required to produce the logistics products, perform equipment installation, provide construction window field support/troubleshooting/repair, and support platform compatibility engineering, integration, and system testing. Other costs include the suite of individually procured NTDPS software applications, initial spares, ship systems data, and CANES program management labor.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	SSBN 826	NEIS	Various	Aug 2021	Option	1	4.484
FY 2024	SSBN 827	NEIS	Various	Apr 2024	Option	1	4.302
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	SSBN 826	Oct 2027	62	12	Aug 2021		
FY 2024	SSBN 827	Apr 2030	42	30	Apr 2024		
Competition/Second Source Initiatives: N/A							
Remarks: The CANES P-35 exhibit includes funding for the H/W suite, software contracts, field activities, and support efforts in addition to system hardware. The required award date shown represents initial contract award to support the Command and Control System Module (CCSM) Off-hull Assembly and Test Site (COATS) milestone in construction. There are subsequent contract awards for the rest of the equipment to support the construction schedule. SSBN 826 award dates updated to reflect actuals. Updated methodology for the Months Required Before Delivery and Production Lead Time convention used between the FY21 ship and FY24 ship exhibit entries (FY24 uses mid-construction item delivery date with representative long lead time and FY21 used earliest item delivery date with actual lead time).							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Equipment Item: Electronic Warfare						PARM Code: N/A	
P-35 Category	FY 2021		FY 2024				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	11.992	1	11.922			
Technical Engineering Services		5.342		5.311			
Other Costs		4.470		4.444			
Total	1	21.804	1	21.677			
Description: The COLUMBIA ELECTRONICS budget funds procurement of the Non-Propulsion Electronics System (NPES), which is the collection of command and control subsystems required to provide all of the non-strategic warfighting, navigation, communications, and crew information technology functions. The EW P-35 item contains the processing electronics and software required to detect surface borne electromagnetic energy and classify threat emissions spanning a variety of signal types and frequency range. This includes the AN/BLQ-10 signal processing, display and control system and TYPE 20/24 antenna below deck processing electronics. The EW P-35 includes engineering services required to produce the EW logistics products, perform equipment installation, provide construction window field support/troubleshooting/repair, and support platform compatibility engineering, integration, and system testing. Other costs include software, initial spares, ship systems data, and EW program management labor.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	SSBN 826	LM RMS	Various	May 2021	Option	1	11.992
FY 2024	SSBN 827	LM RMS	Various	Jan 2024	Option	1	11.922
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	SSBN 826	Oct 2027	65	12	May 2021		
FY 2024	SSBN 827	Apr 2030	42	33	Jan 2024		
Competition/Second Source Initiatives: N/A							
Remarks: The EW P-35 exhibit includes total funding for the contracts, field activities, and support efforts in addition to system hardware. The required award date shown represents initial contract award to support the Command and Control System Module (CCSM) Off-hull Assembly and Test Site (COATS) milestone in construction. There are subsequent contract awards for the rest of the equipment to support the construction schedule. SSBN 826 award dates updated to reflect actuals. Updated methodology for the Months Required Before Delivery and Production Lead Time convention used between the FY21 ship and FY24 ship exhibit entries (FY24 uses mid-construction item delivery date with representative long lead time and FY21 used earliest item delivery date with actual lead time).							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Equipment Item: Photonics						PARM Code: N/A	
P-35 Category	FY 2021		FY 2024				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	12.820	1	16.421			
Technical Engineering Services		5.195		3.622			
Other Costs		4.089		4.106			
Total	1	22.104	1	24.149			
Description: The COLUMBIA ELECTRONICS budget funds procurement of the Non-Propulsion Electronics System (NPES), which is the collection of command and control subsystems required to provide all of the non-strategic warfighting, navigation, communications, and crew information technology functions. The Photonics P-35 item contains the two (2) imaging masts, inboard processing electronics and software required to support surface and submerged periscope operations, and includes visual and infrared (IR) imaging, RF signal communications, and radar early warning. The Photonics P-35 includes engineering services required to produce the logistics products, perform equipment installation, provide construction window field support/troubleshooting/repair, and support platform compatibility engineering and integration. Other costs include software, initial spares, ship systems data, and Photonics program management labor.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	SSBN 826	LM RMS	C/CPIF	May 2021	Option	1	12.820
FY 2024	SSBN 827	LM RMS	C/CPIF	Jan 2024	Option	1	16.421
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	SSBN 826	Oct 2027	65	12	May 2021		
FY 2024	SSBN 827	Apr 2030	42	33	Jan 2024		
Competition/Second Source Initiatives: N/A							
Remarks: The Photonics P-35 exhibit includes funding for multiple contracts, field activities, and support efforts, not just system hardware. The unit cost in the contract data section only reflects the mast (1 shipset, \$4,220 unit cost) prime contractor HW/SW procurement (1 shipset, \$8,600 unit cost) and system integration cost. The contracts are with LM (CPIF Option) and L3-KEO (CPIF Option). The FY21 budget reflects quantity 2 Low Profile Photonics Mast pricing from the current contract, and the FY24 budget reflects quantity 1 Type 20A and quantity 1 Type 20B mast pricing, as recently negotiated on the new contract and accounts for the increase in unit cost. The required award date shown represents initial contract award to support the Command and Control System Module (CCSM) Off-hull Assembly and Test Site (COATS) milestone in construction). There are subsequent contract awards for the rest of the equipment to support the construction schedule. SSBN 826 award dates updated to reflect actuals.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine
Equipment Item: Photonics		PARM Code: N/A
<p>Updated methodology for the Months Required Before Delivery and Production Lead Time convention used between the FY21 ship and FY24 ship exhibit entries (FY24 uses mid-construction item delivery date with representative long lead time and FY21 used earliest item delivery date with actual lead time).</p>		

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																											
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine																																													
Equipment Item: Universal Modular Masts (UMM)						PARM Code: N/A																																											
P-35 Category	FY 2021		FY 2024																																														
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																													
Major Hardware	1	6.979	1	5.587																																													
Technical Engineering Services		2.050		1.641																																													
Other Costs		0.732		0.586																																													
Total	1	9.761	1	7.814																																													
<p>Description:</p> <p>The COLUMBIA ELECTRONICS budget funds procurement of the Non-Propulsion Electronics System (NPES), which is the collection of command and control subsystems required to provide all of the non-strategic warfighting, navigation, communications, and crew information technology functions. The UMM P-35 item contains the hardware costs for six (6) telescopic mechanical mast assemblies custom sized for Columbia Class Sail installation, and required to raise and lower the Photonics and Exterior Communications mast heads. The UMM P-35 includes engineering services required to produce the logistics products, perform equipment installation, provide construction window field support/troubleshooting/repair, and support platform compatibility engineering and integration. Other costs include initial spares, ship systems data, and UMM program management labor.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2021</td><td>SSBN 826</td><td>L3-KEO</td><td>SS/FFP</td><td>Jul 2021</td><td>Option</td><td>1</td><td>6.979</td></tr><tr><td>FY 2024</td><td>SSBN 827</td><td>L3-KEO</td><td>SS/FFP</td><td>Nov 2023</td><td>Option</td><td>1</td><td>5.587</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2021</td><td>SSBN 826</td><td>Oct 2027</td><td>54</td><td>21</td><td>Jul 2021</td></tr><tr><td>FY 2024</td><td>SSBN 827</td><td>Apr 2030</td><td>50</td><td>27</td><td>Nov 2023</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: The UMM P-35 exhibit includes funding for the prime contract, services contract, field activities. The required award date shown represents contract award to support the sail construction milestone. SSBN 826 award dates updated to reflect actuals.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2021	SSBN 826	L3-KEO	SS/FFP	Jul 2021	Option	1	6.979	FY 2024	SSBN 827	L3-KEO	SS/FFP	Nov 2023	Option	1	5.587	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2021	SSBN 826	Oct 2027	54	21	Jul 2021	FY 2024	SSBN 827	Apr 2030	50	27	Nov 2023
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																										
FY 2021	SSBN 826	L3-KEO	SS/FFP	Jul 2021	Option	1	6.979																																										
FY 2024	SSBN 827	L3-KEO	SS/FFP	Nov 2023	Option	1	5.587																																										
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																												
FY 2021	SSBN 826	Oct 2027	54	21	Jul 2021																																												
FY 2024	SSBN 827	Apr 2030	50	27	Nov 2023																																												

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Equipment Item: Exterior Communications						PARM Code: N/A	
P-35 Category	FY 2021		FY 2024				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	24.512	1	26.064			
Technical Engineering Services		7.648		8.132			
Other Costs		7.059		7.506			
Total	1	39.219	1	41.702			
Description: The COLUMBIA ELECTRONICS budget funds procurement of the Non-Propulsion Electronics System (NPES), which is the collection of command and control subsystems required to provide all of the non-strategic warfighting, navigation, communications, and crew information technology functions. The Exterior Communications Systems (ECS) provides the secure off-hull connectivity vital to ship operation and mission success. The ECS P-35 item contains two (2) multi-function antennas, one (1) high data rate antenna, two (2) floating wire antennas, below deck digital modular radios, cryptology, routers, and operator display and control electronics. The ECS P-35 includes engineering services required to produce the ECS logistics products, perform equipment installation, provide construction window field support/troubleshooting/repair, and support platform compatibility engineering and integration. Other costs include software, initial spares, ship systems data, and ECS program management labor.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	SSBN 826	Various	Various	Various	Option	1	24.512
FY 2024	SSBN 827	Various	Various	Mar 2024	Option	1	26.064
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	SSBN 826	Oct 2027	44		Various		
FY 2024	SSBN 827	Apr 2030	97	30	Mar 2020		
Competition/Second Source Initiatives: N/A							
Remarks: The ECS P-35 exhibit includes funding for multiple subsystems, contracts, field activities, and support efforts, not just system hardware. The preponderance of components are submarine fleet common, and procured as Government-Off-The-Shelf (GOTS) components using existing PEO C4I contracts to support the Command and Control System Module (CCSM) Off-hull Assembly and Test Site (COATS) milestone in construction. The required award date shown for SSBN 827 represents initial contract award made using FY20 Multi-Program Material Procurement AP to consolidate ECS mast procurements with VIRGINIA Class bulk procurement. There are subsequent contract awards for the rest of the equipment to support the construction schedule.							
Updated methodology for the Months Required Before Delivery and Production Lead Time convention used between the FY21 ship and FY24 ship exhibit entries (FY24 uses mid-construction item delivery date with representative long lead time and FY21 used earliest item delivery date with actual lead time). There is an additional difference in the ECS P-35 for Months Required Before Delivery as the required award date reflects when 827 AP was obligated in a consolidated procurement of submarine Multi-Function Masts in FY20.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine																											
Equipment Item: Propulsor						PARM Code: N/A																									
P-35 Category	FY 2021		FY 2024																												
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																											
Major Hardware	1	84.643	1	78.187																											
Technical Engineering Services		13.592		10.464																											
Total	1	98.235	1	88.651																											
Description: The propulsor consists of Ni-Al-bronze components and assemblies, a Monel bearing support structure, other engineered components and supporting items for corrosion protection, noise monitoring, etc. The purpose of the propulsor is to generate proper thrust to propel the ship at a rated speed within the approved limits of torque and shaft RPM, while at the same time meeting acoustic and structural requirements. This design is unique to the COLUMBIA Class. The propulsor consists of a large quantity of government supplied material and contracts for specific engineered components.																															
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Prime Contractor</th> <th>Contract Method/Type</th> <th>Award Date</th> <th>New/Option</th> <th>Quantity (Each)</th> <th>Unit Cost (\$ M)</th> </tr> <tr> <td>FY 2021</td> <td>SSBN 826</td> <td>Various</td> <td>Various</td> <td>Sep 2019</td> <td>New</td> <td>1</td> <td>84.643</td> </tr> <tr> <td>FY 2024</td> <td>SSBN 827</td> <td>Various</td> <td>Various</td> <td>Nov 2021</td> <td>Various</td> <td>1</td> <td>78.187</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2021	SSBN 826	Various	Various	Sep 2019	New	1	84.643	FY 2024	SSBN 827	Various	Various	Nov 2021	Various	1	78.187
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																								
FY 2021	SSBN 826	Various	Various	Sep 2019	New	1	84.643																								
FY 2024	SSBN 827	Various	Various	Nov 2021	Various	1	78.187																								
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Earliest Ship Delivery Date</th> <th>Months Required Before Delivery</th> <th>Production Leadtime</th> <th>Required Award Date</th> </tr> <tr> <td>FY 2021</td> <td>SSBN 826</td> <td>Oct 2027</td> <td>52</td> <td>44</td> <td>Oct 2019</td> </tr> <tr> <td>FY 2024</td> <td>SSBN 827</td> <td>Apr 2030</td> <td>53</td> <td>48</td> <td>Nov 2021</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2021	SSBN 826	Oct 2027	52	44	Oct 2019	FY 2024	SSBN 827	Apr 2030	53	48	Nov 2021						
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																										
FY 2021	SSBN 826	Oct 2027	52	44	Oct 2019																										
FY 2024	SSBN 827	Apr 2030	53	48	Nov 2021																										
Competition/Second Source Initiatives: Each contract planned to support manufacture of SSBN 826 propulsor components is intended to be a competitive award.																															
Remarks: Naval Surface Warfare Center Carderock Division (NSWCCD) awarded the lead ship Bearing Support Structure (BSS) contract in Sep 2019 to General Atomics. NSWCCD is awarding separate contracts for Ropeguard, Plugs, Hydrodynamic Shaping Material (HYSHMA), and Tailcone in FY20-22 to support deliveries to SSBN 826. The Navy will deliver the Government Furnished Equipment (GFE) propulsor components to Electric Boat in FY23 and FY24. Nov 2021 Contract Award date for Hull 2 is for BSS contract to General Atomic, consistent with contract award date for lead ship. Months before delivery and Production Lead Time are also based on BSS.																															

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Equipment Item: Advanced Carbon Dioxide Removal Unit (ACRU)						PARM Code: N/A	
P-35 Category	FY 2021		FY 2024				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	5.237	1	6.151			
Technical Engineering Services		2.340		2.189			
Other Costs		2.300		-			
Total	1	9.877	1	8.340			
Description: The Advanced Carbon Dioxide (CO2) Removal Unit (ACRU) takes the place of legacy CO2 removal equipment used on previous classes and will be the system for COLUMBIA Class Submarines. The ACRU uses a solid sorbent material vice the hazardous liquid amine used in existing CO2 scrubbers. The ACRU is Government Furnished Equipment (GFE) for the first two hulls and will be procured to support contractor integration schedules and required in year need dates. The solid sorbent material will be procured separately from the ACRUs. On-board spares, drawing updates, program management and Government technical and contractual oversight are not included in this cost.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	SSBN 826	Various	Various	Sep 2020	New	1	5.237
FY 2024	SSBN 827	Various	Various	Sep 2020	Option	1	6.151
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	SSBN 826	Oct 2027	51	34	Sep 2020		
FY 2024	SSBN 827	Apr 2030	81	34	Sep 2020		
Competition/Second Source Initiatives: Each contract planned to support manufacture of SSBN 826 propulsor components is intended to be a competitive award.							
Remarks: NSWC Philadelphia is executing contract efforts for lead ship and second ship ACRU procurement. Values include support through delivery.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Equipment Item: Strategic Weapons System (SWS) Launcher						PARM Code: N/A	
P-35 Category	FY 2021		FY 2024				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	215.327	1	212.878			
Technical Engineering Services		59.967		44.281			
Total	1	275.294	1	257.159			
Description: The COLUMBIA Strategic Weapon System (SWS) will consist of multiple subsystems comprised of tactical and non-tactical subsystems which work as a single unit to prepare, launch, and deliver the warheads to their predetermined targets. The SWS Launcher Subsystem includes the equipment necessary to store and launch the TRIDENT II (D5) Missile when the submarine is submerged or surfaced. This SWS Launcher Subsystem consists of a Launch Tube Group, Missile Handling Equipment, a Vertical Support Group, an Umbilical Retractor Group, a Closure Group, a Missile Ejector Group, and security locks. The SWS Launcher P-35 includes program management and engineering services required to produce the logistics products, support equipment installation, provide construction window field support/troubleshooting/repair, and support platform compatibility engineering, integration, and system testing.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	SSBN 826	Various	Various	Mar 2019	New	1	215.327
FY 2024	SSBN 827	Various	Various	Jun 2022	New	1	212.878
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	SSBN 826	Oct 2027	55	48	Mar 2019		
FY 2024	SSBN 827	Apr 2030	46	48	Jun 2022		
Competition/Second Source Initiatives: N/A							
Remarks: Northrop Grumman System Corporation - Marine Systems was awarded a contract in March 2019 to procure the preponderance of Launcher Subsystem components for SSBN 826. Naval Surface Warfare Center Crane Division awarded separate contracts for associated support equipment in FY19-21 to support deliveries to SSBN 826. The unit cost in the contract data section reflects the aggregate hardware procurement and system integration cost. Northrop Grumman System Corporation - Marine Systems was awarded a contract in June 2022 to procure the preponderance of Launcher Subsystem components for SSBN 827. Naval Surface Warfare Center Crane Division awarded separate contracts for associated support equipment in FY22-24 to support deliveries to SSBN 827. The unit cost in the contract data section reflects the aggregate hardware procurement and system integration cost.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Equipment Item: SWS Fire Control						PARM Code: N/A	
P-35 Category	FY 2021		FY 2024				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	59.481	1	71.295			
Technical Engineering Services		42.091		39.442			
Total	1	101.572	1	110.737			
Description: The COLUMBIA Strategic Weapon System (SWS) will consist of multiple subsystems comprised of tactical and non-tactical subsystems which work as a single system to prepare, launch, and deliver the warheads to their predetermined targets. The SWS Fire Control Subsystem includes equipment necessary to launch the TRIDENT II (D5) Missile; monitor and control the missile environment; provide checkout and fault isolation capabilities; and provide equipment and network infrastructure capable of collecting, recording, processing, on-loading, and off-loading SWS data to support weapon system performance and accuracy evaluation. The SWS Fire Control P-35 includes engineering services required to produce the logistics products, support equipment installation, provide construction window field support/ troubleshooting/repair, and support platform compatibility engineering, integration, and system testing.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	SSBN 826	Various	SS/CPIF	Various	New	1	59.481
FY 2024	SSBN 827	Various	SS/CPIF	Various	New	1	71.295
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	SSBN 826	Oct 2027	61	27	Jun 2020		
FY 2024	SSBN 827	Apr 2030	66	27	Jul 2022		
Competition/Second Source Initiatives: N/A							
Remarks: General Dynamics Missions Systems was awarded a contract in June 2020 to procure the preponderance of Fire Control Subsystem components for SSBN 826 and provide subsystem integration efforts. L3Harris is expected to be awarded in October 2022 the procurement of the Shipboard Data Subsystem components for SSBN 826 and provide subsystem integration efforts. For FY21 hull, the total contract price did not change between FY2023 and FY2024 submission, but the split between Hardware and Engineering services was updated based on a better understanding of the scope of effort that was contracted as a result of a re-baseline effort. There were engineering-type costs included in the original HW estimates that are believed to be more appropriately tied to engineering services going forward. The increased cost estimate for FY24 SWS Fire Control hardware is based on actual cost projections for the lead ship, projected inflation and market volatility for copper and electronics components based on recent contract proposals for similar efforts. General Dynamics Missions Systems is expected to be awarded in July 2022 to procure the preponderance of Fire Control Subsystem components for SSBN 827 and provide subsystem integration efforts. L3Harris is expected to be awarded in October 2023 the procurement of the Shipboard Data Subsystem components for SSBN 827 and provide subsystem integration efforts.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine																											
Equipment Item: SWS Navigation						PARM Code: N/A																									
P-35 Category	FY 2021		FY 2024																												
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																											
Major Hardware	1	59.809	1	31.266																											
Technical Engineering Services		20.027		11.953																											
Total	1	79.836	1	43.219																											
Description: The COLUMBIA Strategic Weapon System (SWS) will consist of multiple subsystems comprised of tactical and non-tactical subsystems which work as a single unit to prepare, launch, and deliver the warheads to their predetermined targets. The SWS Navigation Subsystem includes inertial and non-inertial equipment and Sonar equipment necessary to determine submarine position which is critical in support of SWS accuracy as well as platform tactical navigation requirements. The SWS Navigation P-35 includes engineering services required to produce the logistics products, support equipment installation, provide construction window field support/troubleshooting/repair, and support platform compatibility engineering, integration, and system testing.																															
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="text-align: center;">Program Year</th> <th style="text-align: center;">Hull</th> <th style="text-align: center;">Prime Contractor</th> <th style="text-align: center;">Contract Method/Type</th> <th style="text-align: center;">Award Date</th> <th style="text-align: center;">New/Option</th> <th style="text-align: center;">Quantity (Each)</th> <th style="text-align: center;">Unit Cost (\$ M)</th> </tr> <tr> <td style="text-align: center;">FY 2021</td> <td style="text-align: center;">SSBN 826</td> <td style="text-align: center;">Various</td> <td style="text-align: center;">Various</td> <td style="text-align: center;">Various</td> <td style="text-align: center;">Option</td> <td style="text-align: center;">1</td> <td style="text-align: right;">59.809</td> </tr> <tr> <td style="text-align: center;">FY 2024</td> <td style="text-align: center;">SSBN 827</td> <td style="text-align: center;">Various</td> <td style="text-align: center;">Various</td> <td style="text-align: center;">Various</td> <td style="text-align: center;">Various</td> <td style="text-align: center;">1</td> <td style="text-align: right;">31.266</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2021	SSBN 826	Various	Various	Various	Option	1	59.809	FY 2024	SSBN 827	Various	Various	Various	Various	1	31.266
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																								
FY 2021	SSBN 826	Various	Various	Various	Option	1	59.809																								
FY 2024	SSBN 827	Various	Various	Various	Various	1	31.266																								
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="text-align: center;">Program Year</th> <th style="text-align: center;">Hull</th> <th style="text-align: center;">Earliest Ship Delivery Date</th> <th style="text-align: center;">Months Required Before Delivery</th> <th style="text-align: center;">Production Leadtime</th> <th style="text-align: center;">Required Award Date</th> </tr> <tr> <td style="text-align: center;">FY 2021</td> <td style="text-align: center;">SSBN 826</td> <td style="text-align: center;">Oct 2027</td> <td style="text-align: center;">65</td> <td></td> <td style="text-align: center;">Various</td> </tr> <tr> <td style="text-align: center;">FY 2024</td> <td style="text-align: center;">SSBN 827</td> <td style="text-align: center;">Apr 2030</td> <td style="text-align: center;">65</td> <td></td> <td style="text-align: center;">Various</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2021	SSBN 826	Oct 2027	65		Various	FY 2024	SSBN 827	Apr 2030	65		Various						
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																										
FY 2021	SSBN 826	Oct 2027	65		Various																										
FY 2024	SSBN 827	Apr 2030	65		Various																										
Competition/Second Source Initiatives: N/A																															
Remarks: SSBN 826: Non-inertial navigation components for SSBN 826, as well as Navigation Subsystem integration efforts, will be procured as options to an existing Lockheed Martin Rotary and Mission Systems awarded in April 2020. An additional Firm Fixed Price contract was awarded to Lockheed Martin Rotary and Mission Systems in FY21 to continually produce inertial navigation components for all SSBN platforms. Navigation Sonar components are produced as required by NSWC Crane. Common SWS Cabinet Infrastructure cabinets are provided to Lockheed Martin Rotary and Mission Systems by General Dynamic Mission Systems as required Non-Inertial component production. 826 includes the costs associated with establishing / transitioning the Inertial Navigation System refurbishment facility from Heath, OH to Pittsfield, MA. SSBN 827: Non-inertial navigation components, as well as Navigation Subsystem integration efforts, will be procured as options to a Lockheed Martin Rotary and Mission Systems to be awarded in November 2022. An additional Firm Fixed Priced contract was awarded to Lockheed Martin Rotary and Mission Systems in FY21 to continually produce inertial navigation components for all SSBN platforms. Navigation Sonar Systems are produced as required by NSWC Crane. Common SWS Cabinet Infrastructure cabinets are provided to Lockheed Martin Rotary and Mission Systems by General Dynamic Mission Systems as required for Non-Inertial component production.																															

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Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy						Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine						
First System (2024) Award Date: October 2020		First System (2024) Completion Date: October 2027			Interval Between Systems: 0 Months					
Cost Elements		Production Leadtime (Months)	When Required* (Months)	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
PLANS										
Lead Ship Design (1)		12-60	Various	-	-	0.000	-	-	-	-
Supplier Development - SSBN 826 (2)		12-60	Various	-	-	0.000	-	-	-	-
Supplier Development - SSBN 827 (2)		12-60	Various	-	-	0.000	-	-	-	-
Supplier Development - SSBN 837 (2)		12-60	Various	110.000	-	0.000	-	-	-	-
Supplier Development- Submarine Industrial Base - SSBN 837 (2)		12-60	Various	-	541.000	400.000	395.000	151.000	130.000	-
SSBN 830		12-60	Various	-	-	0.000	-	-	13.676	-
SSBN 831		12-60	Various	-	-	0.000	-	-	6.218	13.997
SSBN 832		12-60	Various	-	-	0.000	-	-	-	6.364
Total: PLANS				110.000	541.000	400.000	395.000	151.000	149.894	20.361
BASIC CONSTRUCTION (3) - SHIPBUILDER PROCURED LLTM										
SSBN 826		24-42	Various	-	-	0.000	-	-	-	-
SSBN 827		24-54	Various	225.550	418.383	0.000	-	-	-	-
SSBN 828		24-54	Various	-	145.687	192.009	406.295	-	-	-
SSBN 829		24-54	Various	-	-	172.948	31.734	234.852	-	-
SSBN 830		24-54	Various	-	-	0.000	156.062	56.320	330.445	-
SSBN 831		24-54	Various	-	-	0.000	-	161.525	207.163	505.413
SSBN 832		24-54	Various	-	-	0.000	-	-	167.179	208.464
SSBN 833		24-54	Various	-	-	0.000	-	-	-	173.030
Total: BASIC CONSTRUCTION (3) - SHIPBUILDER PROCURED LLTM				225.550	564.070	364.957	594.091	452.697	704.787	886.907
BASIC CONSTRUCTION (4) - MISSILE TUBE CONTINUOUS PRODUCTION & OUTFITTING										
SSBN 827		36-42	Various	29.470	30.749	0.000	-	-	-	-
SSBN 828		36-42	Various	90.522	38.078	33.104	-	-	-	-
SSBN 829		36-42	Various	57.399	135.864	58.909	-	-	-	-
SSBN 830		36-42	Various	-	16.620	63.393	133.496	36.374	-	-
SSBN 831		36-42	Various	-	-	18.730	63.187	139.961	59.640	-
SSBN 832		36-42	Various	-	-	0.000	19.706	64.025	149.677	54.818
SSBN 833		36-42	Various	-	-	0.000	-	20.945	65.087	156.628
SSBN 834		36-42	Various	-	-	0.000	-	-	23.016	65.625

UNCLASSIFIED

Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy							Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine						
First System (2024) Award Date: October 2020		First System (2024) Completion Date: October 2027			Interval Between Systems: 0 Months					
Cost Elements		Production Leadtime <i>(Months)</i>	When Required* <i>(Months)</i>	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
SSBN 835		36-42	Various	-	-	0.000	-	-	-	24.553
Total: BASIC CONSTRUCTION (4) - MISSILE TUBE CONTINUOUS PRODUCTION & OUTFITTING				177.391	221.311	174.136	216.389	261.305	297.420	301.624
BASIC CONSTRUCTION (5) - ADVANCE CONSTRUCTION										
SSBN 826		24-42	Various	-	-	0.000	-	-	-	-
SSBN 827		24-42	Various	87.060	152.639	0.000	-	-	-	-
SSBN 828		24-42	Various	-	32.030	91.882	501.264	-	-	-
SSBN 829		24-42	Various	-	-	32.796	73.909	449.045	-	-
SSBN 830		24-42	Various	-	-	0.000	33.554	100.396	460.279	-
SSBN 831		24-42	Various	-	-	0.000	-	34.342	127.908	471.449
SSBN 832		24-42	Various	-	-	0.000	-	-	35.149	130.954
SSBN 833		24-42	Various	-	-	0.000	-	-	-	35.975
Total: BASIC CONSTRUCTION (5) - ADVANCE CONSTRUCTION				87.060	184.669	124.678	608.727	583.783	623.336	638.378
BASIC CONSTRUCTION (6) - EOQ IN SUPPORT OF MULTI-PROGRAM PROCUREMENT										
SSBN 827		24-42	Various	20.000	-	0.000	-	-	-	-
SSBN 829		24-42	Various	-	-	201.588	-	-	-	-
SSBN 830		24-42	Various	-	-	201.598	103.412	-	-	-
SSBN 831		24-42	Various	-	-	100.851	102.869	104.926	-	-
SSBN 832		24-42	Various	-	-	101.023	102.950	105.033	-	-
SSBN 837 - Production Backup Units		24-42	Various	146.419	140.871	164.568	166.910	169.653	172.643	175.213
Total: BASIC CONSTRUCTION (6) - EOQ IN SUPPORT OF MULTI-PROGRAM PROCUREMENT				166.419	140.871	769.628	476.141	379.612	172.643	175.213
BASIC CONSTRUCTION (7) - SHIPYARD MANUFACTURED ITEMS CONTINUOUS PRODUCTION										
SSBN 827		12-36	Various	12.229	16.145	0.000	-	-	-	-
SSBN 828		12-36	Various	8.210	2.780	16.268	15.299	-	-	-
SSBN 829		12-36	Various	4.567	5.860	5.789	11.660	14.476	-	-
SSBN 830		12-36	Various	-	5.780	4.000	7.531	11.057	10.395	-
SSBN 831		12-36	Various	0.930	-	4.610	4.683	7.968	9.694	13.665
SSBN 832		12-36	Various	-	1.180	0.000	5.420	5.737	6.339	10.797
SSBN 833		12-36	Various	-	-	0.940	-	5.752	5.064	5.769

UNCLASSIFIED

Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy						Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine						
First System (2024) Award Date: October 2020		First System (2024) Completion Date: October 2027				Interval Between Systems: 0 Months				
Cost Elements		Production Leadtime (Months)	When Required* (Months)	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
SSBN 834		12-36	Various	-	-	0.000	1.099	-	5.096	5.430
SSBN 835		12-36	Various	-	-	0.000	-	1.165	-	2.324
SSBN 836		12-36	Various	-	-	0.000	-	-	1.030	-
SSBN 837		12-36	Various	-	-	0.000	-	-	-	0.938
Total: BASIC CONSTRUCTION (7) - SHIPYARD MANUFACTURED ITEMS CONTINUOUS PRODUCTION				25.936	31.745	31.607	45.692	46.155	37.618	38.923
NUCLEAR PROPULSION PLANT EQUIPMENT (8)										
SSBN 826		30-72	Various	-	-	0.000	-	-	-	-
SSBN 827 (In support of AC)		30-72	Various	797.262	-	0.000	-	-	-	-
SSBN 828 (In Support of AC)		30-72	Various	-	772.686	522.192	-	-	-	-
SSBN 829 (In Support of AC)		30-72	Various	-	-	750.213	533.391	-	-	-
SSBN 830 (In support of AC)		30-72	Various	-	-	0.000	735.740	553.880	-	-
SSBN 831 (In Support of AC)		30-72	Various	-	-	0.000	-	730.134	573.212	-
SSBN 832 (In Support of AC)		30-72	Various	-	-	0.000	-	-	730.463	594.058
SSBN 833 (In Support of AC)		30-72	Various	-	-	0.000	-	-	-	737.903
Total: NUCLEAR PROPULSION PLANT EQUIPMENT (8)				797.262	772.686	1,272.405	1,269.131	1,284.014	1,303.675	1,331.961
HM&E (9)										
SSBN 826 (In support of AC)		24-42	Various	-	-	0.000	-	-	-	-
SSBN 827 (In Support of AC)		24-42	Various	42.857	51.035	0.000	-	-	-	-
SSBN 828 (In support of AC)		24-42	Various	-	35.250	30.739	-	-	-	-
SSBN 829 (In Support of AC)		24-42	Various	-	-	36.085	31.468	-	-	-
SSBN 830 (In Support of AC)		24-42	Various	-	-	0.000	36.940	32.214	-	-
SSBN 831 (In Support of AC)		24-42	Various	-	-	0.000	-	37.816	32.977	-
SSBN 832 (In Support of AC)		24-42	Various	-	-	0.000	-	-	38.712	33.758
SSBN 833 (In Support of AC)		24-42	Various	-	-	0.000	-	-	-	39.629
Total: HM&E (9)				42.857	86.285	66.824	68.408	70.030	71.689	73.387
ORDNANCE SWS SHIPBOARD SYSTEMS (10) - LLTM										
SSBN 826 (In Support of AC)		12-48	Various	-	-	0.000	-	-	-	-
SSBN 827 (In Support of AC)		12-48	Various	46.882	73.475	0.000	-	-	-	-

UNCLASSIFIED

Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy							Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine					
First System (2024) Award Date: October 2020		First System (2024) Completion Date: October 2027			Interval Between Systems: 0 Months				
Cost Elements	Production Leadtime (Months)	When Required* (Months)	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
SSBN 828 (In Support of AC)	12-48	Various	12.857	32.610	54.102	24.641	-	-	-
SSBN 829 (In Support of AC)	12-48	Various	11.355	5.322	12.390	60.219	30.910	-	-
SSBN 830 (In Support of AC)	12-48	Various	-	-	5.375	44.826	31.153	29.734	-
SSBN 831 (In Support of AC)	12-48	Various	-	-	0.000	5.429	35.059	58.996	6.174
SSBN 832 (In Support of AC)	12-48	Various	-	-	0.000	-	5.895	36.316	59.976
SSBN 833 (In Support of AC)	12-48	Various	-	-	0.000	-	-	5.803	36.098
SSBN 834 (In Support of AC)	12-48	Various	-	-	0.000	-	-	-	5.597
SSBN 835 (In Support of AC)	12-48	Various	-	-	0.000	-	-	-	-
SSBN 836 (In Support of AC)	12-48	Various	-	-	0.000	-	-	-	-
SSBN 837 (In Support of AC)	12-48	Various	-	-	0.000	-	-	-	-
Total: ORDNANCE SWS SHIPBOARD SYSTEMS (10) - LLTM			71.094	111.407	71.867	135.115	103.017	130.849	107.845
ORDNANCE SWS SHIPBOARD SYSTEMS (11) - ECONOMIC ORDER QUANTITY									
SSBN 826	12-24	Various	-	-	0.000	-	-	-	-
SSBN 827	12-24	Various	0.892	0.062	0.000	-	-	-	-
SSBN 828	12-24	Various	0.892	0.062	0.929	0.255	-	-	-
SSBN 829	12-24	Various	0.892	0.062	0.929	0.255	0.250	-	-
SSBN 830	12-24	Various	0.891	0.062	0.929	0.255	0.250	0.481	-
SSBN 831	12-24	Various	0.891	0.057	0.929	0.255	0.250	0.481	0.250
SSBN 832	12-24	Various	0.892	0.057	0.929	0.255	0.250	0.481	0.250
SSBN 833	12-24	Various	0.893	0.057	0.929	0.255	0.251	0.481	0.250
SSBN 834	12-24	Various	0.892	0.057	0.929	0.255	0.251	0.481	0.250
SSBN 835	12-24	Various	0.892	0.055	0.929	0.255	0.251	0.481	0.250
SSBN 836	12-24	Various	0.892	0.055	0.936	0.251	0.253	0.485	0.299
SSBN 837	12-24	Various	0.892	0.055	0.929	0.255	0.251	0.481	0.250
Total: ORDNANCE SWS SHIPBOARD SYSTEMS (11) - ECONOMIC ORDER QUANTITY			9.811	0.641	9.297	2.546	2.257	3.852	1.799
ORDNANCE SWS SHIPBOARD SYSTEMS (12) - CONTINUOUS PRODUCTION									
SSBN 827	12-24	Various	1.129	-	0.000	-	-	-	-
SSBN 828	12-24	Various	37.418	30.871	0.000	-	-	-	-

UNCLASSIFIED

Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy						Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine						
First System (2024) Award Date: October 2020		First System (2024) Completion Date: October 2027			Interval Between Systems: 0 Months					
Cost Elements		Production Leadtime (Months)	When Required* (Months)	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
SSBN 829		12-24	Various	3.760	29.422	27.632	1.870	7.376	-	-
SSBN 830		12-24	Various	9.776	12.583	31.643	28.871	6.000	5.847	-
SSBN 831		12-24	Various	0.420	9.147	8.889	31.735	39.441	11.847	-
SSBN 832		12-24	Various	-	9.753	8.889	7.133	31.403	45.613	-
SSBN 833		12-24	Various	-	3.522	6.084	9.067	7.357	36.381	43.517
SSBN 834		12-24	Various	-	1.983	1.779	6.208	9.342	7.618	41.518
SSBN 835		12-24	Various	-	-	4.001	-	9.343	7.620	46.578
SSBN 836		12-24	Various	-	-	3.994	-	-	9.687	16.083
SSBN 837		12-24	Various	-	-	3.994	-	-	-	18.136
-		12	Various	-	-	0.000	-	-	-	-
Total: ORDNANCE SWS SHIPBOARD SYSTEMS (12) - CONTINUOUS PRODUCTION				52.503	97.281	96.905	84.884	110.262	124.613	165.832
ELECTRONICS (13)										
SSBN 826		12-24	Various	-	-	0.000	-	-	-	-
SSBN 827 (EOQ in support of Multi-Program Procurement)		12-24	Various	-	-	0.000	-	-	-	-
SSBN 827		12-24	Various	8.097	26.587	0.000	-	-	-	-
SSBN 828		12-24	Various	-	-	8.430	27.661	-	-	-
SSBN 829		12-24	Various	-	-	0.000	8.593	28.214	-	-
SSBN 830		12-24	Various	-	-	0.000	-	8.764	27.212	-
SSBN 831		12-24	Various	-	-	0.000	-	-	12.473	27.757
SSBN 832		12-24	Various	-	-	0.000	-	-	-	12.722
Total: ELECTRONICS (13)				8.097	26.587	8.430	36.254	36.978	39.685	40.479
Total Advance Procurement/Obligation Authority				1,773.980	2,778.553	3,390.734	3,932.378	3,481.110	3,660.061	3,782.709
*Note: "When Required" is the number of months required before ship delivery.										

UNCLASSIFIED

Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy				Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1			P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine				
Cost Elements	FY 2024						
	Production Leadtime <i>(Months)</i>	When Required* <i>(Months)</i>	Unit Cost <i>(\$ M)</i>	Contract Forecast Date	2024 Qty <i>(Each)</i>	For FY	Total Cost Request <i>(\$ M)</i>
PLANS							
Supplier Development - SSBN 827 (2)	12-60	Various	-		-	2024	0.000
Supplier Development - SSBN 837 (2)	12-60	Various	-		-	2035	0.000
Supplier Development- Submarine Industrial Base - SSBN 837 (2)	12-60	Various	-	Oct 2023	-	2035	400.000
SSBN 830	12-60	Various	-		-	2028	0.000
SSBN 831	12-60	Various	-		-	2029	0.000
SSBN 832	12-60	Various	-		-	2030	0.000
Total: PLANS							400.000
BASIC CONSTRUCTION (3) - SHIPBUILDER PROCURED LLTM							
SSBN 827	24-54	Various	-		-	2024	0.000
SSBN 828	24-54	Various	-	Oct 2023	-	2026	192.009
SSBN 829	24-54	Various	-	Oct 2023	-	2028	172.948
SSBN 830	24-54	Various	-		-	2028	0.000
SSBN 831	24-54	Various	-		-	2028	0.000
SSBN 832	24-54	Various	-		-	2030	0.000
SSBN 833	24-54	Various	-		-	2031	0.000
Total: BASIC CONSTRUCTION (3) - SHIPBUILDER PROCURED LLTM							364.957
BASIC CONSTRUCTION (4) - MISSILE TUBE CONTINUOUS PRODUCTION & OUTFITTING							
SSBN 827	36-42	Various	-		-	2024	0.000
SSBN 828	36-42	Various	-	Oct 2023	-	2026	33.104
SSBN 829	36-42	Various	-	Oct 2023	-	2027	58.909
SSBN 830	36-42	Various	-	Oct 2023	-	2028	63.393
SSBN 831	36-42	Various	-	Oct 2023	-	2029	18.730
SSBN 832	36-42	Various	-		-	2030	0.000
SSBN 833	36-42	Various	-		-	2031	0.000
SSBN 834	36-42	Various	-		-	2032	0.000
SSBN 835	36-42	Various	-		-	2033	0.000
Total: BASIC CONSTRUCTION (4) - MISSILE TUBE CONTINUOUS PRODUCTION & OUTFITTING							174.136
BASIC CONSTRUCTION (5) - ADVANCE CONSTRUCTION							

UNCLASSIFIED

Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy					Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Cost Elements	FY 2024						
	Production Leadtime (Months)	When Required* (Months)	Unit Cost (\$ M)	Contract Forecast Date	2024 Qty (Each)	For FY	Total Cost Request (\$ M)
SSBN 827	24-42	Various	-		-	2024	0.000
SSBN 828	24-42	Various	-	Oct 2023	-	2026	91.882
SSBN 829	24-42	Various	-	Oct 2023	-	2027	32.796
SSBN 830	24-42	Various	-		-	2028	0.000
SSBN 831	24-42	Various	-		-	2029	0.000
SSBN 832	24-42	Various	-		-	2030	0.000
SSBN 833	24-42	Various	-		-	2031	0.000
Total: BASIC CONSTRUCTION (5) - ADVANCE CONSTRUCTION							124.678
BASIC CONSTRUCTION (6) - EOQ IN SUPPORT OF MULTI-PROGRAM PROCUREMENT							
SSBN 827	24-42	Various	-		-	2024	0.000
SSBN 829	24-42	Various	-	Oct 2023	-	2027	201.588
SSBN 830	24-42	Various	-	Oct 2023	-	2027	201.598
SSBN 831	24-42	Various	-	Oct 2023	-	2029	100.851
SSBN 832	24-42	Various	-	Oct 2023	-	2030	101.023
SSBN 837 - Production Backup Units	24-42	Various	-	Oct 2023	-	2035	164.568
Total: BASIC CONSTRUCTION (6) - EOQ IN SUPPORT OF MULTI-PROGRAM PROCUREMENT							769.628
BASIC CONSTRUCTION (7) - SHIPYARD MANUFACTURED ITEMS CONTINUOUS PRODUCTION							
SSBN 827	12-36	Various	-		-	2024	0.000
SSBN 828	12-36	Various	-	Oct 2023	-	2026	16.268
SSBN 829	12-36	Various	-	Oct 2023	-	2027	5.789
SSBN 830	12-36	Various	-	Oct 2023	-	2028	4.000
SSBN 831	12-36	Various	-	Oct 2023	-	2029	4.610
SSBN 832	12-36	Various	-		-	2030	0.000
SSBN 833	12-36	Various	-	Oct 2023	-	2031	0.940
SSBN 834	12-36	Various	-		-	2032	0.000
SSBN 835	12-36	Various	-		-	2033	0.000
SSBN 836	12-36	Various	-		-	2034	0.000
SSBN 837	12-36	Various	-		-	2035	0.000

UNCLASSIFIED

Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy					Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Cost Elements	FY 2024						
	Production Leadtime <i>(Months)</i>	When Required* <i>(Months)</i>	Unit Cost <i>(\$ M)</i>	Contract Forecast Date	2024 Qty <i>(Each)</i>	For FY	Total Cost Request <i>(\$ M)</i>
Total: BASIC CONSTRUCTION (7) - SHIPYARD MANUFACTURED ITEMS CONTINUOUS PRODUCTION							31.607
NUCLEAR PROPULSION PLANT EQUIPMENT (8)							
SSBN 827 (In support of AC)	30-72	Various	-		-	2024	0.000
SSBN 828 (In Support of AC)	30-72	Various	-	Oct 2023	-	2026	522.192
SSBN 829 (In Support of AC)	30-72	Various	-	Oct 2023	-	2027	750.213
SSBN 830 (In support of AC)	30-72	Various	-		-	2028	0.000
SSBN 831 (In Support of AC)	30-72	Various	-		-	2029	0.000
SSBN 832 (In Support of AC)	30-72	Various	-		-	2030	0.000
SSBN 833 (In Support of AC)	30-72	Various	-		-	2031	0.000
Total: NUCLEAR PROPULSION PLANT EQUIPMENT (8)							1,272.405
HM&E (9)							
SSBN 827 (In Support of AC)	24-42	Various	-		-	2024	0.000
SSBN 828 (In support of AC)	24-42	Various	-	Oct 2023	-	2026	30.739
SSBN 829 (In Support of AC)	24-42	Various	-	Oct 2023	-	2028	36.085
SSBN 830 (In Support of AC)	24-42	Various	-		-	2029	0.000
SSBN 831 (In Support of AC)	24-42	Various	-		-	2029	0.000
SSBN 832 (In Support of AC)	24-42	Various	-		-	2030	0.000
SSBN 833 (In Support of AC)	24-42	Various	-		-	2031	0.000
Total: HM&E (9)							66.824
ORDNANCE SWS SHIPBOARD SYSTEMS (10) - LLTM							
SSBN 827 (In Support of AC)	12-48	Various	-		-	2024	0.000
SSBN 828 (In Support of AC)	12-48	Various	-	Oct 2023	-	2026	54.102
SSBN 829 (In Support of AC)	12-48	Various	-	Oct 2023	-	2027	12.390
SSBN 830 (In Support of AC)	12-48	Various	-	Oct 2023	-	2029	5.375
SSBN 831 (In Support of AC)	12-48	Various	-		-	2029	0.000
SSBN 832 (In Support of AC)	12-48	Various	-		-	2030	0.000
SSBN 833 (In Support of AC)	12-48	Various	-		-	2032	0.000
SSBN 834 (In Support of AC)	12-48	Various	-		-	2032	0.000
SSBN 835 (In Support of AC)	12-48	Various	-		-	2033	0.000

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy					Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1			P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine				
Cost Elements	FY 2024						
	Production Leadtime (Months)	When Required* (Months)	Unit Cost (\$ M)	Contract Forecast Date	2024 Qty (Each)	For FY	Total Cost Request (\$ M)
SSBN 836 (In Support of AC)	12-48	Various	-		-	2034	0.000
SSBN 837 (In Support of AC)	12-48	Various	-		-	2035	0.000
Total: ORDNANCE SWS SHIPBOARD SYSTEMS (10) - LLTM							71.867
ORDNANCE SWS SHIPBOARD SYSTEMS (11) - ECONOMIC ORDER QUANTITY							
SSBN 827	12-24	Various	-		-	2024	0.000
SSBN 828	12-24	Various	-	Oct 2023	-	2026	0.929
SSBN 829	12-24	Various	-	Oct 2023	-	2027	0.929
SSBN 830	12-24	Various	-	Oct 2023	-	2028	0.929
SSBN 831	12-24	Various	-	Oct 2023	-	2029	0.929
SSBN 832	12-24	Various	-	Oct 2023	-	2030	0.929
SSBN 833	12-24	Various	-	Oct 2023	-	2031	0.929
SSBN 834	12-24	Various	-	Oct 2023	-	2032	0.929
SSBN 835	12-24	Various	-	Oct 2023	-	2033	0.929
SSBN 836	12-24	Various	-	Oct 2023	-	2034	0.936
SSBN 837	12-24	Various	-	Oct 2023	-	2035	0.929
Total: ORDNANCE SWS SHIPBOARD SYSTEMS (11) - ECONOMIC ORDER QUANTITY							9.297
ORDNANCE SWS SHIPBOARD SYSTEMS (12) - CONTINUOUS PRODUCTION							
SSBN 827	12-24	Various	-		-	2024	0.000
SSBN 828	12-24	Various	-		-	2026	0.000
SSBN 829	12-24	Various	-	Oct 2023	-	2027	27.632
SSBN 830	12-24	Various	-	Oct 2023	-	2028	31.643
SSBN 831	12-24	Various	-	Oct 2023	-	2029	8.889
SSBN 832	12-24	Various	-	Oct 2023	-	2030	8.889
SSBN 833	12-24	Various	-	Oct 2023	-	2031	6.084
SSBN 834	12-24	Various	-	Oct 2023	-	2032	1.779
SSBN 835	12-24	Various	-	Oct 2023	-	2033	4.001
SSBN 836	12-24	Various	-	Oct 2023	-	2034	3.994
SSBN 837	12-24	Various	-	Oct 2023	-	2035	3.994
-	12	Various	-		-		0.000

UNCLASSIFIED

Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification):				PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1				P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine			
Cost Elements	FY 2024						
	Production Leadtime (Months)	When Required* (Months)	Unit Cost (\$ M)	Contract Forecast Date	2024 Qty (Each)	For FY	Total Cost Request (\$ M)
Total: ORDNANCE SWS SHIPBOARD SYSTEMS (12) - CONTINUOUS PRODUCTION							96.905
ELECTRONICS (13)							
SSBN 827 (EOQ in support of Multi-Program Procurement)	12-24	Various	-		-	2024	0.000
SSBN 827	12-24	Various	-		-	2024	0.000
SSBN 828	12-24	Various	-	Oct 2023	-	2026	8.430
SSBN 829	12-24	Various	-		-	2027	0.000
SSBN 830	12-24	Various	-		-	2028	0.000
SSBN 831	12-24	Various	-		-	2029	0.000
SSBN 832	12-24	Various	-		-	2030	0.000
Total: ELECTRONICS (13)							8.430
Total Advance Procurement/Obligation Authority							3,390.734
Description: Footnotes: NOTE: In support of the August 2020 Lead Ship Authorization In Progress Review, the program completed an updated cost estimate update in 2020 and cost deltas were reflected in the FY2022 budget submission. In 2021, SEA05C completed their annual cost estimate and overall there were only minor changes and those were reflected in the FY2023 budget submission. SSBN826-837 requirements are updated for NAVSEA 05C's 2021 cost estimate, which includes the CAPE Lead Ship Assessment cost estimate, per direction from the Milestone Decision Authority. Estimate updates were primarily driven by updates to shipyard construction performance and material escalation. Program Advance Procurement (AP) profiles/phasing of funding have been updated to support the continuation of Integrated Enterprise Plan (IEP) funding initiatives (IEP initiatives adjust phasing of funding, not increase program funding) and the Advance Construction (AC) profile reflects the IEP AP re-phase in the 2021 cost estimate. The IEP AC re-phase accelerates ship delivery schedules to reduce the strategic deterrence coverage gaps during transition from OHIO SSBNs to CLB SSBNs and the transition from D5LE to D5LE2 missiles. It is crucial to maintain force structure necessary to meet USSTRATCOM requirements for Sea-Based Strategic Deterrence (SBSD). (1) PLANS: COLUMBIA Class Lead Design Yard and program office support for the detail design for the Common Missile Compartment, Strategic Weapons System, Propulsion Plant, and Rest of Ship. The Program achieved OSD MDA assigned 83% design maturity target in May 2020 (the requirement to start construction) and was 81.2% design disclosure completion for the entire ship at construction start (October 2020). This design maturity target was necessary to achieve the aggressive 7 year lead ship construction time for the lead ship and subsequent construction spans for the Class, which is required to support Strategic Deterrent mission requirements - there is no margin to patrol dates. Detail design activities also support critical engineering analysis and risk reduction efforts. This line reflects adjustments made based on the award of the Integrated Product and Process Development (IPPD) contract. (2) SUPPLIER DEVELOPMENT: COLUMBIA Class, in coordination with Congress, continues to execute Supplier Development to de-risk construction schedules, strengthen submarine industrial base health, ensure on-time delivery of quality components and increase sub-vendors' ability to accept shipbuilder outsourced work. These funds execute supplier improvement and facilitization actions to increase capability of existing suppliers, support strategic outsourcing, increase capacity where needed, and qualify new suppliers in market spaces with capacity challenges. Initiatives include developing alternate sources for high-risk suppliers, developing sources for complex parts traditionally built at the shipbuilders that have been identified for strategic outsourcing, performing process and facility improvements with existing sources, and qualifying existing sources for more stringent requirements. Investment in the sub-vendor supplier base is required to promote facilities investment and vendor qualification to ensure adequate industrial capacity, and reduce COLUMBIA Class construction schedule risk.							

UNCLASSIFIED

Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine
<p>The FY2024 request (\$400M) for Submarine Industrial Base (SIB) investment funding is captured in SSBN837 supplier development under Plans. SIB funding is to support the generational increase in demand across the enterprise. The \$1,617M in FY2023-FY2027 is split across strategic sourcing (\$123M), supplier development (\$960M), shipyard infrastructure (\$396M), workforce development (\$108M), and technology opportunities (\$30M). These investment efforts will support improvements in SIB execution to support the Navy plan of serial production of 1 COLUMBIA plus 2 VIRGINIAs.</p> <p>- Supplier Development (\$189M FY24): The number of SIB suppliers significantly decreasing over the last 40 years has put a strain on the current SIB to meet DoD standards at the planned higher demand. EB and NNS implemented the Critical Supplier Readiness Assessment process to identify supplier shortfalls and the Navy has independently identified potential supplier developments as well. Additional investment is needed to addresses these challenges and bottlenecks by expanding the capacity of existing suppliers and standing up new sources. While prior year funding was provided to the Navy, this additional Navy funding request is based on Navy, CAPE, and shipbuilder projections for continuing needs to reduce SIB supplier base risk.</p> <p>- Shipyard Infrastructure (\$134M FY24): The changes in the Navy's 30 Year Shipbuilding Plan to increase CLB's to one ship per year in addition to VCS authorization of two ships per year (referred to as 1+2) has presented a significant challenge to shipbuilders and their suppliers. Despite previous investments to facilities, shipbuilders are not meeting schedules/required cadence and require additional SIB investment to reach required 1+2 production rates. The priorities for these investments are to complete current facilities efforts at EB and NNS, increase NNS infrastructure to support the required 1+2 rate capacity with needed resiliency, and add resiliency to Quonset Point's fabrication facilities and Groton's post-launch and Post Shakedown Availability (PSA) waterfront.</p> <p>- Strategic Outsourcing (\$37M FY24): Shipbuilders do not have sufficient capacity to accommodate CLB and VCS concurrent production without strategically outsourcing workload to qualified suppliers. SIB investments will support continued development of outsourcing partners to rapidly achieve schedule and quality proficiency. This investment covers shipbuilder and supplier efforts at the suppliers' facilities that makes strategic outsourcing possible and the costs to develop strategic outsourcing partners' capacity and capability to complete the work.</p> <p>- Workforce Development (\$32M FY24): The SIB currently faces labor/workforce challenges as a result of a shift away across the nation from manufacturing careers and turnover. These manufacturing jobs require high demand technical skillsets. Hiring employees outside of shipbuilding requires extensive training to meet submarine shipbuilding high standards. SIB investment provides funding for numerous pipeline training programs and workforce development in key areas around the country.</p> <p>- Technology Opportunities (\$8M FY24): Limited number of foundries are capable of producing forgings and castings is leading to challenges meeting current demand, as well as the planned increase in future demand. Long lead times for castings and forgings, in addition to quality issues, are creating schedule risk and resource inefficiencies. Additive Manufacturing (AM) is a technology that has capability to produce some of these components. Transitioning/qualifying some of the supplier base from traditional casting to AM and digital manufacturing could address current concerns/issues, but requires dedicated investment. Secondly, non-destructive testing (NDT) continues to be a challenge area across the supplier base. Investment is needed to improve NDT process, training, and qualification.</p> <p>(3) BASIC CONSTRUCTION - SHIPBUILDER PROCURED LLTM: Funding is required to support long lead time shipbuilder procured material (for example the Weapons Handling, Air Conditioning Unit, Diesel Generator Set, non-nuclear propulsion equipment, and Reverse Osmosis Unit). These and other components are required early in the construction phase to meet the delivery schedule. 3 Year AP is required for long lead shipbuilder procured equipment for ships 2-12 as determined through actual production spans on recently-completed prototype equipment and updated shipbuilder required-in-yard need dates to support advance construction and serial production of follow-on COLUMBIA hulls. Without these efforts the construction schedules are not supported. SSBN 827, 829, and 830 LLTM values are lower as funding is also reflected in EOQ to support multiprogram procurement to mitigate construction risk and strengthen submarine industrial base (see footnote #6 - funds are reflected in this category). The LLTM profile was adjusted to account for these changes/increases in FY27 and out.</p> <p>(4) BASIC CONSTRUCTION - MISSILE TUBE CONTINUOUS PRODUCTION & OUTFITTING: COLUMBIA Class continues to execute Continuous Production of Missile Tubes to reduce schedule risk, improve manufacturing efficiencies, improve vendor learning, maintain critical production skills, and reduce costs by leveraging high-volume procurements. These benefits increase schedule margin (needed to support schedules) and reduce risk to follow ship deliveries, while also achieving cost reduction savings. Missile Tubes produced for SSBN 826 are funded through RDT&E,N Program Element 0603595N, Project Number 3220. Missile Tube Outfitting is required to continue the efforts from Missile Tube Continuous Production to support construction schedules. Missile Tube Outfitting funding provides labor in support of outfitting Missile Tubes procured under Continuous Production for the COLUMBIA Class. In addition to reducing risk to COLUMBIA on-time ship delivery, this effort is estimated to generate savings throughout the class build through workforce level loading, minimizing the effects of gaps or large variations in demand and procurement efficiencies.</p> <p>(5) BASIC CONSTRUCTION - ADVANCE CONSTRUCTION: Advance Construction (AC) efforts are to de-risk construction schedule and improve probability of on-time delivery. AC begins construction activities in key areas to gain schedule margin and reduce controlling path risks. AC is executed across all six super modules (SMs) with key areas including, but are not limited to, the Bow (Sections 1A and 1B in SM1 that includes the forward Ballast Tanks and Hemi-head), Stern (Sections 9B and 9C in SM6 that includes the X-Stern and aft Ballast Tanks and Hemi-Head) and Common Missile Compartment (CMC) adjacent areas contained in SM2 that include the Missile Compartment Control Module (MCCM). AC is normally, but not limited to, structural fabrication areas that have sufficient design maturity and material availability</p>		

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine
<p>to begin construction and some outfitting. These areas include MCCM Deck Module Fabrication, Mid-Span Tank complex and Foundation Fabrication, and Missile Compartment Forward Bulkhead and S2C Hull Cylinder Fabrication. AC efforts improve efficiency by smoothing workload at Quonset Point, NNS, and capture efficiencies. Included in AC are required efforts to support the Integrated Enterprise Plan (IEP) construction schedules for SSBNs 827-837 which enable ability to deliver ships earlier to reduce strategic coverage gaps.</p> <p>(6) BASIC CONSTRUCTION - EOQ IN SUPPORT OF MULTI-PROGRAM PROCUREMENT (MPMP): COLUMBIA continues to execute MPMP to align shipbuilder procured material procurements with COLUMBIA Class funding with funds budgeted for VIRGINIA Class (Line Item 2013) and CVN (Line Items 2001 and 2004) for common components and vendors, where applicable. The FY2024 submission includes funding to support five shipsets of Economic Order Quantity (EOQ) in support of Build II (Build II = SSBN828-832, Build III = SSBN833-837 EOQ profile is outside the FYDP) which will continue to help de-risk schedules and level load the supplier base. Advance Procurement (AP) is used to execute coordinated material procurements to align COLUMBIA Build II Multi-Program Material Procurement and VIRGINIA Class (VCS) material placements for common components and vendors. Appreciable risk mitigation is provided for COLUMBIA Class construction schedules through acceleration of material procurement, ensuring increased readiness to support construction need dates and through supplier base management and workload leveling. MPMP strengthens the industrial base to improve material availability and avoid construction delays due to late material. COLUMBIA Class Production Backup Units procure critical long lead time material to serve as rolling construction assets throughout COLUMBIA Class construction to be consumed in the event of unforeseen issues from late material or obsolescence to reduce schedule risk and avoid production disruptions from late material, and ensure Required In Yard (RIY) dates are met for compressed shipbuilding schedules. FY2024 submission continues funding and phasing from the FY2023 budget cycle adjusted to support executing additional Production Backup Unit (PBU) efforts to focus on Yellow and Green vendors to strengthen the sub-tier industrial base, and continue to reduce COLUMBIA Class schedule risk to the IEP schedules through supplier base management. PBU material not consumed during construction will be consumed on the 12th hull if not used. PBUs also strengthen critical at-risk vendors in the sub-tier industrial base, reducing the risk of future obsolescence issues and production disruptions. Funding supports the transition of Integrated Power System from GFE to CFE starting with SSBN828 (SSBN828 does not have EOQ funding as the LLTM profile covers required Basic AP efforts). FY2022 includes \$20M funded via congressional add for supplier development.</p> <p>(7) BASIC CONSTRUCTION - SHIPYARD MANUFACTURED ITEMS CONTINUOUS PRODUCTION: COLUMBIA Class continues to execute Continuous Production of selected Shipyard Manufactured Items (US Code 10 2218a subsection (i)) to reduce schedule risk, improve manufacturing efficiencies, improve learning, maintain critical production skills, and reduce costs by leveraging high-volume procurements. Continuous production of items with long lead time material requirements which are difficult to manufacture helps ensure critical material is available to support construction schedules. These benefits will increase schedule margin and reduce risk to follow ship deliveries, while also achieving cost reduction savings through workforce level loading and minimizing the effects of large variations in demand and procurement efficiencies. Examples of Shipyard Manufactured Items include Spherical Air Flasks, Hull Valves, Logistics Escape Trunks, Torpedo Tubes, large vertical array, and stern and bow super module components. Funding is aligned with the 2021 program estimate. Funding levels are based on specific components aligned with SSBN 828 through SSBN 830, based on requirements for continuous production items.</p> <p>(8) NUCLEAR PROPULSION PLANT EQUIPMENT: Propulsion Plant Equipment Advanced Procurement is required to fund long-lead time propulsion plant equipment to support the COLUMBIA Class' implementation of advanced modular construction methods, and meet shipbuilder required-in-yard dates in support of advance construction and serial production of follow-on COLUMBIA hulls. The component fabrication and delivery timeline is different than that of the VIRGINIA Class submarines due to COLUMBIA component production spans and shipbuilder production needs. Without three-year AP the construction schedules are not supported</p> <p>CLB propulsion plant budgets have been reduced beginning in FY24 as a direct result of a steady demand signal. The Navy's VCS cadence, the two-CVN buy of CVN 80 and 81, ramp up to serial production of COLUMBIA, construction schedule accelerations that reduce production gaps between COLUMBIA shipsets, and the support of 3-year AP funding has level-loaded demand and allowed optimized use of capacity across the nuclear industrial base. Preparations for generational shipbuilding volume included implementation of streamlined processes that eliminated unnecessary overhead, optimized material procurements, and improved production. Providing a consistent demand signal to principal suppliers has further improved the efficiency and effectiveness of long-term planning, including required vendor self-capitalization. Additionally, more rapid risk reduction from lead ship to follow ships for COLUMBIA propulsion plants than experienced in previous nuclear shipbuilding programs supports budget reductions.</p> <p>(9) HM&E: Hull Mechanical & Engineering AP is required to align the Propulsor procurement and production schedule with COLUMBIA Class Advance Construction schedule acceleration and support the overall ship schedules. Funding supports Continuous Production of Propulsors for SSBN 827-833 material and labor. This enables level loading of Naval Foundry and Propeller Center resources, and will provide needed schedule execution to mitigate the risk of supporting the accelerated shipbuilder construction schedules per the IEP. Funding supports COLUMBIA Class construction, reducing risk of construction schedule delays and cost growth, thereby ensuring nation's strategic deterrence requirements are met.</p> <p>(10) ORDNANCE SWS SHIPBOARD SYSTEMS - LLTM: Ordnance Strategic Weapons Systems (SWS) Shipboard Systems AP is required to fund Long Lead Time Material (LLTM) for the Strategic Weapon System (SWS) shipboard components to meet COLUMBIA (CLB) Class Government Furnished Equipment (GFE) Required-In-Yard (RIY) dates to support construction activities for CLB. AP is required to procure selected SWS Launcher, Fire Control and Navigation Subsystem components including launch tube assemblies and construction support equipment, launch tube umbilical housings, launcher ejector group and vertical support group equipment; Fire Control power and network equipment and sub-assemblies; and Fire Control and Navigation common infrastructure. The SWS shipboard components have</p>		

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 01 / 1		P-1 Line Item Number / Title: 1045 / COLUMBIA Class Submarine
<p>a lead time of 12-48 months and are required by the shipbuilder early in the construction phase to meet the ship delivery schedule. (Note: SWS components requiring 48 month lead time for SSBN 826 are procured through RDT&E,N Program Element 0603595N, Project Number 3220 in support of lead ship Missile Tube Module prototyping.) A delay to these LLTM purchases will impact the U.S. Navy's ability to meet the shipbuilder's RIY dates for tactical hardware resulting in increased schedule risk to construction and ship delivery. Since the FY2021 submission, in order to support the Integrated Enterprise Plan schedule, required-in-yard dates for Launcher, Fire Control and Navigation subsystem components were reevaluated and subsequent rephasing was required to minimize risk to meet the COLUMBIA construction schedules. This line does not fund any efforts related to the development and procurement of the TRIDENT II D5 Life Extension (D5LE) Missile or TRIDENT II D5 Life Extension 2 (D5LE2) Missile (however, CLB SWS is dependent on these efforts to ensure the system maintains demonstrated performance and remains survivable while facing a dynamic threat environment until COLUMBIA end of life).</p> <p>(11) ORDNANCE SWS SHIPBOARD SYSTEMS - EOQ: Ordnance SWS Shipboard Systems EOQ funding is required for large lot procurements of SWS shipboard components to mitigate significant obsolescence, requalification and vendor risk while ensuring SWS homogeneity and consistent SWS system performance across all COLUMBIA Class hulls. Examples include SWS Launcher Subsystem Detonator Power Assembly electronics components and SWS Fire Control Subsystem components such as network switch memory and flash devices, Navigation Timing Interface Module oscillators and display units. Funding enables opportunities to mitigate obsolescence and construction schedule risks, and realize additional cost savings outside the FYDP. This line does not fund any efforts related to the development and procurement of the TRIDENT II D5 Life Extension (D5LE) Missile or TRIDENT II D5 Life Extension 2 (D5LE2) Missile.</p> <p>(12) ORDNANCE SWS SHIPBOARD SYSTEMS- CONTINUOUS PRODUCTION: Ordnance SWS Shipboard Systems Continuous Production (U.S. Code 10 2218a subsection (i)) of SWS Navigation Subsystem, Inertial Navigation Systems and Gyros and Launcher Subsystem Launch tubes and on-tube components is required to procure critical components to ensure homogeneity and consistent SWS system performance across the SWS unit builds, maintain critical production and fabrication skills, eliminate production re-starts and potential re-qualification risk while gaining manufacturing efficiencies and mitigating SWS Subsystem obsolescence across all COLUMBIA Class hulls during construction. These benefits will reduce schedule risk by ensuring on-time deliveries of SWS GFE to the shipbuilder, support the IEP ship schedules, and result in cost savings outside of the FYDP. Follow-on procurements are outside the FYDP. This line does not fund any efforts related to the development and procurement of the TRIDENT II D5 Life Extension (D5LE) Missile or TRIDENT II D5 Life Extension 2 (D5LE2) Missile.</p> <p>(13) ELECTRONICS: Electronics Equipment AP is required to fund the GFE material that either has a long-lead procurement time, or is required to meet shipbuilding contract early construction delivery requirements. Material includes SONAR hydrophones for the bow array, the Low Cost Conformal Array, the WSQ-9 arrays, and a wide range of components required to outfit the Command and Control System Module (CCSM) where the predominant portion of the C5I system electronics reside.</p> <p>*Note: "When Required" is the number of months required before ship delivery.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy								Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships						P-1 Line Item Number / Title: 2001 / Carrier Replacement Program						
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: 223												
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 (<i>Units in Each</i>)	3	-	-	-	-	-	-	-	-	1	-	4
Gross/Weapon System Cost (<i>\$ in Millions</i>)	38,829.403	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17,324.660	-	56,154.063
Less PY Advance Procurement (<i>\$ in Millions</i>)	9,253.301	-	-	-	-	-	-	-	-	3,001.587	-	12,254.888
Less Cost To Complete (<i>\$ in Millions</i>)	2,843.160	-	-	-	-	-	-	-	-	-	-	2,843.160
Less Subsequent Year Full Funding (<i>\$ in Millions</i>)	21,987.323	-	-	-	-	-	-	-	-	12,203.511	-	34,190.834
Net Procurement (P-1) (<i>\$ in Millions</i>)	4,745.619	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2,119.562	-	6,865.181
Plus Subsequent Year Full Funding (<i>\$ in Millions</i>)	15,927.225	1,062.205	1,465.880	1,115.296	-	1,115.296	2,416.717	-	-	-	12,203.511	34,190.834
Full Funding TOA (<i>\$ in Millions</i>)	20,672.844	1,062.205	1,465.880	1,115.296	-	1,115.296	2,416.717	-	-	2,119.562	12,203.511	41,056.015
Plus CY Advance Procurement (<i>\$ in Millions</i>)	9,253.301	-	-	-	-	-	-	1,159.211	1,842.376	-	-	12,254.888
Plus Cost To Complete (<i>\$ in Millions</i>)	1,465.860	291.000	461.700	624.600	-	624.600	-	-	-	-	-	2,843.160
Total Obligation Authority (<i>\$ in Millions</i>)	31,392.005	1,353.205	1,927.580	1,739.896	0.000	1,739.896	2,416.717	1,159.211	1,842.376	2,119.562	12,203.511	56,154.063
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	743.508	41.981	66.622	43.402	-	43.402	187.556	107.283	39.058	140.707	107.711	1,477.828
Total (<i>\$ in Millions</i>)	32,135.513	1,395.186	1,994.202	1,783.298	-	1,783.298	2,604.273	1,266.494	1,881.434	2,260.269	12,311.222	57,631.891
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	12,943.134	-	-	-	-	-	-	-	-	17,324.660	-	14,038.516
Description: To provide credible, sustainable, independent forward presence during peacetime without access to land bases; operate as the cornerstone of a joint and/or allied maritime expeditionary force in response to crisis; and carry the war to the enemy through joint multi-mission offensive operations. The Navy designed the FORD Class aircraft carrier with the warfighting capability essential for the 21st century, and the flexibility and resilience to rapidly adapt to emerging threats. The Ford class incorporates advances in technology such as a new reactor plant, propulsion system, electric plant, Electromagnetic Aircraft Launch System (EMALS), Advanced Arresting Gear (AAG), machinery control, and integrated warfare systems that increase lethality, while lowering life cycle costs through reductions in maintenance and manning requirements. Increased Service Life Allowances (SLA) for weight and stability enable future modernization and the ability to adapt to new missions over the ship's 50-year life cycle. CVN 80 and CVN 81 were awarded under a two-ship buy. CVN 80 is a separate contract line item under the same contract as CVN 81, which allows discrete hull costs to be captured. The CVN 80/81 construction contract is a Fixed Price Incentive (Firm Target) (FPIF) contract type that limits the Navy's liability and incentivizes the shipyard's best performance. The contract language guarantees a single technical baseline for both ships, which allows the shipyard to re-use engineering rollover products, minimize changes between the two ships and leverages economic order quantities for equipment and material procurement. CVN 82 is currently budgeted as a FY 2028 single ship procurement with Advanced Procurement funding in FY 2026 and FY 2027. CVN 81 was moved to BLI 2004 in accordance with the Department of Defense Appropriations Act, 2020.												

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023																																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships			P-1 Line Item Number / Title: 2001 / Carrier Replacement Program																																									
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: 223																																												
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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2001 / Carrier Replacement Program		
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2013		FY 2018	
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>
Plan Costs	1	914.363	1	433.200
Basic Construction/Conversion		7,813.256		7,830.789
Change Orders		346.135		264.392
Electronics (†)		280.426		356.827
Propulsion Equipment		2,034.582		2,524.461
Hull, Mechanical, and Electrical (HM&E) (†)		29.832		22.466
Ordnance (†)		1,148.222		1,257.604
Other Cost		133.154		123.202
Total Ship Estimate		12,699.970		12,812.941
Less Advance Procurement FY 2007		52.750		-
Less Advance Procurement FY 2008		123.530		-
Less Advance Procurement FY 2009		1,210.561		-
Less Advance Procurement FY 2010		482.938		-
Less Advance Procurement FY 2011		902.473		-
Less Advance Procurement FY 2012		554.798		-
Less Advance Procurement FY 2016		-		862.358
Less Advance Procurement FY 2017		-		1,370.784
Less Subsequent Full Funding FY 2014		917.553		-
Less Subsequent Full Funding FY 2015		1,219.405		-
Less Subsequent Full Funding FY 2016		1,569.543		-
Less Subsequent Full Funding FY 2017		1,241.783		-
Less Subsequent Full Funding FY 2018		2,556.384		-
Less Subsequent Full Funding FY 2019		-		929.122
Less Subsequent Full Funding FY 2020		-		1,062.000
Less Subsequent Full Funding FY 2021		-		958.933
Less Subsequent Full Funding FY 2022		-		1,062.205
Less Subsequent Full Funding FY 2023		-		1,465.880
Less Subsequent Full Funding FY 2024		-		1,115.296
Less Subsequent Full Funding FY 2025		-		2,416.717
Less Cost to Complete FY 2022		291.000		-
Less Cost to Complete FY 2023		461.700		-
Less Cost to Complete FY 2024		624.600		-
Net P-1 Funding		490.952		1,569.646

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2001 / Carrier Replacement Program
<p>Remarks:</p> <p>CVN 79</p> <p>From the FY 2023 budget submission, funds were realigned from Basic Construction (\$42.3M) to Plans \$9.1M, Change Orders \$21.7M, Electronics (\$0.3M), HM&E \$0.4M, and Other Costs \$11.4M due to fact of life changes for execution purposes and single phase adjudication.</p> <p>The CVN 79 realignment to Change Orders of \$21.7M from the FY 2023 budget submission is attributed to additional technical issues from the CVN 78 discovered in the last 2 years which required incorporation into the CVN 79 contract.</p> <p>The CVN 79 realignment to Other Cost of \$11.4M from the FY 2023 budget submission is attributed to the award of the single phase contract modification in 2022. Single phase added 24 months to the CVN 79 DD&C Contract to incorporate a new radar suit, JSF modifications, and the resolution of technical items discovered late in the CVN 78 program. To support the added duration and incorporation of new systems, additional funding is required for engineering and logistics products as well as light off and certification of the new combat system.</p> <p>CVN 80</p> <p>Basic: Increase of \$1.8M from the FY 2023 budget submission due to economic inflation adjustments.</p> <p>Electronics: Decrease of \$21.8M from the FY 2023 budget submission due to Congressional reduction for Government Furnished Equipment (GFE) ahead of need and refined estimates.</p>		

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2001 / Carrier Replacement Program		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
CVN 79 ⁽¹⁾	Huntington Ingalls Industries, Newport News Shipbuilding	2013	Jun 2015	Feb 2011	Jul 2025
CVN 80	Huntington Ingalls Industries, Newport News Shipbuilding	2018	Jan 2019	Jan 2019	Mar 2028
CVN 82	Huntington Ingalls Industries, Newport News Shipbuilding	2028	Sep 2028	Sep 2028	Sep 2037
Footnotes: ⁽¹⁾ The CVN 79 delivery date is being adjusted to July 2025 to support a revised ship delivery/post-delivery strategy. The Navy is implementing a strategy to pull baseline work from the Post Shakedown Availability (PSA) into the construction period in order to provide more capability at ship delivery. This approach will prepare CVN 79 as the first FORD class aircraft carrier to operate in the Indo-Pacific region and decrease the amount of time CVN 79 would be required to be at the shipyard after ship delivery to conduct the PSA. CVN 79s PSA will align to a traditional period of resolving discrepancies discovered during trials. The revised strategy maintains the overall "ready for deployment workups" milestone for CVN 79.					

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2001 / Carrier Replacement Program		
Electronics	FY 2013		FY 2018	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
CONSOLIDATED AFLOAT NETWORK AND ENTERPRISE SERVICES (CANES)	1	20.066	1	23.913
AN/USG-2, COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	1	8.060	1	6.110
DIGITAL MODULAR RADIO (DMR) ULTRA HIGH FREQUENCY/VERY HIGH FREQUENCY LINE OF SIGHT (EHF/VHF LOS) SAT	1	8.803	1	10.904
AN/UPX-29(V), INTERROGATOR FRIEND OR FOE (IFF) W/MK XII	1	7.738	1	8.425
SPN-46, AUTOMATIC CARRIER LANDING SYSTEM	1	12.965	1	17.372
SHIP SELF DEFENSE SYSTEM (SSDS)	1	27.825	1	32.306
AN/SYY-1(V)1 AIR TRAFFIC CONTROL SYSTEM, SHIPBOARD	1	5.241	1	6.386
NAVY MULTI-BAND TERMINAL (NMT)	1	5.444	1	8.646
AN/SLQ-32(V)6, SURFACE ELECTRONIC WARFARE IMPROVEMENT PROGRAM (SEWIP) BLOCK 2	1	14.209	1	13.904
AN/SRQ-6/MCS-21, SHIPS SIGNAL EXPLOITATION EQUIPMENT (SSEE)	1	5.476	0	-
AN/SRC-61 (V)X HFDAG	1	5.228	1	6.059
JOINT PRECISION AIRCRAFT LANDING SYSTEMS (JPALS)	1	12.408	1	10.875
ELECTRONIC CONSOLIDATED AUTOMATED SUPPORT SYSTEM (eCASS)	1	40.402	1	39.900
OA-9277 ULTRA HIGH FREQUENCY (UHF) MULTICOUPLER	0	-	1	7.850
AN/USQ-214(V)1, NETWORK TACTICAL COMMON DATA LINK (NTCDL) SYSTEM	0	-	1	6.132
AN/WSN-7(V)3, RING LASER GYRO NAVIGATOR (RLGN)	0	-	1	5.366
SPECTRAL	0	-	1	11.962
MK 53 MOD 15 DECOY LAUNCHING SYSTEM (NULKA)	0	-	1	33.900
P-35 Items Subtotal		173.865		250.010
Major Items				
AN/USQ-155(V)1 TACTICAL VARIANT SWITCH	1	2.259	1	2.743
INFORMATION ASSURANCE (IA)		2.000		2.465
AN/URC-141X(V), MULTI-FUNCTION INFORMATION DISTRIBUTION SYSTEM (MIDS)-ON SHIP (MOS)	1	1.206	1	1.586
AN/SLQ-25E DUAL, SURFACE SHIP TORPEDO DEFENSE SYSTEM, NIXIE	1	7.472	1	5.243
SHIPBOARD AIR TRAFFIC CONTROL COMMUNICATIONS (SATCC)	1	2.131	1	2.343
AN/WSN-7(V)3, RING LASER GYRO NAVIGATOR (RLGN)	1	2.753	0	-
DISTRIBUTED SYSTEMS DESIGN INTEGRATION SERVICES	1	8.042	1	7.531
C4I INTEGRATION & COORDINATION		9.268		6.119
DISTRIBUTED COMMON GROUND STATION - NAVY (DCGS-N)	1	1.919	1	2.319
AN/USQ-144K AUTOMATED DIGITAL NETWORK SYSTEM (ADNS)	1	1.257	1	1.315
AN/UYQ-86 COMMON DATA LINK MANAGEMENT SYSTEM (CDLMS) WITH NGC2P	1	1.051	1	1.816

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2001 / Carrier Replacement Program		
Electronics	FY 2013		FY 2018	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
OA-9277 ULTRA HIGH FREQUENCY (UHF) MULTICOUPLER	1	1.852	0	-
ARC-210 CARRIER AIR TRAFFIC CONTROL CENTER (CATCC) - PRIFLY - LANDING SIGNAL OFFICER (LSO) SYSTEM	1	1.438	1	1.845
WARFARE SYSTEM INTEGRATION		14.333		16.627
COMMERCIAL BROADBAND SATELLITE PROGRAM, FORCE LEVEL VARIANT (CBSP-FLV)	2	2.371	2	3.289
AN/SSN-6(V)X BLOCK 4, NAVIGATION SENSOR SYSTEM INTERFACE (NAVSSI)	1	2.505	0	-
GLOBAL POSITIONING SYSTEM, NAVIGATION, AND TIMING SERVICE (GPNTS)	0	-	1	1.803
INTEGRATED STRIKE PLANNING & EXECUTION SYSTEMS (ISP&E)	1	2.579	1	2.123
AN/USQ-123(V), COMMUNICATIONS DATA LINK-SYSTEM (CDL-S)	1	1.170	0	-
AN/SPN-41 (V), INSTRUMENT LANDING SYSTEM (ILS)	1	4.296	1	4.214
SHIP SIGNAL EXPLOITATION SPACE (SSES/SI) COMMUNICATIONS	1	3.375	1	4.193
TURNKEY RADIO COMMUNICATIONS SYSTEM (RCS)	1	17.528	1	14.884
AN/USQ-T52 TRAINING INTERFACE UNIT (TIU) ADVANCED TRAINING DOMAIN (ATD)	1	1.570	1	2.733
AN/SPS-73(V)18 NEXT GENERATION SURFACE SEARCH RADAR (NGSSR)	0	-	1	3.424
READY ROOM (JSF) MODIFICATIONS		3.150		3.400
LITHIUM ION BATTERY HANDLING & STORAGE		2.100		2.300
OE-570G SATELLITE ANTENNA	0	-	1	1.215
ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM, NAVY (ECDIS-N)	0	-	1	1.853
Major Items Subtotal		97.625		97.383
Other Cost Elements				
Other ELECTRONICS		8.936		9.434
Other Cost Elements Subtotal		8.936		9.434
Total Electronics		280.426		356.827
Remarks: CVN 80 Electronics: Total decrease of \$21.8M from the FY 2023 budget submission. Decrease of \$15.7M due to Congressional reduction for Government Furnished Equipment (GFE) ahead of need. Decrease of \$6.1M due to refined estimates for ISP&E. AN/USQ-T52 Training Interface Unit (TIU) Advanced Training Domain (ATD) replaces AN/USQ-T46X(V)X, Battle Force Tactical Training System (BFTT) on CVN 79 and CVN 80. Next Generation Surface Search Radar (NGSSR) replaces AN/SPS-73A(V)12-Tech Refresh - Surface Search Radar on the CVN 80, due to SPS-73 no longer being in production.				

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2001 / Carrier Replacement Program
AN/SLQ-25E Dual, Surface Ship Torpedo Defense System, NIXIE replaced AN/SLQ-25C Dual, Surface Ship Torpedo Defense System, NIXIE on CVN 79 and CVN 80 due to obsolescence a no longer being available to be refurbished.		

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2001 / Carrier Replacement Program		
Hull, Mechanical, and Electrical (HM&E)	FY 2013		FY 2018		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Items					
HM&E ENGINEERING SERVICES		24.009			16.494
LIFE RAFTS		2.008			1.900
SUPSHIP MATERIAL AND GFE		0.810			0.620
TRUCKS (FORKLIFTS)		0.747			0.825
Major Items Subtotal		27.574			19.839
Other Cost Elements					
Other HM&E		2.258			2.627
Other Cost Elements Subtotal		2.258			2.627
Total Hull, Mechanical, and Electrical (HM&E)		29.832			22.466

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2001 / Carrier Replacement Program		
Ordnance	FY 2013		FY 2018	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
ELECTROMAGNETIC AIRCRAFT LAUNCHING SYSTEM (EMALS)	1	686.015	1	717.739
AN/SPY-6(V)3 ENTERPRISE AIR SURVEILLANCE RADAR (EASR)	1	75.351	1	59.114
ADVANCED ARRESTING GEAR (AAG)	1	253.509	1	322.290
PHALANX BLOCK 1B MK 15 MOD 21 & 22, CLOSE - IN WEAPONS SYSTEM (CIWS)	3	19.577	3	22.467
AN/SQQ-34, CARRIER-TACTICAL SUPPORT CENTER (CV-TSC)	1	3.937	1	4.456
MK-57 NATO SEASPARROW MISSILE SYSTEM (NSSMS)	1	45.852	1	46.523
AVIATION DATA MANAGEMENT AND CONTROL SYSTEM (ADMACS)	1	5.196	1	9.520
MK 49, MOD 5 ROLLING AIRFRAME MISSILE (RAM)	2	16.278	2	23.227
AN/SPQ-9B, ANTI-SHIP MISSILE DEFENSE (ASMD) SURFACE SURVEILLANCE AND TRACKING RADAR	1	8.036	1	13.726
IMPROVED FRESNEL LENS OPTICAL LANDING SYSTEM (IFLOLS)	0	-	1	7.279
INTEGRATED LAUNCH AND RECOVERY TELEVISION SYSTEM (ILARTS)	0	-	1	6.751
P-35 Items Subtotal		1,113.751		1,233.092
Major Items				
LANDING SIGNAL OFFICER DISPLAY SYSTEM (LSODS)	1	2.601	1	2.820
MORIAH BLOCK 2	1	1.175	1	2.316
LONG RANGE LINEUP SYSTEM (LRLS)	1	0.858	1	0.966
IMPROVED FRESNEL LENS OPTICAL LANDING SYSTEM (IFLOLS)	1	2.154	0	-
INTEGRATED LAUNCH AND RECOVERY TELEVISION SYSTEM (ILARTS)	1	4.888	0	-
COMPACT SWAGING MACHINE (CSM)	2	2.424	2	3.500
JOINT STRIKE FIGHTER ALIS	1	2.337	1	1.800
MK-38 MOD 3 MACHINE GUN SYSTEM (MGS)	0	-	4	8.300
MANUALLY OPERATED VISUAL LANDING AID SYSTEM (MOVLAS)	0	-	1	1.539
Major Items Subtotal		16.437		21.241
Other Cost Elements				
DUAL BAND RADAR (DBR) (SPY-3 AND VOLUME SEARCH RADAR (VSR))		10.948		-
Other ORDNANCE		7.086		3.271
Other Cost Elements Subtotal		18.034		3.271
Total Ordnance		1,148.222		1,257.604
Remarks: CVN 79 From the FY 2023 budget submission, funds were increased by \$1.1M in Other Ordnance on CVN 79 in support of fact of life changes for execution purposes.				

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2001 / Carrier Replacement Program
<p>The Enterprise Radar Suite (ERS) consists of AN/SPY-6(V)3 Enterprise Air Surveillance Radar (EASR), AN/SPQ-9B Anti-ship Missile Defense (ASMD) Surface Surveillance and Tracking Radar and MK-9 Target Illuminators (TIs), as part of MK-57 NATO SeaSparrow Missile System (NSSMS). These three systems combine to functionally replace the Dual Band Radar (CVN 78) on CVN 79 and follow. The \$10,948K cost on the CVN 79 represents a sunk cost paid for overruns associated with receiving the Volume Search Radar (VSR) from the DDG 1000 program and was originally planned for installation on CVN 79.</p> <p>MK-57 NATO SeaSparrow Missile System (NSSMS) has been updated to become one complete system from MK29 MOD 5, Guided Missile Launching System (GMLS) and MK-9 Target Illuminator.</p>		

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: CONSOLIDATED AFLOAT NETWORK AND ENTERPRISE SERVICES (CANES)						PARM Code: PMW 160	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	11.508	1	15.702			
Technical Data and Documentation		0.080		0.219			
Spares		0.654		0.936			
System Engineering		1.685		1.187			
Technical Engineering Services		0.728		1.344			
Other Costs		5.411		4.525			
Total	1	20.066	1	23.913			
Description: CANES will provide the Navy tactical/non-tactical information environment and infrastructure necessary to enable hosting, extended services reach-back and reach-forward, and relay functions. These capabilities will support real time and non-real time tactical/non-tactical edge connected, connectionless, and ad-hoc voice, video and data information exchange requirements. CANES replace and modernize afloat networks with hardware, software and enterprise services infrastructure to enable information warfare from and within the tactical domain. CANES provides complete infrastructure inclusive of hardware, software, processing, storage and end user devices for Unclassified, Coalition, Secret and Sensitive Compartmented Information (SCI) enclaves for all basic network services to Navy surface combatants, submarines and maritime operations centers. The POR CVN 79 is Increment 1.2 and CVN 80 is Increment 2.0.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	VARIOUS	C/FFP	Mar 2017		1	11.508
FY 2018	CVN 80	VARIOUS	C/CPFF	Dec 2022		1	15.702
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	77	12	Feb 2018		
FY 2018	CVN 80	Mar 2028	44	15	Apr 2023		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: AN/USG-2, COOPERATIVE ENGAGEMENT CAPABILITY (CEC)						PARM Code: PEO IWS 6.0	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	3.707		1	2.750		
Spares		0.433			0.470		
System Engineering		0.885			2.195		
Technical Engineering Services		0.895			0.197		
Other Costs		2.140			0.498		
Total	1	8.060		1	6.110		
Description: The Cooperative Engagement Capability (CEC) AN/USG-2B system provides real time integration of fire control quality sensor data into a single composite data source, which is used by multiple CEC ships and airborne units for direct and remote missile engagements. CEC significantly improves battle force Anti-Air Warfare (AAW) capability by coordinating all force AAW sensors into a single real time, fire control quality composite track picture.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	DRS	C/FFP	May 2020		1	3.707
FY 2018	CVN 80	DRS	C/FFP	Jul 2022		1	2.750
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	47	18	Feb 2020		
FY 2018	CVN 80	Mar 2028	30	18	Mar 2024		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: DIGITAL MODULAR RADIO (DMR) ULTRA HIGH FREQUENCY/VERY HIGH FREQUENCY LINE OF SIGHT (EHF/VHF LOS) SAT						PARM Code: PMW 170	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	7.765		1	9.187		
Spares		0.050			0.055		
System Engineering		0.152			0.643		
Technical Engineering Services		0.004			0.565		
Other Costs		0.774			0.380		
Ancillary Equipment		0.058			0.074		
Total	1	8.803		1	10.904		
Description: DMR-VHF/UHF LOS/SATCOM is an open architecture system that allows transmission and reception of UHF and VHF RF signals. The DMR replaces many legacy systems, including some crypto, Line Of Sight (LOS) and Satellite Communications (SATCOM) components.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	GENERAL DYNAMICS	C/FFP	Sep 2014		1	7.765
FY 2018	CVN 80	GENERAL DYNAMICS	C/FFP	Feb 2019		1	9.187
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	71	18	Feb 2018		
FY 2018	CVN 80	Mar 2028	38	18	Jul 2023		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: AN/UPX-29(V), INTERROGATOR FRIEND OR FOE (IFF) W/MK XII						PARM Code: PMA 213	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	5.938	1	6.829			
Ancillary Equipment		0.057		0.056			
Technical Data and Documentation		0.004		0.019			
Spares		0.051		0.678			
System Engineering		0.070		0.068			
Technical Engineering Services		0.005		0.182			
Other Costs		1.613		0.593			
Total	1	7.738	1	8.425			

Description:
 IFF is an approved and fully supported centralized Mark XII/XIIA Interrogator system. It uses one receiver transmitter that synchronizes video with up to four radar sweeps. It supplies synthetic video (symbology) to, and accepts requests from, as many as 22 remote locations. It provides digital target reporting to the combat systems/weapon systems computer via full scan, sector, and/or pop-up interrogations. It provides instantaneous target reporting at requested range and azimuth through the use of an electronically-steered Antenna Group OE-120/UPX or OE-120B/UPX. It provides electronically evaluated Mode 4 target reporting directly to operators and over the combat systems/weapon system computer interface. It provides full redundancy so identification capabilities are retained in case of main processor, main antenna, or main receiver/transmitter failure.

Contract Data:

Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	BAE SYSTEMS	C/FFP	May 2016		1	5.938
FY 2018	CVN 80	NOTHROP GRUMMAN-BAE SYSTEMS	SS/FFP	Mar 2019		1	6.829

Delivery Date:

Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date
FY 2013	CVN 79	Jul 2025	57	24	Oct 2018
FY 2018	CVN 80	Mar 2028	35	24	Apr 2023

Competition/Second Source Initiatives:
 None

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																											
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program																																													
Equipment Item: SPN-46, AUTOMATIC CARRIER LANDING SYSTEM						PARM Code: PMA 213																																											
P-35 Category	FY 2013			FY 2018																																													
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	1	8.436		1	13.702																																												
System Engineering		0.510			0.423																																												
Technical Engineering Services		0.624			0.430																																												
Other Costs		3.395			2.817																																												
Total	1	12.965		1	17.372																																												
<p>Description: AN/SPN-46 Automatic Carrier Landing System (ACLS) is a precision approach landing system (PALS) which provides electronic guidance to carrier-based aircraft and allows them to land in all-weather conditions with no limitations due to low ceiling or restricted visibility. AN/SPN-46 is a fully automated, all weather approach landing aid for carrier aircraft.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2013</td><td>CVN 79</td><td>NAWCAD</td><td>Various</td><td>Dec 2016</td><td></td><td>1</td><td>8.436</td></tr><tr><td>FY 2018</td><td>CVN 80</td><td>NAWCAD</td><td>Various</td><td>Dec 2020</td><td></td><td>1</td><td>13.702</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2013</td><td>CVN 79</td><td>Jul 2025</td><td>64</td><td>24</td><td>Mar 2018</td></tr><tr><td>FY 2018</td><td>CVN 80</td><td>Mar 2028</td><td>35</td><td>24</td><td>Apr 2023</td></tr></table> <p>Competition/Second Source Initiatives: None.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2013	CVN 79	NAWCAD	Various	Dec 2016		1	8.436	FY 2018	CVN 80	NAWCAD	Various	Dec 2020		1	13.702	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2013	CVN 79	Jul 2025	64	24	Mar 2018	FY 2018	CVN 80	Mar 2028	35	24	Apr 2023
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																										
FY 2013	CVN 79	NAWCAD	Various	Dec 2016		1	8.436																																										
FY 2018	CVN 80	NAWCAD	Various	Dec 2020		1	13.702																																										
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																												
FY 2013	CVN 79	Jul 2025	64	24	Mar 2018																																												
FY 2018	CVN 80	Mar 2028	35	24	Apr 2023																																												

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: SHIP SELF DEFENSE SYSTEM (SSDS)						PARM Code: PEO IWS 10.0	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	11.795		1	11.900		
Technical Data and Documentation		0.659			1.556		
Spares		1.223			0.644		
System Engineering		4.740			7.467		
Technical Engineering Services		0.191			0.792		
Other Costs		9.217			9.947		
Total	1	27.825		1	32.306		
Description: The SSDS MK 2, Mod (6E) Common C2 system provides capabilities for multi-mission requirements including Ship Protection against air, surface, and subsurface threats using both own-ship and remote data (Joint Composite Track Number (JCTN) and Joint Data Network (JDN)) in support of the Anti-Air Warfare (AAW) Capstone requirements.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	LOCKHEED MARTIN	C/FFP	Apr 2019		1	11.795
FY 2018	CVN 80	LOCKHEED MARTIN	C/CPFF	Jan 2020		1	11.900
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	51	24	Apr 2019		
FY 2018	CVN 80	Mar 2028	31	24	Aug 2023		
Competition/Second Source Initiatives: None							
Remarks: Hardware procurement supports the same CPS (Common Processing System)/CDS (Common Display System) configuration for SSDS, CV-TSC and SEWIP.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: AN/SYY-1(V)1 AIR TRAFFIC CONTROL SYSTEM, SHIPBOARD						PARM Code: PMA 213	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	2.893	1	3.740			
Spares		0.222		0.085			
System Engineering		0.318		0.714			
Technical Engineering Services		0.039		0.910			
Other Costs		1.769		0.937			
Total	1	5.241	1	6.386			
Description: AN/SYY-1(V)1 Air Traffic Control System, Shipboard is a processing and display system which correlates and fuses sensor inputs from radar and IFF. The correlated sensor data is displayed to Air Traffic Controllers in a 2D air picture to facilitate the safe and expeditious movement of air traffic operating in the carrier controlled area and launching from/recovering to the ship.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	VARIOUS	Various	Jan 2020		1	2.893
FY 2018	CVN 80	VARIOUS	Various	Nov 2022		1	3.740
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	38	24	May 2020		
FY 2018	CVN 80	Mar 2028	34	24	May 2023		
Competition/Second Source Initiatives: N/A							
Remarks: This system replaces AN/TPX-42. AN/SYY-1(V)1 addresses obsolescence, incorporates existing AN/TPX-42A(V) functionality and will add additional capability and interfaces across all platforms.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: NAVY MULTI-BAND TERMINAL (NMT)						PARM Code: PMW 170	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	5.131	1	7.892			
Ancillary Equipment		0.005		-			
Spares		-		0.263			
System Engineering		0.042		0.075			
Technical Engineering Services		0.014		0.087			
Other Costs		0.252		0.329			
Total	1	5.444	1	8.646			
Description: The Advanced Extremely High Frequency (AEHF) Navy Multi-band Terminal (NMT) will be used to receive signals from the Advanced EHF satellites which is a follow-on to the DoD's highly secure, highly protected MILSTAR communications satellite system.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	RAYTHEON	C/FFP	Jun 2014		1	5.131
FY 2018	CVN 80	RAYTHEON	C/FFP	Jan 2020		1	7.892
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	71	18	Feb 2018		
FY 2018	CVN 80	Mar 2028	31	18	Feb 2024		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																											
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program																																													
Equipment Item: AN/SLQ-32(V)6, SURFACE ELECTRONIC WARFARE IMPROVEMENT PROGRAM (SEWIP) BLOCK 2						PARM Code: PEO IWS 2E																																											
P-35 Category	FY 2013		FY 2018																																														
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																													
Major Hardware	1	10.409	1	11.100																																													
Ancillary Equipment		0.195		0.212																																													
Spares		0.245		0.267																																													
System Engineering		0.898		0.980																																													
Technical Engineering Services		1.342		0.168																																													
Other Costs		1.120		1.177																																													
Total	1	14.209	1	13.904																																													
<p>Description:</p> <p>SEWIP Block 2 is a scalable Electronic Warfare enterprise suite to provide improved Electromagnetic Interference (EMI) mitigation and Combat System Interface capabilities to select new construction ships as well as upgrade current AN/SLQ-32(V)3 and (V)4 Electronic Warfare (EW) suites on existing ships. It provides enhanced shipboard Electronic Warfare (EW) for early detection, analysis, threat warning and protection from anti-ship missiles. SEWIP Block 2 focused on Electronic Support (ES) capability improvements.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2013</td><td>CVN 79</td><td>LOCKHEED MARTIN</td><td>C/FFP</td><td>Jan 2020</td><td></td><td>1</td><td>10.409</td></tr><tr><td>FY 2018</td><td>CVN 80</td><td>LOCKHEED MARTIN</td><td>C/FFP</td><td>Jan 2020</td><td></td><td>1</td><td>11.100</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2013</td><td>CVN 79</td><td>Jul 2025</td><td>37</td><td>18</td><td>Dec 2020</td></tr><tr><td>FY 2018</td><td>CVN 80</td><td>Mar 2028</td><td>24</td><td>18</td><td>Sep 2024</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>None</p> <p>Remarks:</p> <p>Hardware procurement supports the same CPS (Common Processing System)/CDS (Common Display System) configuration for SSDS, CV-TSC and SEWIP.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2013	CVN 79	LOCKHEED MARTIN	C/FFP	Jan 2020		1	10.409	FY 2018	CVN 80	LOCKHEED MARTIN	C/FFP	Jan 2020		1	11.100	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2013	CVN 79	Jul 2025	37	18	Dec 2020	FY 2018	CVN 80	Mar 2028	24	18	Sep 2024
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																										
FY 2013	CVN 79	LOCKHEED MARTIN	C/FFP	Jan 2020		1	10.409																																										
FY 2018	CVN 80	LOCKHEED MARTIN	C/FFP	Jan 2020		1	11.100																																										
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																												
FY 2013	CVN 79	Jul 2025	37	18	Dec 2020																																												
FY 2018	CVN 80	Mar 2028	24	18	Sep 2024																																												

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: AN/SRQ-6/MCS-21, SHIPS SIGNAL EXPLOITATION EQUIPMENT (SSEE)						PARM Code: PMW 120	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	3.801	0	-			
Spares		0.210		-			
System Engineering		0.423		-			
Technical Engineering Services		0.072		-			
Other Costs		0.970		-			
Total	1	5.476	0	-			
Description: SSEE provided for cryptological signal acquisition, recognition, analysis and geo-location. It replaces Maritime Cryptological System (MCS-21) which replaces the Battle Group Passive Horizon Extension System (BGPHEs).							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	VARIOUS	Various	Apr 2020		1	3.801
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	42	18	Jul 2020		
Competition/Second Source Initiatives: None							
Remarks: SPECTRAL replaces AN/SRQ-6/MCS-21, SHIPS SIGNAL EXPLOITATION EQUIPMENT (SSEE) due to obsolescence issues on CVN 80.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: AN/SRC-61 (V)X HFDAG						PARM Code: PMW 170	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	4.553	1	4.816			
Ancillary Equipment		-		0.052			
Spares		0.010		0.011			
System Engineering		0.246		0.216			
Technical Engineering Services		0.155		0.527			
Other Costs		0.264		0.437			
Total	1	5.228	1	6.059			
Description: High Frequency (HF) Distributed Amplifier Group (DAG) is the Navy's Program of Record (POR) HF system and is the follow-on replacement of HF Radio Group (HFRG). HFDAG has a modular architecture and utilizes COTS equipment to the maximum extent possible. It provides Line Of Sight (LOS/Beyond Line of Sight (BLOS) voice and data transmission capabilities to USN Ships. The 16-channel CVN variant greatly improves capabilities from HFRG: (1) increases availability (Ao), (2) provides reprogrammable waveforms, (3) increases the number of waveforms available, (4) provides automatic link establishment (ALE).							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	GENERAL DYNAMICS	C/FFP	Feb 2019		1	4.553
FY 2018	CVN 80	GENERAL DYNAMICS	C/FFP	Feb 2019		1	4.816
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	61	18	Dec 2018		
FY 2018	CVN 80	Mar 2028	35	18	Oct 2023		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: JOINT PRECISION AIRCRAFT LANDING SYSTEMS (JPALS)						PARM Code: PMA 213	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	8.036		1	6.948		
Spares		-			1.061		
System Engineering		0.059			0.037		
Technical Engineering Services		0.027			1.664		
Other Costs		4.286			1.165		
Total	1	12.408		1	10.875		
Description: The Joint Precision Approach and Landing System (JPALS) is the primary precision approach and landing system for CVN ships to support F-35B, F-35C, MQ-25 and future platforms. JPALS ship systems are required to provide a primary precision approach capability during night and instrument flight conditions and coupled approach to the deck (auto-land) capability aboard CVN ships. JPALS also provides over-the-air inertial alignment capability for CVN ships to support aircraft platforms without Link-4A capability, including F-35, MQ-25 and future platforms. The nomenclature for JPALS has been designated AN/USN-3(V)1, Satellite Signals Landing System.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	Raytheon	C/FFP	Nov 2021		1	8.036
FY 2018	CVN 80	Raytheon	C/FFP	Sep 2024		1	6.948
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	32	12	Nov 2021		
FY 2018	CVN 80	Mar 2028	30	12	Sep 2024		
Competition/Second Source Initiatives: N/A							

UNCLASSIFIED

Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: ELECTRONIC CONSOLIDATED AUTOMATED SUPPORT SYSTEM (eCASS)						PARM Code: PMA 260	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	40.402	1	39.504			
Technical Engineering Services		-		0.396			
Total	1	40.402	1	39.900			
<p>Description:</p> <p>The electronic Consolidated Automated Support System (eCASS) supports JSF integration on FORD Class. AN/USM-737(V) electronic Consolidated Automated Support System (eCASS) will be the Navy's next generation Automatic Test Equipment (ATE) system, replacing the legacy mainframe AN/USM-636(V) Consolidated Automated Support System (CASS) due to imminent obsolescence and emerging test requirements. eCASS will be the newest member of the CASS family of testers, designated by OPNAVINST 3960.16B as the US Navy's standard ATE used to perform avionics weapons system diagnostics and repair across a multitude of Naval and Marine Corps aircraft platforms and uses joint service coordinated test technologies that will be capable of interoperating with the Future Force.</p> <p>The eCASS system is designed with four configurations, with reserved design space allocations for future growth and mission peculiar requirements. The four eCASS configurations provide the capability to execute the Hybrid (HYB) Mission, Radio Frequency (RF) Mission, High Power (HP) Mission, and the Electro Optical (EO) Mission.</p>							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	LOCKHEED MARTIN	SS/FFP	Dec 2022		1	40.402
FY 2018	CVN 80	LOCKHEED MARTIN	SS/FFP	Mar 2023		1	39.504
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	14	18	Nov 2022		
FY 2018	CVN 80	Mar 2028	45	18	Dec 2022		
<p>Competition/Second Source Initiatives: N/A</p>							
<p>Remarks:</p> <p>CVN 79 installation is planned to occur during PSA in December 2025.</p> <p>Total increase of \$3.7M from the FY 2023 budget submission is a result of not being able to take part in an EOQ buy with other programs.</p> <p>CVN 80 award delayed 4 months with no impact to ship construction schedule.</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: OA-9277 ULTRA HIGH FREQUENCY (UHF) MULTICOUPLER						PARM Code: PMW 170	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	0	-	1	7.660			
System Engineering		-		0.025			
Technical Engineering Services		-		0.061			
Other Costs		-		0.104			
Total	0	-	1	7.850			
Description: OA-9277 Description: Ultra High Frequency (UHF) Program supports the exchange of secure Battle Group coordination data, organizational messaging, tactical data and voice over UHF SATCOM via Demand Assigned Multiple Access (DAMA) over 5/25kHz channels. UHF legacy Communication Line of Sight (LOS) Systems also support Anti-Access/Area Denial (A2AD) by providing a redundant or overlapping form of communication in case U.S. satellites are targeted by threat nations.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2018	CVN 80	RF PRODUCTS INC	C/FFP	Aug 2021		1	7.660
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2018	CVN 80	Mar 2028	30	24	Sep 2023		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program																															
Equipment Item: AN/USQ-214(V)1, NETWORK TACTICAL COMMON DATA LINK (NTCDL) SYSTEM						PARM Code: PMW 170																													
P-35 Category	FY 2013		FY 2018																																
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																															
Major Hardware	0	-	1	5.423																															
Spares		-		0.190																															
System Engineering		-		0.129																															
Technical Engineering Services		-		0.105																															
Other Costs		-		0.285																															
Total	0	-	1	6.132																															
<p>Description:</p> <p>NTCDL provides the ability to transmit/receive real-time intelligence, surveillance, and reconnaissance (ISR) data simultaneously from multiple sources (air, surface, subsurface, 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 CDL equipped aircraft (e.g., F/A-18, P-3, and MH- 60R) in addition to next-generation manned and unmanned platforms (e.g., P-8 Poseidon, Triton, Unmanned Carrier-Launched Airborne Surveillance and Strike (UCLASS) vehicle, Small Tactical Unmanned Aircraft Systems (STUAS), and Fire Scout).</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2018</td><td>CVN 80</td><td>BAE Systems Information and Electronic Systems Integration Inc</td><td>C/FFP</td><td>Mar 2022</td><td></td><td>1</td><td>5.423</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2018</td><td>CVN 80</td><td>Mar 2028</td><td>31</td><td>14</td><td>Jun 2024</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>None</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2018	CVN 80	BAE Systems Information and Electronic Systems Integration Inc	C/FFP	Mar 2022		1	5.423	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2018	CVN 80	Mar 2028	31	14	Jun 2024
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2018	CVN 80	BAE Systems Information and Electronic Systems Integration Inc	C/FFP	Mar 2022		1	5.423																												
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																														
FY 2018	CVN 80	Mar 2028	31	14	Jun 2024																														

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: AN/WSN-7(V)3, RING LASER GYRO NAVIGATOR (RLGN)						PARM Code: PEO IWS 6.0	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	0	-	1	4.012			
Technical Data and Documentation		-		0.294			
System Engineering		-		0.305			
Technical Engineering Services		-		0.289			
Other Costs		-		0.466			
Total	0	-	1	5.366			
Description: The AN/WSN-7(V)3 Ring Laser Gyro Navigation (RLGN) System calculates and disseminates own ship's position, velocity and attitude (heading, roll and pitch) data outputs. The AN/WSN-7(V)3 RLGN System provides real time navigation data to use by Navigation & combat systems.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2018	CVN 80	Northrop Grumman	C/FFP	Aug 2022		1	4.012
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2018	CVN 80	Mar 2028	47	20	Aug 2022		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program																															
Equipment Item: SPECTRAL						PARM Code: PMW 120																													
P-35 Category	FY 2013		FY 2018																																
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																															
Major Hardware	0	-	1	9.063																															
Spares		-		0.679																															
System Engineering		-		0.804																															
Technical Engineering Services		-		0.180																															
Other Costs		-		1.236																															
Total	0	-	1	11.962																															
<p>Description: Spectral is the Navy's next-generation shipboard Information Operations (IO), Electromagnetic Maneuver Warfare (EMW), Signals Intelligence (SIGINT) weapon system. Spectral will detect, classify, and track Signals of Interest (SOI) beyond currently fielded capabilities to improve warfighter mission effectiveness through automation, operability, and intuitiveness in the Tasking, Collection, Processing, Exploitation, and Dissemination (TCPED) process, specifically in the provision of combat identification, threat tracking, and offensive IO effects.</p> <p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2018</td><td>CVN 80</td><td>Various</td><td>Various</td><td>Oct 2023</td><td></td><td>1</td><td>9.063</td></tr></table> <p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2018</td><td>CVN 80</td><td>Mar 2028</td><td>35</td><td>18</td><td>Oct 2023</td></tr></table> <p>Competition/Second Source Initiatives: None</p> <p>Remarks: CVN 80 is replacing AN/SRQ-6/MCS-21, SHIPS SIGNAL EXPLOITATION EQUIPMENT (SSEE) with SPECTRAL due to obsolescence issues.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2018	CVN 80	Various	Various	Oct 2023		1	9.063	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2018	CVN 80	Mar 2028	35	18	Oct 2023
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2018	CVN 80	Various	Various	Oct 2023		1	9.063																												
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																														
FY 2018	CVN 80	Mar 2028	35	18	Oct 2023																														

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: MK 53 MOD 15 DECOY LAUNCHING SYSTEM (NULKA)						PARM Code: PEO IWS 2D1	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	0	-		1	12.084		
Technical Data and Documentation		-			0.069		
Spares		-			0.086		
System Engineering		-			2.042		
Technical Engineering Services		-			3.321		
Other Costs		-			16.298		
Total	0	-		1	33.900		
Description: The NULKA decoy launching system is an integral part of the surface Electronic Warfare (EW) suite in the ship self-defense system. It provides protection against active Radio Frequency anti-ship missile attacks.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2018	CVN 80	TBD	SS/FFP	Mar 2023	New	1	12.084
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2018	CVN 80	Mar 2028	30	30	Mar 2023		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program																											
Equipment Item: ELECTROMAGNETIC AIRCRAFT LAUNCHING SYSTEM (EMALS)						PARM Code: PMA 251																									
P-35 Category	FY 2013		FY 2018																												
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																											
Major Hardware	1	621.740	1	633.837																											
Spares		9.387		37.930																											
System Engineering		21.156		15.793																											
Technical Engineering Services		1.952		0.201																											
Other Costs		31.780		29.978																											
Total	1	686.015	1	717.739																											
Description: EMALS is an advanced technology electrically generated launching system that uses a moving electromagnetic field to propel aircraft to launch speed. EMALS is made up of six primary sub-systems: prime power interface, energy storage, energy distribution, power conversion, launch motor, and launch control subsystem. Benefits over the current C13 steam catapults include reduced weight and volume, greater launching flexibility for future aircraft, improved control, and reduced manning workload requirements.																															
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Prime Contractor</th> <th>Contract Method/Type</th> <th>Award Date</th> <th>New/Option</th> <th>Quantity (Each)</th> <th>Unit Cost (\$ M)</th> </tr> <tr> <td>FY 2013</td> <td>CVN 79</td> <td>GENERAL ATOMICS</td> <td>SS/FFP</td> <td>May 2014</td> <td>New</td> <td>1</td> <td>621.740</td> </tr> <tr> <td>FY 2018</td> <td>CVN 80</td> <td>GENERAL ATOMICS</td> <td>SS/FFP</td> <td>Jan 2017</td> <td>Option</td> <td>1</td> <td>633.837</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2013	CVN 79	GENERAL ATOMICS	SS/FFP	May 2014	New	1	621.740	FY 2018	CVN 80	GENERAL ATOMICS	SS/FFP	Jan 2017	Option	1	633.837
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																								
FY 2013	CVN 79	GENERAL ATOMICS	SS/FFP	May 2014	New	1	621.740																								
FY 2018	CVN 80	GENERAL ATOMICS	SS/FFP	Jan 2017	Option	1	633.837																								
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Earliest Ship Delivery Date</th> <th>Months Required Before Delivery</th> <th>Production Leadtime</th> <th>Required Award Date</th> </tr> <tr> <td>FY 2013</td> <td>CVN 79</td> <td>Jul 2025</td> <td>103</td> <td>48</td> <td>Dec 2012</td> </tr> <tr> <td>FY 2018</td> <td>CVN 80</td> <td>Mar 2028</td> <td>57</td> <td>48</td> <td>Jun 2019</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2013	CVN 79	Jul 2025	103	48	Dec 2012	FY 2018	CVN 80	Mar 2028	57	48	Jun 2019						
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																										
FY 2013	CVN 79	Jul 2025	103	48	Dec 2012																										
FY 2018	CVN 80	Mar 2028	57	48	Jun 2019																										
Competition/Second Source Initiatives: None																															
Remarks: Long Lead Time Materials Unfinalized Contract Action (UCA) awarded May 2014, Unfinalized Production UCA awarded June 2015 for CVN 79, and Production UCA finalized December 2016 for CVN 79 with option for CVN 80. CVN 80 option exercised January 2017 EMALS and AAG bundled savings on single production contract for CVN 79 and CVN 80 are reflective of contract negotiations. CVN 79 - Negotiations with the Original Equipment Manufacturer (OEM) were required to negotiate improvements to the contractor's schedule since award was late. CVN 80 - Spares P-35 category includes \$28.05 for CVN 78 Class Interim Spares.																															

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program																											
Equipment Item: AN/SPY-6(V)3 ENTERPRISE AIR SURVEILLANCE RADAR (EASR)						PARM Code: PEO IWS 2.0																									
P-35 Category	FY 2013		FY 2018																												
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																											
Major Hardware	1	42.588	1	39.121																											
Ancillary Equipment		0.175		0.180																											
Spares		1.542		2.044																											
System Engineering		9.055		6.985																											
Technical Engineering Services		9.579		4.685																											
Other Costs		12.412		6.099																											
Total	1	75.351	1	59.114																											
Description: The Enterprise Air Surveillance Radar (EASR) suite will be a modern long-range, three-dimensional (3D) radar used to search, detect and provide space-stabilized, three-coordinate (range, bearing, height) data for air intercept control and designation to a weapon system and Air Traffic Control (ATC) system. The Enterprise Radar Suite (ERS), which includes EASR, is intended to replace the functions that Dual Band Radar (DBR) performed on CVN 78, but at a much lower cost.																															
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Prime Contractor</th> <th>Contract Method/Type</th> <th>Award Date</th> <th>New/Option</th> <th>Quantity (Each)</th> <th>Unit Cost (\$ M)</th> </tr> <tr> <td>FY 2013</td> <td>CVN 79</td> <td>RAYTHEON</td> <td>C/CPIF</td> <td>Dec 2019</td> <td></td> <td>1</td> <td>42.588</td> </tr> <tr> <td>FY 2018</td> <td>CVN 80</td> <td>RAYTHEON</td> <td>C/CPIF</td> <td>Mar 2022</td> <td></td> <td>1</td> <td>39.121</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2013	CVN 79	RAYTHEON	C/CPIF	Dec 2019		1	42.588	FY 2018	CVN 80	RAYTHEON	C/CPIF	Mar 2022		1	39.121
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																								
FY 2013	CVN 79	RAYTHEON	C/CPIF	Dec 2019		1	42.588																								
FY 2018	CVN 80	RAYTHEON	C/CPIF	Mar 2022		1	39.121																								
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Earliest Ship Delivery Date</th> <th>Months Required Before Delivery</th> <th>Production Leadtime</th> <th>Required Award Date</th> </tr> <tr> <td>FY 2013</td> <td>CVN 79</td> <td>Jul 2025</td> <td>40</td> <td>30</td> <td>Sep 2019</td> </tr> <tr> <td>FY 2018</td> <td>CVN 80</td> <td>Mar 2028</td> <td>30</td> <td>30</td> <td>Mar 2023</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2013	CVN 79	Jul 2025	40	30	Sep 2019	FY 2018	CVN 80	Mar 2028	30	30	Mar 2023						
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																										
FY 2013	CVN 79	Jul 2025	40	30	Sep 2019																										
FY 2018	CVN 80	Mar 2028	30	30	Mar 2023																										
Competition/Second Source Initiatives: None																															
Remarks: The hardware configuration for the CVN 79, CVN 80, and CVN 81 (non-rotating) is essentially three times that of a rotating configuration, which is currently planned for the big deck amphibious warfare ships. CVN 79, CVN 80, and CVN 81 will have three phased arrays mounted around the island, while the amphibious warfare ships will use one rotating array. Below deck equipment is also provided at a larger scale with the non-rotating variant of EASR. The Enterprise Radar Suite (ERS) consists of AN/SPY-6(V)2 Enterprise Air Surveillance Radar (EASR), AN/SPQ-9B Anti-Ship Missile Defense (ASMD) Surface Surveillance and Tracking Radar, and MK-9 Target Illuminators (TIs) as part of MK-57 Nato SeaSparrow Missile System (NSSMS).																															

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program																											
Equipment Item: ADVANCED ARRESTING GEAR (AAG)						PARM Code: PMA 251																									
P-35 Category	FY 2013		FY 2018																												
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																											
Major Hardware	1	222.210	1	254.652																											
Spares		0.645		31.422																											
System Engineering		9.102		11.634																											
Technical Engineering Services		4.133		1.030																											
Other Costs		17.419		23.552																											
Total	1	253.509	1	322.290																											
Description: AAG provides an upgraded ability to recover all existing and projected aircraft carrier based air vehicles. The AAG system will replace the Mark 7 arresting gear system found on the NIMITZ class carriers and will be the aircraft recovery system for the CVN 79, CVN 80, and CVN 81. AAG consists of six primary systems: energy absorption subsystem, energy storage subsystem, dynamic control subsystem, thermal management subsystem, cross deck pendant, and the control subsystem.																															
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Prime Contractor</th> <th>Contract Method/Type</th> <th>Award Date</th> <th>New/Option</th> <th>Quantity (Each)</th> <th>Unit Cost (\$ M)</th> </tr> <tr> <td>FY 2013</td> <td>CVN 79</td> <td>GENERAL ATOMICS</td> <td>SS/FFP</td> <td>May 2014</td> <td>New</td> <td style="text-align: center;">1</td> <td style="text-align: right;">222.210</td> </tr> <tr> <td>FY 2018</td> <td>CVN 80</td> <td>GENERAL ATOMICS</td> <td>SS/FFP</td> <td>Jan 2017</td> <td>Option</td> <td style="text-align: center;">1</td> <td style="text-align: right;">254.652</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2013	CVN 79	GENERAL ATOMICS	SS/FFP	May 2014	New	1	222.210	FY 2018	CVN 80	GENERAL ATOMICS	SS/FFP	Jan 2017	Option	1	254.652
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																								
FY 2013	CVN 79	GENERAL ATOMICS	SS/FFP	May 2014	New	1	222.210																								
FY 2018	CVN 80	GENERAL ATOMICS	SS/FFP	Jan 2017	Option	1	254.652																								
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Earliest Ship Delivery Date</th> <th>Months Required Before Delivery</th> <th>Production Leadtime</th> <th>Required Award Date</th> </tr> <tr> <td>FY 2013</td> <td>CVN 79</td> <td>Jul 2025</td> <td style="text-align: center;">101</td> <td style="text-align: center;">48</td> <td style="text-align: center;">Feb 2013</td> </tr> <tr> <td>FY 2018</td> <td>CVN 80</td> <td>Mar 2028</td> <td style="text-align: center;">61</td> <td style="text-align: center;">48</td> <td style="text-align: center;">Feb 2019</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2013	CVN 79	Jul 2025	101	48	Feb 2013	FY 2018	CVN 80	Mar 2028	61	48	Feb 2019						
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																										
FY 2013	CVN 79	Jul 2025	101	48	Feb 2013																										
FY 2018	CVN 80	Mar 2028	61	48	Feb 2019																										
Competition/Second Source Initiatives: None																															
Remarks: Long Lead Time Materials Undefinitized Contract Action (UCA) awarded May 2014, Undefinitized Production UCA awarded June 2015 for CVN 79, and Production UCA definitized December 2016 for CVN 79 with option for CVN 80. CVN 80 option exercised January 2017. EMALS and AAG bundled savings on single production contract for CVN 79 and CVN 80 are reflective of contract negotiations. CVN 80 - Spares P-35 category includes \$30.727M for CVN 78 Class Interim Spares and \$1.770M for Initial Installation & Checkout Spares.																															

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: PHALANX BLOCK 1B MK 15 MOD 21 & 22, CLOSE - IN WEAPONS SYSTEM (CIWS)						PARM Code: IWS 11	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	3	15.427		3	18.047		
Ancillary Equipment		0.091			0.104		
Spares		0.381			0.392		
System Engineering		1.151			1.294		
Technical Engineering Services		0.769			0.896		
Other Costs		1.758			1.734		
Total	3	19.577		3	22.467		
Description: Phalanx is a high fire rate Close-In Weapon System (CIWS) that automatically acquires, tracks and destroys Anti-Ship cruise missiles, Helos, Aircraft, and all types of Surface threats. The installed version will have one MK-15 Mod 21 and two MK-15 Mod 22 CIWS systems.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	RAYTHEON	C/FFP	Mar 2020		3	5.142
FY 2018	CVN 80	RAYTHEON	C/FFP	Jan 2024		3	6.016
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	49	22	Aug 2019		
FY 2018	CVN 80	Mar 2028	28	22	Jan 2024		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: AN/SQQ-34, CARRIER-TACTICAL SUPPORT CENTER (CV-TSC)						PARM Code: PEO IWS 5E	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	2.924	1	3.199			
Spares		0.114		0.109			
System Engineering		0.188		0.381			
Technical Engineering Services		0.354		0.272			
Other Costs		0.357		0.495			
Total	1	3.937	1	4.456			
Description: CV-TSC provides for carrier organic Anti-submarine Warfare (ASW), Mine Warfare (MIW), Surface Warfare (SUW), and other composite warfare area sensor data processing, tactical command and control, and organic/battle-group aircraft mission support. CV-TSC supports both ship self defense and embarked Destroyer Squadron (DESRON) missions. This system is Open Architecture Computing Environment (OACE), Joint Fires Network (JFN), and FORCENet compliant, and includes redesign to maximize introduction of expected transformational technologies such as Common Processing System (CPS), Common Display System (CDS), sensor processing in support of the MH-60R helicopter, high speed bandwidth network, Excomm systems, net-centric warfare components, etc.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	Various	Various	Jan 2020		1	3.150
FY 2018	CVN 80	Various	Various	Jan 2020		1	3.199
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	51	18	Oct 2019		
FY 2018	CVN 80	Mar 2028	35	18	Oct 2023		
Competition/Second Source Initiatives: None							
Remarks: Hardware procurement supports the same CPS (Common Processing System)/CDS (Common Display System) configuration for SSDS, CV-TSC and SEWIP.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: MK-57 NATO SEASPARROW MISSILE SYSTEM (NSSMS)						PARM Code: PEO IWS 12	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	39.340		1	40.644		
Ancillary Equipment		0.269			0.435		
Spares		1.423			1.958		
System Engineering		1.358			0.816		
Technical Engineering Services		0.363			0.773		
Other Costs		3.099			1.897		
Total	1	45.852		1	46.523		
Description: The NATO SeaSparrow Surface Missile System (NSSMS) is a medium range self-defense missile system capable of defeating near/mid-term air/surface threats. The NSSMS MK 57 Mod 15 is comprised of (4) MK 9 tracker/illuminator radars and (2) MK 29 ESSM Guided Missile Launchers (GML) that connect to and support the SSDS Integrated Combat System (ICS).							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	RAYTHEON	C/FFP	Nov 2019		1	39.340
FY 2018	CVN 80	RAYTHEON	C/FFP	May 2023		1	40.644
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	41	29	Sep 2019		
FY 2018	CVN 80	Mar 2028	18	36	Sep 2023		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																											
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program																																													
Equipment Item: AVIATION DATA MANAGEMENT AND CONTROL SYSTEM (ADMACS)						PARM Code: PMA 251																																											
P-35 Category	FY 2013			FY 2018																																													
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	1	2.467		1	2.893																																												
Spares		-			0.264																																												
System Engineering		0.434			0.370																																												
Technical Engineering Services		0.598			0.785																																												
Other Costs		1.697			5.208																																												
Total	1	5.196		1	9.520																																												
<p>Description:</p> <p>ADMACS is a virtual, seamless, data sharing, knowledge based data system that provides interface for all aviation data systems. It is a tactical real-time information management system maintaining data integrity throughout the ship spaces that manage aircraft launch and recovery operations on board the carrier. ADMACS includes data from launch and recovery equipment, air traffic control, aviation maintenance, landing signaling officer, etc.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2013</td><td>CVN 79</td><td>BOWHEAD</td><td>C/FFP</td><td>Jul 2016</td><td>Option</td><td>1</td><td>2.467</td></tr><tr><td>FY 2018</td><td>CVN 80</td><td>Laurel Technologies Partnership/DRS</td><td>Various</td><td>Sep 2022</td><td></td><td>1</td><td>2.893</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2013</td><td>CVN 79</td><td>Jul 2025</td><td>69</td><td>12</td><td>Oct 2018</td></tr><tr><td>FY 2018</td><td>CVN 80</td><td>Mar 2028</td><td>28</td><td>12</td><td>Nov 2024</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2013	CVN 79	BOWHEAD	C/FFP	Jul 2016	Option	1	2.467	FY 2018	CVN 80	Laurel Technologies Partnership/DRS	Various	Sep 2022		1	2.893	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2013	CVN 79	Jul 2025	69	12	Oct 2018	FY 2018	CVN 80	Mar 2028	28	12	Nov 2024
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																										
FY 2013	CVN 79	BOWHEAD	C/FFP	Jul 2016	Option	1	2.467																																										
FY 2018	CVN 80	Laurel Technologies Partnership/DRS	Various	Sep 2022		1	2.893																																										
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																												
FY 2013	CVN 79	Jul 2025	69	12	Oct 2018																																												
FY 2018	CVN 80	Mar 2028	28	12	Nov 2024																																												

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: MK 49, MOD 5 ROLLING AIRFRAME MISSILE (RAM)						PARM Code: PEO IWS 11	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	2	11.884		2	19.736		
Ancillary Equipment		0.263			0.250		
Technical Data and Documentation		-			0.167		
Spares		-			0.136		
System Engineering		2.150			1.415		
Technical Engineering Services		0.403			0.563		
Other Costs		1.578			0.960		
Total	2	16.278		2	23.227		
Description: The MK 49 Mod 5 Rolling Airframe Missile (RAM) Weapon System is a lightweight, low cost, high power system for anti-ship missile defense against current and evolving threats. The Block 2 upgrade adds the capability of infrared, all-the-way missile guidance while maintaining the original dual-mode (RF/IR) capability. The helos, aircraft, and surface (HAS) upgrade enables the engagement of asymmetric threats.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	RAYTHEON	C/FFP	Jun 2019		2	5.942
FY 2018	CVN 80	RAYTHEON	C/FFP	Sep 2023		2	9.868
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	48	21	Oct 2019		
FY 2018	CVN 80	Mar 2028	33	21	Sep 2023		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: AN/SPQ-9B, ANTI-SHIP MISSILE DEFENSE (ASMD) SURFACE SURVEILLANCE AND TRACKING RADAR						PARM Code: PEO IWS2B	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	4.290		1	7.469		
Spares		0.651			0.490		
System Engineering		0.388			1.066		
Technical Engineering Services		0.620			0.655		
Other Costs		2.087			4.046		
Total	1	8.036		1	13.726		
Description: SPQ-9B is a multimode, x-band, narrow beam, pulse Doppler radar that detects and tracks sea-skimming missiles (ASMD) at the horizon in heavy clutter while simultaneously providing detection and tracking of surface targets.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2013	CVN 79	LAUREL TECHNOLOGIES PARTNERSHIP	SS/FFP	Mar 2020		1	4.290
FY 2018	CVN 80	NGES	SS/FFP	Mar 2022		1	7.469
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2013	CVN 79	Jul 2025	41	18	Aug 2020		
FY 2018	CVN 80	Mar 2028	35	18	Oct 2023		
Competition/Second Source Initiatives: None							
Remarks: The Enterprise Radar Suite (ERS) consists of AN/SPY-6(V)3 Enterprise Air Surveillance Radar (EASR), AN/SPQ-9B Anti-ship Missile Defense (ASMD) Surface Surveillance and Tracking Radar and MK-9 Target Illuminators (TIs) as part of MK-57 Nato SeaSparrow Missile System (NSSMS).							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: IMPROVED FRESNEL LENS OPTICAL LANDING SYSTEM (IFLOLS)						PARM Code: PMA 251	
P-35 Category	FY 2013		FY 2018				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	0	-	1	6.290			
System Engineering		-		0.219			
Technical Engineering Services		-		0.042			
Other Costs		-		0.728			
Total	0	-	1	7.279			
Description: Improved Fresnel Lens Optical Landing System (IFLOLS) is the primary visual landing aid system that displays glide path and trend information to a fixed wing pilot approaching the CVN flight deck. The system presents a display that is visible at a range of 1.0 nautical mile and displays a virtual image (ball) that is dynamically stabilized to compensate for ship's pitch, roll and heave motion.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2018	CVN 80	NAWCAD	WR	Feb 2022		1	6.290
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2018	CVN 80	Mar 2028	49	12	Feb 2023		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2001 / Carrier Replacement Program			
Equipment Item: INTEGRATED LAUNCH AND RECOVERY TELEVISION SYSTEM (ILARTS)						PARM Code: PMA 251	
P-35 Category	FY 2013			FY 2018			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	0	-		1	3.139		
System Engineering		-			0.430		
Technical Engineering Services		-			0.986		
Other Costs		-			2.196		
Total	0	-		1	6.751		
Description: ILARTS provides a method for observing and retaining a video record of each aircraft launch and recovery. The system simultaneously monitors and records aircraft recoveries and launches during day and night operations. It also provides the LSO with information on the aircraft lineup during recovery.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2018	CVN 80	Various	Various	Nov 2022		1	3.139
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2018	CVN 80	Mar 2028	49	12	Feb 2023		
Competition/Second Source Initiatives: None							

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy									Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships						P-1 Line Item Number / Title: 2004 / CVN-81						
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: 223												
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 <i>(Units in Each)</i>	1	-	-	-	-	-	-	-	-	-	-	1
Gross/Weapon System Cost <i>(\$ in Millions)</i>	12,929.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	12,929.104
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	0.000
Less Cost To Complete <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	0.000
Less Subsequent Year Full Funding <i>(\$ in Millions)</i>	11,071.604	-	-	-	-	-	-	-	-	-	-	11,071.604
Less Funding in SCN Line Item 2001 <i>(\$ in Millions)</i>	1,429.682	-	-	-	-	-	-	-	-	-	-	1,429.682
Net Procurement (P-1) <i>(\$ in Millions)</i>	427.818	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	427.818
Plus Subsequent Year Full Funding <i>(\$ in Millions)</i>	1,606.432	1,287.719	1,052.024	800.492	-	800.492	666.045	1,922.144	2,011.766	1,724.982	-	11,071.604
Full Funding TOA <i>(\$ in Millions)</i>	2,034.250	1,287.719	1,052.024	800.492	-	800.492	666.045	1,922.144	2,011.766	1,724.982	-	11,499.422
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	0.000
Plus Cost To Complete <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	-	0.000
Plus Funding in SCN Line Item 2001 <i>(\$ in Millions)</i>	1,429.682	-	-	-	-	-	-	-	-	-	-	1,429.682
Total Obligation Authority <i>(\$ in Millions)</i>	3,463.932	1,287.719	1,052.024	800.492	0.000	800.492	666.045	1,922.144	2,011.766	1,724.982	-	12,929.104
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery <i>(\$ in Millions)</i>	-	-	-	-	-	-	-	-	-	-	461.219	461.219
Total <i>(\$ in Millions)</i>	3,463.932	1,287.719	1,052.024	800.492	-	800.492	666.045	1,922.144	2,011.766	1,724.982	461.219	13,390.323
Gross/Weapon System Unit Cost <i>(\$ in Millions)</i>	12,929.104	-	-	-	-	-	-	-	-	-	-	12,929.104

Description:

To provide credible, sustainable, independent forward presence during peacetime without access to land bases; operate as the cornerstone of a joint and/or allied maritime expeditionary force in response to crisis; and carry the war to the enemy through joint multi-mission offensive operations.

The Navy designed the FORD Class aircraft carrier with the warfighting capability essential for the 21st century, and the flexibility and resilience to rapidly adapt to emerging threats. The Ford class incorporates advances in technology such as a new reactor plant, propulsion system, electric plant, Electromagnetic Aircraft Launch System (EMALS), Advanced Arresting Gear (AAG), machinery control, and integrated warfare systems that increase lethality, while lowering life cycle costs through reductions in maintenance and manning requirements. Increased Service Life Allowances (SLA) for weight and stability enable future modernization and the ability to adapt to new missions over the ship's 50-year life cycle.

CVN 80 and CVN 81 were awarded under a two-ship buy. CVN 81 is a separate contract line item under the same contract as CVN 80, which allows discrete hull costs to be captured. The CVN 80/81 construction contract is a Fixed Price Incentive (Firm Target) (FPIF) contract type that limits the Navy's liability and incentivizes the shipyard's best performance. The contract language guarantees a single technical baseline for both ships, which allows the shipyard to re-use engineering rollover products, minimize changes between the two ships and leverages economic order quantities for equipment and material procurement.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships		P-1 Line Item Number / Title: 2004 / CVN-81		
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: 223				
<div><div><div>Characteristics:</div><div>-</div><div>Length Overall1092 ft</div><div>Beam134 ft</div><div>Displacement97,337 TONS</div><div>Draft38.7 ft</div></div><div><div>Systems:</div><div>Electronics</div><div>-SHIP SELF DEFENSE SYSTEM (SSDS)</div></div><div><div>Ordnance</div><div>-ELECTROMAGNETIC AIRCRAFT LAUNCHING SYSTEM (EMALS)</div><div>-AN/SPY-6(V)3 ENTERPRISE AIR SURVEILLANCE RADAR (EASR)</div><div>-ADVANCED ARRESTING GEAR (AAG)</div></div></div>				
<div><div><div>Production Status:</div><div>CVN 81</div><div>Contract Award DateJan 2019</div><div>Months to Completion</div><div>a) Award to Delivery157 months</div><div>b) Construction Start to Delivery157 months</div><div>Delivery DateFeb 2032</div><div>Completion Of Fitting OutApr 2032</div><div>Obligation Work Limit DateMar 2033</div></div></div>				
<div><div><div>Design Schedule</div><div>Issue Date for TLR</div><div>Issue Date for TLS</div><div>Preliminary Design</div><div>Contract Design</div><div>Detail Design</div><div>Request for Proposals</div><div>Design Agent</div><div>Classification of Cost Estimate: CLASS C BUDGET ESTIMATE</div></div><div><div>Start / Issue</div><div>Apr 2004</div><div>Sep 2006</div><div>Jan 2003</div><div>May 2004</div><div>Jan 2004</div><div>Jul 2007</div><div>Huntington Ingalls Industries</div></div><div><div>Complete / Response</div><div>N/A</div><div>N/A</div><div>Jul 2008</div><div>Apr 2008</div><div>Sep 2009</div><div>Oct 2007</div></div><div><div>Reissue</div></div><div><div>Reissue Complete / Response</div></div></div>				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2004 / CVN-81	
Cost Categories <small>^(†) indicates the presence of a P-8a</small>	FY 2020		
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	
Plan Costs	1		
Basic Construction/Conversion		8,116.495	
Change Orders		168.102	
Electronics ^(†)		309.559	
Propulsion Equipment		2,887.110	
Hull, Mechanical, and Electrical (HM&E) ^(†)		13.600	
Ordnance ^(†)		1,306.783	
Other Cost		127.455	
Total Ship Estimate		12,929.104	
Less Subsequent Full Funding FY 2021		1,606.432	
Less Subsequent Full Funding FY 2022		1,287.719	
Less Subsequent Full Funding FY 2023		1,052.024	
Less Subsequent Full Funding FY 2024		800.492	
Less Subsequent Full Funding FY 2025		666.045	
Less Subsequent Full Funding FY 2026		1,922.144	
Less Subsequent Full Funding FY 2027		2,011.766	
Less Subsequent Full Funding FY 2028		1,724.982	
Less Funding in SCN Line Item 2001 FY 2019		643.000	
Less Funding in SCN Line Item 2001 FY 2020		786.682	
Net P-1 Funding		427.818	
Remarks:			
Basic: Increase of \$5.0M from the FY 2023 budget submission due to economic inflation adjustments.			
Electronics: Decrease of \$5.9M from the FY 2023 budget submission due to revised cost estimate.			
\$786.7M of FY 2020 funding for CVN 81 was executed in SCN line item 2001 during the FY 2020 continuing resolution.			

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2004 / CVN-81		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
CVN 81	Huntington Ingalls Industries, Newport News Shipbuilding	2020	Jan 2019	Jan 2019	Feb 2032

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2004 / CVN-81	
Electronics	FY 2020		
	Qty (Each)	Total Cost (\$ M)	
P-35 Items			
CONSOLIDATED AFLOAT NETWORK AND ENTERPRISE SERVICES (CANES)	1	26.433	
AN/USG-2, COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	1	7.626	
DIGITAL MODULAR RADIO (DMR) ULTRA HIGH FREQUENCY/VERY HIGH FREQUENCY LINE OF SIGHT (EHF/VHF LOS) SAT	1	10.835	
AN/UPX-29(V), INTERROGATOR FRIEND OR FOE (IFF) W/MK XII	1	8.912	
SPN-46, AUTOMATIC CARRIER LANDING SYSTEM	1	9.661	
SHIP SELF DEFENSE SYSTEM (SSDS)	1	29.699	
AN/SYY-1(V)1 AIR TRAFFIC CONTROL SYSTEM, SHIPBOARD	1	6.219	
NAVY MULTI-BAND TERMINAL (NMT)	1	11.579	
AN/SLQ-32(V)6, SURFACE ELECTRONIC WARFARE IMPROVEMENT PROGRAM (SEWIP) BLOCK 2	1	15.221	
SPECTRAL	1	12.722	
AN/SRC-61 (V)X HFDAG	1	6.021	
SEA BASED JPALS JOINT PRECISION AIRCRAFT LANDING SYSTEM (JPALS)	1	16.100	
OA-9277 ULTRA HIGH FREQUENCY (UHF) MULTICOUPLER	1	8.916	
AN/WSN-7(V)3, RING LASER GYRO NAVIGATOR (RLGN)	1	4.842	
AN/USQ-214(V)1, NETWORK TACTICAL COMMON DATA LINK (NTCDL) SYSTEM	1	6.638	
P-35 Items Subtotal		181.424	
Major Items			
AN/USQ-155(V)1 TACTICAL VARIANT SWITCH	1	2.725	
INFORMATION ASSURANCE (IA)		2.669	
AN/URC-141X(V), MULTI-FUNCTION INFORMATION DISTRIBUTION SYSTEM (MIDS)-ON SHIP (MOS)	1	1.576	
AN/SLQ-25C DUAL, SURFACE SHIP TORPEDO DEFENSE SYSTEM, NIXIE	1	4.627	
SHIPBOARD AIR TRAFFIC CONTROL COMMUNICATIONS (SATCC)	1	3.614	
DISTRIBUTED SYSTEMS DESIGN INTEGRATION SERVICES	1	19.037	
C4I INTEGRATION & COORDINATION		7.114	
DISTRIBUTED COMMON GROUND STATION - NAVY (DCGS-N)	1	2.304	
AN/USQ-144K AUTOMATED DIGITAL NETWORK SYSTEM (ADNS)	1	1.307	
AN/UYQ-86 COMMON DATA LINK MANAGEMENT SYSTEM (CDLMS) WITH NGC2P	1	1.805	
ARC-210 CARRIER AIR TRAFFIC CONTROL CENTER (CATCC) - PRIFLY - LANDING SIGNAL OFFICER (LSO) SYSTEM	1	1.996	
WARFARE SYSTEM INTEGRATION		19.995	
COMMERCIAL BROADBAND SATELLITE PROGRAM, FORCE LEVEL VARIANT (CBSP-FLV)	2	3.638	
GLOBAL POSITIONING SYSTEM, NAVIGATION, AND TIMING SERVICE (GPNTS)	1	1.719	
INTEGRATED STRIKE PLANNING & EXECUTION SYSTEMS (ISP&E)	1	2.293	

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2004 / CVN-81	
Electronics	FY 2020		
	Qty (Each)	Total Cost (\$ M)	
	AN/SPN-41 (V), INSTRUMENT LANDING SYSTEM (ILS)	1	4.925
	SHIP SIGNAL EXPLOITATION SPACE (SSES/SI) COMMUNICATIONS	1	4.044
	TURNKEY RADIO COMMUNICATIONS SYSTEM (RCS)	1	14.789
	AN/USQ-T52 TRAINING INTERFACE UNIT (TIU) ADVANCED TRAINING DOMAIN (ATD)	1	1.828
	AN/SPS-73(V)18 NEXT GENERATION SURFACE SEARCH RADAR (NGSSR)		3.516
	READY ROOM (JSF)	1	3.600
	LITHIUM ION BATTERY HANDLING & STORAGE		2.400
	OE-570G SATELLITE ANTENNA	1	1.314
	ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM, NAVY (ECDIS-N)	1	1.307
	Major Items Subtotal		114.142
	Other Cost Elements		
Other ELECTRONICS		13.993	
Other Cost Elements Subtotal		13.993	
Total Electronics		309.559	
Remarks: P-8A Electronics: Decrease of \$5.9M from the FY 2023 budget submission due to revised cost estimate for Integrated Strike Planning & Execution (ISP&E). AN/SYY-1(V)1 Air Traffic Control System Shipboard replaces AN/TPX-42A(V)14, Carrier Air Traffic Control Center - Direct Altitude and Identify Readout (CATCC-DAIR). AN/SYY-1(V)1 addresses obsolescence, incorporates existing AN/TPX-42A(V) functionality and will add additional capability and interfaces across all platforms. Global Positioning System, Navigation and Timing Service (GPNTS) is the next generation of navigation to address Fleet obsolescence issues. GPNTS replaces AN/SSN-6(V)X Block 4, Navigation Sensor System Interface (NAVSSI). AN/USQ-T52 Training Interface Unit (TIU) Advanced Training Domain (ATD) replaces AN/USQ-T46X(V)X, Battle Force Tactical Training System (BFTT). Official nomenclature for Next Generation Surface Search Radar (NGSSR) has been updated to AN/SPS-73(V)18, Next Generation Surface Search Radar (NGSSR). AN/SLQ-25E Dual, Surface Ship Torpedo Defense System, NIXIE replaces AN/SLQ-25C Dual, Surface Ship Torpedo Defense System, NIXIE due to obsolescence and no longer being available to procure or be refurbished. SPECTRAL replaces AN/SRQ-6/MCS-21, SHIPS SIGNAL EXPLOITATION EQUIPMENT (SSEE) due to obsolescence issues.			

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2004 / CVN-81
Hull, Mechanical, and Electrical (HM&E)	FY 2020	
	Qty (Each)	Total Cost (\$ M)
Major Items		
HM&E ENGINEERING SERVICES		8.093
LIFE RAFTS		1.888
SUPSHIP MATERIAL AND GFE		0.616
TRUCKS (FORKLIFTS)		0.820
Major Items Subtotal		11.417
Other Cost Elements		
Other HM&E		2.183
Other Cost Elements Subtotal		2.183
Total Hull, Mechanical, and Electrical (HM&E)		13.600
Remarks: Other HM&E increased by \$1.2M from the FY 2023 budget submission due to revised estimates for CAC Pay and Chemical, Biological, and Radiological (CBR) equipment.		

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2004 / CVN-81	
Ordnance	FY 2020		
	Qty (Each)	Total Cost (\$ M)	
P-35 Items			
ELECTROMAGNETIC AIRCRAFT LAUNCHING SYSTEM (EMALS)	1	766.727	
AN/SPY-6(V)3 ENTERPRISE AIR SURVEILLANCE RADAR (EASR)	1	61.985	
ADVANCED ARRESTING GEAR (AAG)	1	314.426	
PHALANX BLOCK 1B MK 15 MOD 21 & 22, CLOSE - IN WEAPONS SYSTEM (CIWS)	3	25.318	
AN/SQQ-34, CARRIER-TACTICAL SUPPORT CENTER (CV-TSC)	1	5.259	
MK-57 NATO SEASPARROW MISSILE SYSTEM (NSSMS)	1	45.849	
AVIATION DATA MANAGEMENT AND CONTROL SYSTEM (ADMACS)	1	8.772	
MK 49, MOD 3 ROLLING AIRFRAME MISSILE (RAM)	2	26.933	
AN/SPQ-9B, ANTI-SHIP MISSILE DEFENSE (ASMD) SURFACE SURVEILLANCE AND TRACKING RADAR	1	13.718	
IMPROVED FRESNEL LENS OPTICAL LANDING SYSTEM (IFLOLS)	1	7.754	
INTEGRATED LAUNCH AND RECOVERY TELEVISION SYSTEM (ILARTS)	1	7.207	
P-35 Items Subtotal		1,283.948	
Major Items			
LANDING SIGNAL OFFICER DISPLAY SYSTEM (LSODS)	1	3.056	
MORIAH BLOCK 2	1	2.254	
LONG RANGE LINEUP SYSTEM (LRLS)	1	0.960	
COMPACT SWAGING MACHINE (CSM)	2	2.500	
JOINT STRIKE FIGHTER ALIS	1	1.900	
MK-38 MOD 3 Machine Gun System (MGS)	4	8.300	
MANUALLY OPERATED VISUAL LANDING AID SYSTEM (MOVLAS)	1	1.662	
Major Items Subtotal		20.632	
Other Cost Elements			
Other ORDNANCE		2.203	
Other Cost Elements Subtotal		2.203	
Total Ordnance		1,306.783	
Remarks: P-8A Ordnance: - The Enterprise Air Surveillance Radar (EASR) replaces Dual Band Radar (DBR). - Official nomenclature for Enterprise Air Surveillance Radar (EASR) has been updated to AN/SPY-6(V)3, Enterprise Air Surveillance Radar (EASR).			

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2004 / CVN-81
- MK-57 NATO SeaSparrow Missile System (NSSMS) has been updated to become one complete system from MK29 MOD 5 Guided Missile Launching System (GMLS) (P-35) and MK-9 Target Illuminator (P-35).		

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: CONSOLIDATED AFLOAT NETWORK AND ENTERPRISE SERVICES (CANES)						PARM Code: PMW 160	
P-35 Category				FY 2020			
				Qty (Each)		Total Cost (\$ M)	
Major Hardware				1		16.467	
Technical Data and Documentation						0.424	
Spares						0.917	
System Engineering						1.976	
Technical Engineering Services						1.380	
Other Costs						5.269	
Total				1		26.433	
Description: CANES will provide the Navy tactical/non-tactical information environment and infrastructure necessary to enable hosting, extended services reach-back and reach-forward, and relay functions. These capabilities will support real time and non-real time tactical/non-tactical edge connected, connectionless, and ad-hoc voice, video and data information exchange requirements. CANES replace and modernize afloat networks with hardware, software and enterprise services infrastructure to enable information warfare from and within the tactical domain. CANES provides complete infrastructure inclusive of hardware, software, processing, storage and end user devices for Unclassified, Coalition, Secret and Sensitive Compartmented Information (SCI) enclaves for all basic network services to Navy surface combatants, submarines and maritime operations centers. The POR is Increment 2.0.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	VARIOUS	C/FFP	Mar 2027		1	16.467
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	44	15	Mar 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: AN/USG-2, COOPERATIVE ENGAGEMENT CAPABILITY (CEC)					PARM Code: PEO IWS 6.0		
P-35 Category				FY 2020			
				Qty (Each)		Total Cost (\$ M)	
Major Hardware				1		5.157	
Spares						0.225	
System Engineering						0.520	
Technical Engineering Services						0.666	
Other Costs						1.058	
Total				1		7.626	
Description: The Cooperative Engagement Capability (CEC) AN/USG-2B system provides real time integration of fire control quality sensor data into a single composite data source, which is used by multiple CEC ships and airborne units for direct and remote missile engagements. CEC significantly improves battle force Anti-Air Warfare (AAW) capability by coordinating all force AAW sensors into a single real time, fire control quality composite track picture.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Feb 2028		1	5.157
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	30	18	Feb 2028		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: DIGITAL MODULAR RADIO (DMR) ULTRA HIGH FREQUENCY/VERY HIGH FREQUENCY LINE OF SIGHT (EHF/VHF LOS) SAT						PARM Code: PMW 170	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	9.129		
Ancillary Equipment					0.073		
Spares					0.055		
System Engineering					0.639		
Technical Engineering Services					0.561		
Other Costs					0.378		
Total				1	10.835		
Description: DMR-VHF/UHF LOS/SATCOM is an open architecture system that allows transmission and reception of UHF and VHF RF signals. The DMR replaces many legacy systems, including some crypto, Line Of Sight (LOS) and Satellite Communications (SATCOM) components.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	May 2027		1	9.129
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	39	18	May 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: AN/UPX-29(V), INTERROGATOR FRIEND OR FOE (IFF) W/MK XII						PARM Code: PMA 213	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	7.382		
Ancillary Equipment					0.096		
Technical Data and Documentation					0.021		
Spares					0.310		
System Engineering					0.241		
Technical Engineering Services					0.203		
Other Costs					0.659		
Total				1	8.912		
Description: IFF is an approved and fully supported centralized Mark XII/XIIA Interrogator system. It uses one receiver transmitter that synchronizes video with up to four radar sweeps. It supplies synthetic video (symbology) to, and accepts requests from, as many as 22 remote locations. It provides digital target reporting to the combat systems/weapon systems computer via full scan, sectorized, and/or pop-up interrogations. It provides instantaneous target reporting at requested range and azimuth through the use of an electronically-steered Antenna Group OE-120/UPX or OE-120B/UPX. It provides electronically evaluated Mode 4 target reporting directly to operators and over the combat systems/weapon system computer interface. It provides full redundancy so identification capabilities are retained in case of main processor, main antenna, or main receiver/transmitter failure.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	NOTHROP GRUMMAN-BAE SYSTEMS	SS/FFP	Mar 2022		1	7.382
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	35	24	Mar 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: SPN-46, AUTOMATIC CARRIER LANDING SYSTEM						PARM Code: PMA 213	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	5.833		
System Engineering					1.451		
Technical Engineering Services					0.338		
Other Costs					2.039		
Total				1	9.661		
Description: AN/SPN-46 Automatic Carrier Landing System (ACLS) is a precision approach landing system (PALS) which provides electronic guidance to carrier-based aircraft and allows them to land in all-weather conditions with no limitations due to low ceiling or restricted visibility. AN/SPN-46 is a fully automated, all weather approach landing aid for carrier aircraft.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	NAWCAD	Various	Mar 2027		1	5.833
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	35	24	Mar 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: SHIP SELF DEFENSE SYSTEM (SSDS)					PARM Code: PEO IWS 10.0		
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	10.940		
Technical Data and Documentation					1.430		
Spares					0.592		
System Engineering					6.865		
Technical Engineering Services					0.728		
Other Costs					9.144		
Total				1	29.699		
Description: The SSDS MK 2, Mod (6E) Common C2 system provides capabilities for multi-mission requirements including Ship Protection against air, surface, and subsurface threats using both own-ship and remote data (Joint Composite Track Number (JCTN) and Joint Data Network (JDN)) in support of the Anti-Air Warfare (AAW) Capstone requirements.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	Lockheed Martin	TBD	Jul 2027		1	10.940
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	31	24	Jul 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: AN/SYY-1(V)1 AIR TRAFFIC CONTROL SYSTEM, SHIPBOARD						PARM Code: PMA 213	
P-35 Category				FY 2020			
				Qty (Each)		Total Cost (\$ M)	
Major Hardware				1		3.176	
Spares						0.285	
System Engineering						1.986	
Technical Engineering Services						0.060	
Other Costs						0.712	
Total				1		6.219	
Description: AN/SYY-1(V)1 Air Traffic Control System, Shipboard" is a processing and display system which correlates and fuses sensor inputs from radar and IFF. The correlated sensor data is displayed to Air Traffic Controllers in a 2D air picture to facilitate the safe and expeditious movement of air traffic operating in the carrier controlled area and launching from/recovering to the ship.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Apr 2027		1	3.176
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	34	24	Apr 2027		
Competition/Second Source Initiatives: None							
Remarks: This system replaces AN/TPX-42. AN/SYY-1(V)1 addresses obsolescence, incorporates existing AN/TPX-42A(V) functionality, and adds additional capability and interfaces across all platforms.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: NAVY MULTI-BAND TERMINAL (NMT)					PARM Code: PMW 170		
P-35 Category				FY 2020			
				Qty (Each)		Total Cost (\$ M)	
Major Hardware				1		10.289	
Spares						0.344	
System Engineering						0.085	
Technical Engineering Services						0.099	
Other Costs						0.762	
Total				1		11.579	
Description: The Advanced Extremely High Frequency (AEHF) Navy Multi-band Terminal (NMT) will be used to receive signals from the Advanced EHF satellites which is a follow-on to the DoD's highly secure, highly protected MILSTAR communications satellite system.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Jan 2028		1	10.289
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	31	18	Jan 2028		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: AN/SLQ-32(V)6, SURFACE ELECTRONIC WARFARE IMPROVEMENT PROGRAM (SEWIP) BLOCK 2						PARM Code: PEO IWS 2E	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	12.287		
Ancillary Equipment					0.219		
Spares					0.292		
System Engineering					1.011		
Technical Engineering Services					0.173		
Other Costs					1.239		
Total				1	15.221		
<p>Description:</p> <p>SEWIP Block 2 is a scalable Electronic Warfare enterprise suite to provide improved Electromagnetic Interference (EMI) mitigation and Combat System Interface capabilities to select new construction ships as well as upgrade current AN/SLQ-32(V)3 and (V)4 Electronic Warfare (EW) suites on existing ships. It provides enhanced shipboard Electronic Warfare (EW) for early detection, analysis, threat warning and protection from anti-ship missiles. SEWIP Block 2 focused on Electronic Support (ES) capability improvements.</p>							
<p>Contract Data:</p>							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Aug 2028		1	12.287
<p>Delivery Date:</p>							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	24	18	Aug 2028		
<p>Competition/Second Source Initiatives:</p> <p>None</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81																															
Equipment Item: SPECTRAL					PARM Code: PMW 120																														
P-35 Category				FY 2020																															
				Qty (Each)	Total Cost (\$ M)																														
Major Hardware				1	9.619																														
Spares					0.721																														
System Engineering					0.858																														
Technical Engineering Services					0.191																														
Other Costs					1.333																														
Total				1	12.722																														
<p>Description:</p> <p>Spectral is the Navy's next-generation shipboard Information Operations (IO), Electromagnetic Maneuver Warfare (EMW), Signals Intelligence (SIGINT) weapon system. Spectral will detect, classify, and track Signals of Interest (SOI) beyond currently fielded capabilities to improve warfighter mission effectiveness through automation, operability, and intuitiveness in the Tasking, Collection, Processing, Exploitation, and Dissemination (TCPED) process, specifically in the provision of combat identification, threat tracking, and offensive IO effects.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2020</td><td>CVN 81</td><td>TBD</td><td>TBD</td><td>Sep 2027</td><td></td><td>1</td><td>9.619</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2020</td><td>CVN 81</td><td>Feb 2032</td><td>35</td><td>18</td><td>Sep 2027</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>None</p> <p>Remarks:</p> <p>Spectral is replacing AN/SRQ-6/MCS-21, SHIPS SIGNAL EXPLOITATION EQUIPMENT (SSEE) on CVN 81 due to obsolescence issues.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2020	CVN 81	TBD	TBD	Sep 2027		1	9.619	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2020	CVN 81	Feb 2032	35	18	Sep 2027
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2020	CVN 81	TBD	TBD	Sep 2027		1	9.619																												
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																														
FY 2020	CVN 81	Feb 2032	35	18	Sep 2027																														

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: AN/SRC-61 (V)X HFDAG					PARM Code: PMW 170		
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	4.786		
Ancillary Equipment					0.052		
Spares					0.011		
System Engineering					0.215		
Technical Engineering Services					0.524		
Other Costs					0.433		
Total				1	6.021		
Description: High Frequency (HF) Distributed Amplifier Group (DAG) is the Navy's Program of Record (POR) HF system and is the follow-on replacement of HF Radio Group (HFRG). HFDAG has a modular architecture and utilizes COTS equipment to the maximum extent possible. It provides Line Of Sight (LOS/Beyond Line of Sight (BLOS) voice and data transmission capabilities to USN Ships. The 16-channel CVN variant greatly improves capabilities from HFRG: (1) increases availability (Ao), (2) provides reprogrammable waveforms, (3) increases the number of waveforms available, (4) provides automatic link establishment (ALE).							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Sep 2027		1	4.786
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	35	18	Sep 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: SEA BASED JPALS JOINT PRECISION AIRCRAFT LANDING SYSTEM (JPALS)						PARM Code: PMA 213	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	10.465		
Spares					1.066		
System Engineering					2.073		
Technical Engineering Services					0.436		
Other Costs					2.060		
Total				1	16.100		
Description: The Joint Precision Approach and Landing System (JPALS) is the primary precision approach and landing system for CVN ships to support F-35B, F-35C, MQ-25 and future platforms. JPALS ship systems are required to provide a primary precision approach capability during night and instrument flight conditions and coupled approach to the deck (auto-land) capability aboard CVN ships. JPALS also provides over-the-air inertial alignment capability for CVN ships to support aircraft platforms without Link-4A capability, including F-35, MQ-25 and future platforms. The nomenclature for JPALS has been designated AN/USN-3(V)1, Satellite Signals Landing System.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	RAYTHEON	C/FFP	Aug 2028		1	10.465
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	30	12	Aug 2028		
Competition/Second Source Initiatives: None							
Remarks: JPALS required to support JSF integration on FORD Class.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: OA-9277 ULTRA HIGH FREQUENCY (UHF) MULTICOUPLER						PARM Code: PMW 170	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	8.632		
System Engineering					0.074		
Technical Engineering Services					0.075		
Other Costs					0.135		
Total				1	8.916		
Description: OA-9277 Description: Ultra High Frequency (UHF) Program supports the exchange of secure Battle Group coordination data, organizational messaging, tactical data and voice over UHF SATCOM via Demand Assigned Multiple Access (DAMA) over 5/25kHz channels. UHF legacy Communication Line of Sight (LOS) Systems also support Anti-Access/Area Denial (A2AD) by providing a redundant or overlapping form of communication in case U.S. satellites are targeted by threat nations.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Aug 2027		1	8.632
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	30	24	Aug 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: AN/WSN-7(V)3, RING LASER GYRO NAVIGATOR (RLGN)						PARM Code: PEO IWS 6.0	
P-35 Category				FY 2020			
				Qty (Each)		Total Cost (\$ M)	
Major Hardware				1		4.657	
Technical Engineering Services						0.120	
Other Costs						0.065	
Total				1		4.842	
Description: The AN/WSN-7(V)3 Ring Laser Gyro Navigation (RLGN) System calculates and disseminates own ship's position, velocity and attitude (heading, roll and pitch) data outputs. The AN/WSN-7(V)3 RLGN System provides real time navigation data to use by Navigation & combat systems.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Sep 2026		1	4.657
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	47	18	Sep 2026		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: AN/USQ-214(V)1, NETWORK TACTICAL COMMON DATA LINK (NTCDL) SYSTEM						PARM Code: PMW 170	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	5.105		
Ancillary Equipment					0.173		
Technical Data and Documentation					0.017		
Spares					0.554		
System Engineering					0.070		
Technical Engineering Services					0.211		
Other Costs					0.508		
Total				1	6.638		
<p>Description:</p> <p>NTCDL provides the ability to transmit/receive real-time intelligence, surveillance, and reconnaissance (ISR) data simultaneously from multiple sources (air, surface, subsurface, 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 CDL equipped aircraft (e.g., F/A-18, P-3, and MH- 60R) in addition to next-generation manned and unmanned platforms (e.g., P-8 Poseidon, Triton, Unmanned Carrier-Launched Airborne Surveillance and Strike (UCLASS) vehicle, Small Tactical Unmanned Aircraft Systems (STUAS), and Fire Scout).</p>							
<p>Contract Data:</p>							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	BAE Systems Information and Electronic Systems Integration Inc	C/FFP	Mar 2022		1	5.105
<p>Delivery Date:</p>							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	31	14	May 2028		
<p>Competition/Second Source Initiatives:</p> <p>None</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: ELECTROMAGNETIC AIRCRAFT LAUNCHING SYSTEM (EMALS)					PARM Code: PMA 251		
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	704.560		
Spares					10.669		
System Engineering					17.070		
Technical Engineering Services					0.156		
Other Costs					34.272		
Total				1	766.727		
<p>Description:</p> <p>EMALS is an advanced technology electrically generated launching system that uses a moving electromagnetic field to propel aircraft to launch speed. EMALS is made up of six primary sub-systems: prime power interface, energy storage, energy distribution, power conversion, launch motor, and launch control subsystem. Benefits over the current C13 steam catapults include reduced weight and volume, greater launching flexibility for future aircraft, improved control, and reduced manning workload requirements.</p>							
<p>Contract Data:</p>							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	GENERAL ATOMICS	SS/FFP	Nov 2021	Option	1	704.560
<p>Delivery Date:</p>							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	57	48	May 2023		
<p>Competition/Second Source Initiatives:</p> <p>None</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81																															
Equipment Item: AN/SPY-6(V)3 ENTERPRISE AIR SURVEILLANCE RADAR (EASR)					PARM Code: PEO IWS 2.0																														
P-35 Category				FY 2020																															
				Qty (Each)		Total Cost (\$ M)																													
Major Hardware				1		41.086																													
Ancillary Equipment						0.194																													
Spares						1.535																													
System Engineering						8.633																													
Technical Engineering Services						5.126																													
Other Costs						5.411																													
Total				1		61.985																													
<p>Description:</p> <p>The Enterprise Air Surveillance Radar (EASR) suite will be a modern long-range, three-dimensional (3D) radar used to search, detect and provide space-stabilized, three-coordinate (range, bearing, height) data for air intercept control and designation to a weapon system and Air Traffic Control (ATC) system. The Enterprise Radar Suite (ERS), which includes EASR, is intended to replace the functions that Dual Band Radar (DBR) performed on CVN 78, but at a much lower cost.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2020</td><td>CVN 81</td><td>RAYTHEON</td><td>C/CPIF</td><td>Feb 2027</td><td></td><td>1</td><td>41.086</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2020</td><td>CVN 81</td><td>Feb 2032</td><td>30</td><td>30</td><td>Feb 2027</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>None</p> <p>Remarks:</p> <p>The hardware configuration (non-rotating) is essentially three times that of a rotating configuration, which is currently planned for the big deck amphibious warfare ships. EASR will have three phased arrays mounted around the island, while the amphibious warfare ships will use one rotating array. Below deck equipment is also provided at a larger scale with the non-rotating variant of EASR.</p> <p>The Enterprise Radar Suite (ERS) consists of AN/SPY-6(V)3 Enterprise Air Surveillance Radar (EASR), AN/SPQ-9B Anti-ship Missile Defense (ASMD) Surface Surveillance and Tracking Radar, and MK-9 Target Illuminators (TIs) (now part of MK-57 NATO SEASPARROW MISSILE SYSTEM (NSSMS)).</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2020	CVN 81	RAYTHEON	C/CPIF	Feb 2027		1	41.086	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2020	CVN 81	Feb 2032	30	30	Feb 2027
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2020	CVN 81	RAYTHEON	C/CPIF	Feb 2027		1	41.086																												
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																														
FY 2020	CVN 81	Feb 2032	30	30	Feb 2027																														

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: ADVANCED ARRESTING GEAR (AAG)						PARM Code: PMA 251	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	270.978		
Spares					0.564		
System Engineering					12.865		
Technical Engineering Services					1.143		
Other Costs					28.876		
Total				1	314.426		
Description: AAG provides an upgraded ability to recover all existing and projected aircraft carrier based air vehicles. The AAG system will replace the Mark 7 arresting gear system found on the NIMITZ Class carriers for the FORD Class. AAG consists of six primary systems: energy absorption subsystem, energy storage subsystem, dynamic control subsystem, thermal management subsystem, cross deck pendant, and the control subsystem.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	GENERAL ATOMICS	SS/FFP	Dec 2021	Option	1	270.978
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	64	48	Oct 2022		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: PHALANX BLOCK 1B MK 15 MOD 21 & 22, CLOSE - IN WEAPONS SYSTEM (CIWS)						PARM Code: IWS 11	
P-35 Category				FY 2020			
				Qty (Each)		Total Cost (\$ M)	
Major Hardware				3		20.348	
Ancillary Equipment						0.117	
Spares						0.495	
System Engineering						1.558	
Technical Engineering Services						0.954	
Other Costs						1.846	
Total				3		25.318	
Description: Phalanx is a high fire rate Close-In Weapon System (CIWS) that automatically acquires, tracks, and destroys Anti-Ship cruise missiles, Helos, Aircraft, and all types of Surface threats. The installed version will have one MK-15 Mod 21 and two MK-15 Mod 22 CIWS systems.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	RAYTHEON	C/FFP	Dec 2027		3	6.783
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	28	22	Dec 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: AN/SQQ-34, CARRIER-TACTICAL SUPPORT CENTER (CV-TSC)						PARM Code: PEO IWS 5E	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	4.024		
Spares					0.315		
System Engineering					0.072		
Technical Engineering Services					0.077		
Other Costs					0.771		
Total				1	5.259		
Description: CV-TSC provides for carrier organic Anti-submarine Warfare (ASW), Mine Warfare (MIW), Surface Warfare (SUW), and other composite warfare area sensor data processing, tactical command and control, and organic/battle-group aircraft mission support. CV-TSC supports both ship self-defense and embarked Destroyer Squadron (DESRON) missions. This system is Open Architecture Computing Environment (OACE), Joint Fires Network (JFN), and FORCEnet compliant. It includes redesign to maximize introduction of expected transformational technologies such as Common Processing System (CPS), Common Display System (CDS), sensor processing in support of the MH-60R helicopter, high speed bandwidth network, Excomm systems, net-centric warfare components, etc.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Sep 2027		1	4.024
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	35	18	Sep 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: MK-57 NATO SEASPARROW MISSILE SYSTEM (NSSMS)					PARM Code: PEO IWS 12		
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	40.165		
Ancillary Equipment					0.432		
Spares					1.788		
System Engineering					0.811		
Technical Engineering Services					0.768		
Other Costs					1.885		
Total				1	45.849		
Description: The NATO SeaSparrow Surface Missile System (NSSMS) is a medium range self-defense missile system capable of defeating near/mid-term air/surface threats. The NSSMS MK 57 Mod 15 is comprised of (4) MK 9 tracker/illuminator radars and (2) MK 29 ESSM Guided Missile Launchers (GML) that connect to and support the SSDS Integrated Combat System (ICS).							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Aug 2027		1	40.165
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	18	36	Aug 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81																															
Equipment Item: AVIATION DATA MANAGEMENT AND CONTROL SYSTEM (ADMACS)					PARM Code: PMA 251																														
P-35 Category				FY 2020																															
				Qty (Each)		Total Cost (\$ M)																													
Major Hardware				1		5.108																													
System Engineering						0.944																													
Technical Engineering Services						0.588																													
Other Costs						2.132																													
Total				1		8.772																													
<p>Description:</p> <p>ADMACS is a virtual, seamless, data sharing, knowledge based data system that provides interface for all aviation data systems. It is a tactical real-time information management system maintaining data integrity throughout the ship spaces that manage aircraft launch and recovery operations on board the carrier. ADMACS includes data from launch and recovery equipment, air traffic control, aviation maintenance, landing signaling officer, etc.</p> <p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2020</td><td>CVN 81</td><td>TBD</td><td>TBD</td><td>Oct 2028</td><td></td><td>1</td><td>5.108</td></tr></table> <p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2020</td><td>CVN 81</td><td>Feb 2032</td><td>28</td><td>12</td><td>Oct 2028</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>None</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2020	CVN 81	TBD	TBD	Oct 2028		1	5.108	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2020	CVN 81	Feb 2032	28	12	Oct 2028
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2020	CVN 81	TBD	TBD	Oct 2028		1	5.108																												
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																														
FY 2020	CVN 81	Feb 2032	28	12	Oct 2028																														

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81			
Equipment Item: MK 49, MOD 3 ROLLING AIRFRAME MISSILE (RAM)						PARM Code: PEO IWS 11	
P-35 Category				FY 2020			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				2	21.950		
Ancillary Equipment					0.285		
Spares					0.200		
System Engineering					1.627		
Technical Engineering Services					0.808		
Other Costs					2.063		
Total				2	26.933		
Description: The MK 49 Mod 5 Rolling Airframe Missile (RAM) Weapon System is a lightweight, low cost, high power system for anti-ship missile defense against current and evolving threats. The Block 2 upgrade adds the capability of infrared, all-the-way missile guidance while maintaining the original dual-mode (RF/IR) capability. The helos, aircraft, and surface (HAS) upgrade enables the engagement of asymmetric threats.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 81	TBD	TBD	Aug 2027		2	10.975
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 81	Feb 2032	33	21	Aug 2027		
Competition/Second Source Initiatives: None							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81																			
Equipment Item: AN/SPQ-9B, ANTI-SHIP MISSILE DEFENSE (ASMD) SURFACE SURVEILLANCE AND TRACKING RADAR						PARM Code: PEO IWS2B																	
P-35 Category				FY 2020																			
				Qty (Each)	Total Cost (\$ M)																		
Major Hardware				1	7.576																		
Spares					0.497																		
System Engineering					1.081																		
Technical Engineering Services					0.664																		
Other Costs					3.900																		
Total				1	13.718																		
Description: SPQ-9B is a multimode, x-band, narrow beam, pulse Doppler radar that detects and tracks sea-skimming missiles (ASMD) at the horizon in heavy clutter while simultaneously providing detection and tracking of surface targets.																							
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="width: 10%;">Program Year</th> <th style="width: 10%;">Hull</th> <th style="width: 30%;">Prime Contractor</th> <th style="width: 15%;">Contract Method/Type</th> <th style="width: 10%;">Award Date</th> <th style="width: 10%;">New/Option</th> <th style="width: 10%;">Quantity (Each)</th> <th style="width: 15%;">Unit Cost (\$ M)</th> </tr> <tr> <td>FY 2020</td> <td>CVN 81</td> <td>Laurel Technologies Partnership/DRS</td> <td>SS/FFP</td> <td>Mar 2022</td> <td></td> <td style="text-align: center;">1</td> <td style="text-align: right;">7.576</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2020	CVN 81	Laurel Technologies Partnership/DRS	SS/FFP	Mar 2022		1	7.576
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																
FY 2020	CVN 81	Laurel Technologies Partnership/DRS	SS/FFP	Mar 2022		1	7.576																
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="width: 10%;">Program Year</th> <th style="width: 10%;">Hull</th> <th style="width: 20%;">Earliest Ship Delivery Date</th> <th style="width: 20%;">Months Required Before Delivery</th> <th style="width: 20%;">Production Leadtime</th> <th style="width: 20%;">Required Award Date</th> </tr> <tr> <td>FY 2020</td> <td>CVN 81</td> <td style="text-align: center;">Feb 2032</td> <td style="text-align: center;">35</td> <td style="text-align: center;">18</td> <td style="text-align: center;">Sep 2027</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2020	CVN 81	Feb 2032	35	18	Sep 2027				
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																		
FY 2020	CVN 81	Feb 2032	35	18	Sep 2027																		
Competition/Second Source Initiatives: None																							
Remarks: The Enterprise Radar Suite (ERS) consists of AN/SPY-6(V)3 Enterprise Air Surveillance Radar (EASR), AN/SPQ-9B Anti-ship Missile Defense (ASMD) Surface Surveillance and Tracking Radar and MK-9 Target Illuminators (TIs) (now part of MK-57 NATO SEASPARROW MISSILE SYSTEM (NSSMS)).																							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81																															
Equipment Item: IMPROVED FRESNEL LENS OPTICAL LANDING SYSTEM (IFLOLS)						PARM Code: PMA 251																													
P-35 Category				FY 2020																															
				Qty (Each)	Total Cost (\$ M)																														
Major Hardware				1	6.964																														
System Engineering					0.241																														
Technical Engineering Services					0.046																														
Other Costs					0.503																														
Total				1	7.754																														
<p>Description: Improved Fresnel Lens Optical Landing System (IFLOLS) is the primary visual landing aid system that displays glide path and trend information to a fixed wing pilot approaching the CVN flight deck. The system presents a display that is visible at a range of 1.0 nautical mile and displays a virtual image (ball) that is dynamically stabilized to compensate for ship's pitch, roll and heave motion.</p> <p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2020</td><td>CVN 81</td><td>NAWCAD</td><td>TBD</td><td>Jan 2027</td><td></td><td>1</td><td>6.964</td></tr></table> <p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2020</td><td>CVN 81</td><td>Feb 2032</td><td>49</td><td>12</td><td>Jan 2027</td></tr></table> <p>Competition/Second Source Initiatives: None</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2020	CVN 81	NAWCAD	TBD	Jan 2027		1	6.964	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2020	CVN 81	Feb 2032	49	12	Jan 2027
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2020	CVN 81	NAWCAD	TBD	Jan 2027		1	6.964																												
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																														
FY 2020	CVN 81	Feb 2032	49	12	Jan 2027																														

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2004 / CVN-81																															
Equipment Item: INTEGRATED LAUNCH AND RECOVERY TELEVISION SYSTEM (ILARTS)						PARM Code: PMA 251																													
P-35 Category				FY 2020																															
				Qty (Each)	Total Cost (\$ M)																														
Major Hardware				1	4.119																														
System Engineering					0.441																														
Technical Engineering Services					1.016																														
Other Costs					1.631																														
Total				1	7.207																														
<p>Description:</p> <p>ILARTS provides a method for observing and retaining a video record of each aircraft launch and recovery. The system simultaneously monitors and records aircraft recoveries and launches during day and night operations. It also provides the LSO with information on the aircraft lineup during recovery.</p> <p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2020</td><td>CVN 81</td><td>TBD</td><td>TBD</td><td>Jan 2027</td><td></td><td>1</td><td>4.119</td></tr></table> <p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2020</td><td>CVN 81</td><td>Feb 2032</td><td>49</td><td>12</td><td>Jan 2027</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>None</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2020	CVN 81	TBD	TBD	Jan 2027		1	4.119	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2020	CVN 81	Feb 2032	49	12	Jan 2027
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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships							P-1 Line Item Number / Title: 2013 / Virginia Class Submarine					
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A				Other Related Program Elements: 0604558N, 0604580N, 0204281N					
Line Item MDAP/MAIS Code: 516												
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 (<i>Units in Each</i>)	34	2	2	2	-	2	2	2	2	2	3	51
Gross/Weapon System Cost (<i>\$ in Millions</i>)	95,551.341	6,900.757	7,250.579	9,427.643	0.000	9,427.643	8,593.967	8,617.251	8,814.406	8,965.622	13,869.096	167,990.662
Less PY Advance Procurement (<i>\$ in Millions</i>)	26,511.705	1,888.328	1,938.306	2,297.678	-	2,297.678	1,871.623	2,108.969	1,995.200	2,064.520	3,252.331	43,928.660
Less Cost To Complete (<i>\$ in Millions</i>)	3,116.870	-	-	-	-	-	-	-	-	-	-	3,116.870
Less Economic Order Quantity (<i>\$ in Millions</i>)	4,753.602	778.189	778.089	-	-	-	272.007	596.592	832.550	832.549	832.550	9,676.128
Net Procurement (P-1) (<i>\$ in Millions</i>)	61,169.164	4,234.240	4,534.184	7,129.965	0.000	7,129.965	6,450.337	5,911.690	5,986.656	6,068.553	9,784.215	111,269.004
Plus CY Advance Procurement (<i>\$ in Millions</i>)	29,726.419	2,105.407	2,025.651	1,855.502	-	1,855.502	2,214.984	2,050.264	2,102.858	1,484.422	363.153	43,928.660
Plus Cost To Complete (<i>\$ in Millions</i>)	1,844.685	-	304.702	168.180	-	168.180	200.078	69.292	394.183	135.750	-	3,116.870
Plus Economic Order Quantity (<i>\$ in Millions</i>)	6,309.880	-	-	1,360.037	-	1,360.037	1,298.349	707.862	-	-	-	9,676.128
Total Obligation Authority (<i>\$ in Millions</i>)	99,050.148	6,339.647	6,864.537	10,513.684	0.000	10,513.684	10,163.748	8,739.108	8,483.697	7,688.725	10,147.368	167,990.662
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	1,580.224	84.433	78.429	95.434	-	95.434	161.424	104.968	85.620	60.797	1,977.796	4,229.125
Total (<i>\$ in Millions</i>)	100,630.372	6,424.080	6,942.966	10,609.118	-	10,609.118	10,325.172	8,844.076	8,569.317	7,749.522	12,125.164	172,219.787
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	2,810.334	3,450.379	3,625.290	4,713.822	-	4,713.822	4,296.984	4,308.626	4,407.203	4,482.811	4,623.032	3,293.935

Description:

MISSION: To seek out and destroy enemy ships across a wide spectrum of tactical scenarios, working both independently and in concert with a battle group/other ships, providing Joint Commanders with early, accurate knowledge of the battlefield on which power may be projected from sea; covert striking power against targets ashore; the capability to establish covertly an expeditionary force on land; and the maritime strength to destroy enemy naval forces and interdict seaborne commerce.

NOTE: The program is currently executing the fourth Multi-Year Procurement (MYP) (Block V) contract which was awarded on 2 December 2019 and subsequently modified on 22 March 2021 to exercise an option for a tenth SSN. Block V incorporates Acoustic Superiority (AS) modifications on all SSNs, and VIRGINIA Payload Module (VPM) beginning with SSN 803. All Block V SSNs will include modifications to provide enhanced capability and improved performance based upon efforts performed via RDT&E (PE 0604558N/Prj 1947). VPM is an 84-foot hull section with four additional payload tubes, each capable of carrying seven Tomahawk cruise missiles or various other payloads. VPM helps mitigate the loss of undersea strike capability with the retirement of the Service's four guided missile submarines (SSGNs) in the late-2020s. Funding associated with these changes to the baseline are shown in more detail on subsequent pages of these exhibits.

FY 2024 funds two VIRGINIA Class Submarines (VCS) in different configurations; one is the Modified VIRGINIA Class Subsea and Seabed Warfare (Mod VA SSW) and the second is Virginia Payload Module (VPM); funding also provides Advance Procurement (AP) for future SSNs and EOQ funds for a future multi-year procurement.

Funds in FY 2024 also account for Undersea Dominance Payload Integration (UDPI) host-ship HM&E changes, reliability and obsolescence management, and Conventional Prompt Strike (CPS) integration.

FY 2024 includes Completion of Prior Year Shipbuilding Programs (cost to complete) funds for the Block IV FY2015 SSN 795 (\$43.4M), FY 2016 SSN 796/SSN 797 (\$100.1M), and FY 2017 SSN 798 (\$24.7M) to finance the Government responsible portion of the shipbuilding construction contract overrun.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships			P-1 Line Item Number / Title: 2013 / Virginia Class Submarine		
ID Code (A=Service Ready, B=Not Service Ready): A		Program Elements for Code B Items: N/A		Other Related Program Elements: 0604558N, 0604580N, 0204281N	
Line Item MDAP/MAIS Code: 516					
Design Schedule		Start / Issue	Complete / Response	Reissue	Reissue Complete / Response
Request for Proposals		N/A	N/A		
Design Agent		Electric Boat			
Classification of Cost Estimate: C					
<p>Justification: FY 2024 funds two VIRGINIA Class Submarines (VCS) in different configurations; Modified VIRGINIA Class Subsea and Seabed Warfare (Mod VA SSW), Virginia Payload Module (VPM), as well as Advance Procurement (AP) for future SSNs. Funds in FY 2024 also account for Undersea Dominance Payload Integration (UDPI) host-ship HM&E changes, reliability and obsolescence management, and Conventional Prompt Strike (CPS) integration. FY 2024 includes Completion of Prior Year Shipbuilding Programs (cost to complete) funds for the Block IV FY2015 SSN 795 (\$43.4M), FY 2016 SSN 796/SSN 797 (\$100.1M), and FY 2017 SSN 798 (\$24.7M) to finance the Government responsible portion of the shipbuilding construction contract overrun.</p> <p>The VIRGINIA Class SSN Acquisition Program Baseline (APB) established in 2017 is for 48 submarines. Update of baseline estimates to support current force structure projections are in process.</p>					
<p>Footnotes:</p> <p>⁽¹⁾ These VIRGINIA Class exhibits reflect Block V incorporating changes for AS on all SSNs and VPM beginning with SSN 803.</p> <p>⁽²⁾ The Navy conducts Construction Readiness Reviews (CRR) with the shipbuilders to determine, at an enterprise level, if the shipbuilders are ready to ramp up to full construction of the next VCS Block V SSN. The provided dates for SSN 808 and subsequent Block V SSNs are the current Program Manager estimates and may be adjusted based on the outcomes of future CRRs or future contract awards/modifications.</p> <p>⁽³⁾ SSN 812 and subsequent SSNs reflect initial estimated construction spans for platforms not yet under contract and may be adjusted based on the outcome of final contract negotiations.</p>					

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 02 / 1P-1 Line Item Number / Title:
2013 / Virginia Class Submarine

Cost Categories (^(†) indicates the presence of a P-8a)	FY 2015		FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	2	177.095	2	183.078	2	180.184	2	187.778	2	472.813	2	394.106	2	303.171	2	252.399
Basic Construction/Conversion		3,424.980		3,543.047		3,597.042		3,635.664		4,927.522		5,186.180		4,988.260		4,743.583
Change Orders		89.481		91.459		73.043		74.536		87.952		103.891		100.610		94.912
Electronics (^(†))		504.701		514.795		515.852		525.653		482.551		546.354		529.936		540.536
Technology Insertion		28.835		13.535		12.501		18.000		8.500		15.096		14.800		15.398
Propulsion Equipment		970.000		1,025.000		1,032.500		1,051.100		871.675		1,047.000		1,083.600		1,046.830
Hull, Mechanical, and Electrical (HM&E) (^(†))		106.822		109.920		110.190		112.394		119.028		125.882		128.400		139.293
Other Cost		53.233		54.777		54.058		55.140		60.070		65.168		66.476		67.806
Total Ship Estimate		5,355.147		5,535.611		5,575.370		5,660.265		7,030.111		7,483.677		7,215.253		6,900.757
Less Advance Procurement FY 2013		1,110.000		-		-		-		-		-		-		-
Less Advance Procurement FY 2014		467.014		1,145.000		-		-		-		-		-		-
Less Advance Procurement FY 2015		-		468.536		1,152.500		-		-		-		-		-
Less Advance Procurement FY 2016		-		-		470.788		1,171.100		-		-		-		-
Less Advance Procurement FY 2017		-		-		-		475.940		1,376.294		-		-		-
Less Advance Procurement FY 2018		-		-		-		-		752.597		1,167.999		-		-
Less Advance Procurement FY 2019		-		-		-		-		-		588.903		1,222.038		-
Less Advance Procurement FY 2020		-		-		-		-		-		-		618.641		1,268.947
Less Advance Procurement FY 2021		-		-		-		-		-		-		-		619.381
Less Advance Procurement FY 2022		-		-		-		-		-		-		-		-
Less Advance Procurement FY 2023		-		-		-		-		-		-		-		-
Less Cost to Complete FY 2023		46.060		58.642		-		-		-		-		200.000		-
Less Cost to Complete FY 2024		43.419		100.115		24.646		-		-		-		-		-
Less Cost to Complete FY 2025		-		-		141.823		58.255		-		-		-		-

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy										Date: March 2023							
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1								P-1 Line Item Number / Title: 2013 / Virginia Class Submarine									
Cost Categories <small>^(†) indicates the presence of a P-8a</small>	FY 2015		FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022		
	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>	
Less Cost to Complete FY 2026		-		-		-		69.292		-		-		-		-	
Less Cost to Complete FY 2027		-		-		-		-		394.183		-		-		-	
Less Cost to Complete FY 2028		-		-		-		-		135.750		-		-		-	
Less EOQ FY 2014		158.400		219.380		194.909		169.909		-		-		-		-	
Less EOQ FY 2015		-		197.568		251.603		231.618		-		-		-		-	
Less EOQ FY 2016		-		-		151.116		178.836		-		-		-		-	
Less EOQ FY 2018		-		-		-		-		30.611		115.229		31.008		24.126	
Less EOQ FY 2019		-		-		-		-		-		246.365		246.365		246.365	
Less EOQ FY 2020		-		-		-		-		-		-		293.988		293.988	
Less EOQ FY 2021		-		-		-		-		-		-		-		213.710	
Net P-1 Funding		3,530.254		3,346.370		3,187.985		3,305.315		4,340.676		5,365.181		4,603.213		4,234.240	

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 02 / 1P-1 Line Item Number / Title:
2013 / Virginia Class Submarine

Cost Categories (^(†) indicates the presence of a P-8a)	FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	2	192.169	2	207.166
Basic Construction/Conversion		5,095.448		7,159.762
Change Orders		102.067		146.118
Electronics (^(†))		551.346		562.372
Technology Insertion		15.706		16.020
Propulsion Equipment		1,083.115		1,121.470
Hull, Mechanical, and Electrical (HM&E) (^(†))		141.566		144.189
Other Cost		69.162		70.546
Total Ship Estimate		7,250.579		9,427.643
Less Advance Procurement FY 2013		-		-
Less Advance Procurement FY 2014		-		-
Less Advance Procurement FY 2015		-		-
Less Advance Procurement FY 2016		-		-
Less Advance Procurement FY 2017		-		-
Less Advance Procurement FY 2018		-		-
Less Advance Procurement FY 2019		-		-
Less Advance Procurement FY 2020		200.000		-
Less Advance Procurement FY 2021		1,126.386		-
Less Advance Procurement FY 2022		611.920		1,493.487
Less Advance Procurement FY 2023		-		804.191
Less Cost to Complete FY 2023		-		-
Less Cost to Complete FY 2024		-		-
Less Cost to Complete FY 2025		-		-
Less Cost to Complete FY 2026		-		-
Less Cost to Complete FY 2027		-		-
Less Cost to Complete FY 2028		-		-
Less EOQ FY 2014		-		-
Less EOQ FY 2015		-		-
Less EOQ FY 2016		-		-
Less EOQ FY 2018		24.026		-
Less EOQ FY 2019		246.365		-
Less EOQ FY 2020		293.988		-
Less EOQ FY 2021		213.710		-

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2013 / Virginia Class Submarine		
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2023		FY 2024	
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>
Net P-1 Funding		4,534.184		7,129.965
<p>Remarks: These VIRGINIA Class exhibits reflect Block V incorporating changes for AS on all SSNs and VPM beginning with SSN 803.</p> <p>FY 2024 funds two VIRGINIA Class Submarines (VCS) in different configurations; one is the Modified VIRGINIA Class Subsea and Seabed Warfare (Mod VA SSW) and the second is Virginia Payload Module (VPM); funding also provides Advance Procurement (AP) for future SSNs and EOQ funds for a future multi-year procurement.</p> <p>FY2023 and later SSNs have higher Basic Construction and Change Orders funding to account for additional costs due to unfavorable construction contract cost and schedule performance.</p> <p>FY2024 SSNs have an increase to Plan Costs, Basic Construction/Conversion, and Change Orders funding to account for additional costs associated with the Mod VA SSW platform configuration.</p> <p>The program identified cost efficiencies in the Electronics category to support the award of the Block V MYP contract. The overall cost efficiencies are carried through all future program years. Additionally, the Electronics profile fluctuation (FY 2019 - FY 2023) reflects improved alignment of non-recurring engineering support to physically and electronically integrate the pre-planned NPES TI-24 Tech Insertion configuration and various phased Undersea Dominance Payloads.</p> <p>Funds in FY 2024 also account for Undersea Dominance Payload Integration (UDPI) host-ship HM&E changes, reliability and obsolescence management, and Conventional Prompt Strike (CPS) integration. FY 2024 Cost-to complete funds are for the Block IV FY2015 SSN 795 (\$43.4M), FY 2016 SSN 796/SSN 797 (\$100.1M), and FY 2017 SSN 798 (\$24.7M) to finance the Government responsible portion of the shipbuilding construction contract overrun.</p>				

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy	Date: March 2023
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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1	P-1 Line Item Number / Title: 2013 / Virginia Class Submarine
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Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
SSN 795	EB/HII-NNS	2015	Apr 2014	Sep 2015	May 2023
SSN 796	EB/HII-NNS	2016	Apr 2014	Mar 2016	Sep 2023
SSN 797	EB/HII-NNS	2016	Apr 2014	Sep 2016	Jun 2024
SSN 798	EB/HII-NNS	2017	Apr 2014	Mar 2017	Nov 2024
SSN 799	EB/HII-NNS	2017	Apr 2014	Sep 2017	Mar 2025
SSN 800	EB/HII-NNS	2018	Apr 2014	Mar 2018	Dec 2025
SSN 801	EB/HII-NNS	2018	Apr 2014	Sep 2018	Sep 2026
SSN 802 ⁽¹⁾	EB/HII-NNS	2019	Dec 2019	Sep 2019	May 2027
SSN 803	EB/HII-NNS	2019	Dec 2019	Mar 2020	Nov 2028
SSN 804	EB/HII-NNS	2020	Dec 2019	Sep 2020	Mar 2029
SSN 805	EB/HII-NNS	2020	Dec 2019	Jul 2021	Jul 2029
SSN 806	EB/HII-NNS	2021	Dec 2019	Aug 2022	Feb 2030
SSN 807	EB/HII-NNS	2021	Dec 2019	Nov 2022	Feb 2031
SSN 808 ⁽²⁾	EB/HII-NNS	2022	Dec 2019	May 2023	Dec 2030
SSN 809	EB/HII-NNS	2022	Dec 2019	Oct 2023	Oct 2031
SSN 810	EB/HII-NNS	2023	Dec 2019	Mar 2024	Dec 2031
SSN 811	EB/HII-NNS	2023	Dec 2019	Sep 2024	Jul 2032
SSN 812 ⁽³⁾	EB/HII-NNS	2024	May 2024	Mar 2025	Jun 2033
SSN 813	EB/HII-NNS	2024	May 2025	Sep 2025	Sep 2033
SSN 814	EB/HII-NNS	2025	May 2025	Mar 2026	Mar 2034
SSN 815	EB/HII-NNS	2025	May 2025	Sep 2026	Sep 2034
SSN 816	EB/HII-NNS	2026	May 2025	Mar 2027	Mar 2035
SSN 817	EB/HII-NNS	2026	May 2025	Sep 2027	Sep 2035
SSN 818	EB/HII-NNS	2027	May 2025	Mar 2028	Mar 2036
SSN 819	EB/HII-NNS	2027	May 2025	Sep 2028	Sep 2036
SSN 820	EB/HII-NNS	2028	May 2025	Mar 2029	Mar 2037
SSN 821	EB/HII-NNS	2028	May 2025	Sep 2029	Sep 2037

Footnotes:

⁽¹⁾ These VIRGINIA Class exhibits reflect Block V incorporating changes for AS on all SSNs and VPM beginning with SSN 803.

⁽²⁾ The Navy conducts Construction Readiness Reviews (CRR) with the shipbuilders to determine, at an enterprise level, if the shipbuilders are ready to ramp up to full construction of the next VCS Block V SSN. The provided dates for SSN 808 and subsequent Block V SSNs are the current Program Manager estimates and may be adjusted based on the outcomes of future CRRs or future contract awards/modifications.

⁽³⁾ SSN 812 and subsequent SSNs reflect initial estimated construction spans for platforms not yet under contract and may be adjusted based on the outcome of final contract negotiations.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy				Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2013 / Virginia Class Submarine			
Electronics	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items						
Sonar, Combat Control & Architecture	2	221.924	2	226.362	2	230.889
Electronic Support Measures (ESM)	2	60.623	2	61.836	2	63.073
Photonics Masts	2	40.772	2	41.587	2	42.419
Universal Modular Mast (UMM)	2	23.252	2	23.718	2	24.192
Exterior Communications System (ECS) Recurring	2	55.001	2	56.101	2	57.223
P-35 Items Subtotal		401.572		409.604		417.796
Major Items						
System Level Activities	2	40.816	2	41.633	2	42.466
AN/BPS-16	2	6.261	2	6.386	2	6.514
Navigation	2	7.097	2	7.239	2	7.384
CWITT	2	46.159	2	47.082	2	48.023
Non-Propulsion Electronics System, Systems Engineering and Integration (NPES SE&I)	2	36.125	2	36.846	2	37.583
Major Items Subtotal		136.458		139.186		141.970
Other Cost Elements						
Misc Electronics		2.506		2.556		2.606
Other Cost Elements Subtotal		2.506		2.556		2.606
Total Electronics		540.536		551.346		562.372
Remarks: The program identified cost efficiencies in the Electronics category to support the award of the Block V MYP contract. The overall cost efficiencies are carried through all future program years.						

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2013 / Virginia Class Submarine			
Hull, Mechanical, and Electrical (HM&E)	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items						
Propulsor	2	92.621	2	93.960	2	95.631
P-35 Items Subtotal		92.621		93.960		95.631
Major Items						
CSA MK2		3.570		3.640		3.712
Major Items Subtotal		3.570		3.640		3.712
Other Cost Elements						
HM&E Installation and testing		21.110		21.468		21.898
T&E		19.600		20.058		20.460
SUPSHIP responsible material		2.392		2.440		2.488
Other Cost Elements Subtotal		43.102		43.966		44.846
Total Hull, Mechanical, and Electrical (HM&E)		139.293		141.566		144.189

Remarks:
VCS includes additional hardware funding to insert Improved Advanced Hybrid (IAH) Propulsors beginning with SSNs authorized in FY 2022. Construction of these Propulsors is within existing foundry capacity and has been successfully proven during at-sea demonstration. The IAH Propulsor provides significantly enhanced capability, reduced maintenance complexity, and improved performance. Insertion of IAH Propulsors accounts for the increase to Propulsor hardware material costs above inflation.

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2013 / Virginia Class Submarine																																																											
Equipment Item: Sonar, Combat Control & Architecture					PARM Code: N/A																																																										
P-35 Category	FY 2022		FY 2023		FY 2024																																																										
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																									
	Major Hardware	2190.679	2194.493	2198.383																																																											
	Technical Engineering Services	3.413	3.481	3.550																																																											
	Other Costs	27.832	28.388	28.956																																																											
Total	2221.924	2226.362	2230.889																																																												
<p>Description:</p> <p>The VIRGINIA Class Command, Control, Communications and Intelligence (C3I) System is the electronics suite which will provide required operational and warfighting capability for the Navy's newest attack submarine. The C3I System includes 15 subsystems (23 if all electronically interfaced subsystems are included) integrated by an overarching Architecture Subsystem. This P-35 covers the procurement requirements for the following: C3I Prime Contractor Furnished Equipment (Sonar, Combat Control and Architecture subsystems) and associated Government Furnished Equipment; technical data documentation; spares; technical engineering services; design engineering services; field engineering services; management support services; and shipboard certification efforts.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>SSN 808</td><td>Lockheed Martin</td><td>C/CPIF</td><td>Jan 2022</td><td>Option</td><td>2</td><td>52.922</td></tr><tr><td>FY 2023</td><td>SSN 810</td><td>Lockheed Martin</td><td>C/CPIF</td><td>Jan 2023</td><td>Option</td><td>2</td><td>53.980</td></tr><tr><td>FY 2024</td><td>SSN 812</td><td>Lockheed Martin</td><td>C/CPIF</td><td>Jan 2024</td><td>Option</td><td>2</td><td>55.060</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>SSN 808</td><td>Dec 2030</td><td>26</td><td>32</td><td>Feb 2026</td></tr><tr><td>FY 2023</td><td>SSN 810</td><td>Dec 2031</td><td>26</td><td>32</td><td>Feb 2027</td></tr><tr><td>FY 2024</td><td>SSN 812</td><td>Jun 2033</td><td>26</td><td>32</td><td>Aug 2028</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: The Sonar, Combat Control & Architecture P-35 exhibit includes funding for multiple subsystems, contracts and field activities. However, the unit cost in the contract data section reflects only the major contract, Sonar acoustics processing.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	SSN 808	Lockheed Martin	C/CPIF	Jan 2022	Option	2	52.922	FY 2023	SSN 810	Lockheed Martin	C/CPIF	Jan 2023	Option	2	53.980	FY 2024	SSN 812	Lockheed Martin	C/CPIF	Jan 2024	Option	2	55.060	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	SSN 808	Dec 2030	26	32	Feb 2026	FY 2023	SSN 810	Dec 2031	26	32	Feb 2027	FY 2024	SSN 812	Jun 2033	26	32	Aug 2028
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																								
FY 2022	SSN 808	Lockheed Martin	C/CPIF	Jan 2022	Option	2	52.922																																																								
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2013 / Virginia Class Submarine			
Equipment Item: Electronic Support Measures (ESM)						PARM Code: N/A	
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	2	48.444	2	49.413	2	50.402	
Technical Engineering Services		2.713		2.767		2.822	
Other Costs		9.466		9.656		9.849	
Total	2	60.623	2	61.836	2	63.073	

Description:
 The VIRGINIA Class Command, Control, Communications and Intelligence (C3I) System is the electronics suite which will provide required operational and warfighting capability for the Navy's newest attack submarine. The C3I System includes 15 subsystems (23 if all electronically interfaced subsystems are included) integrated by an overarching Architecture Subsystem. This P-35 covers the procurement requirements for the following: Electronic Support Measures subsystem Prime Contractor Furnished Equipment, and associated Government Furnished Equipment; technical data documentation; spares; systems engineering; technical engineering services; computer program support; system test & evaluation; field engineering services; management support services; shipboard certification efforts; quality assurance and reliability/maintainability assurance; maintenance of technical data; and contractor support services efforts. This system provides the capability to process a variety of electromagnetic signal types over a wide frequency range in support of all applicable submarine mission areas.

Contract Data:

Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	SSN 808	Lockheed Martin	C/FPIF	Jun 2022	Option	2	24.222
FY 2023	SSN 810	Lockheed Martin	C/CPIF	Jun 2023	Option	2	24.707
FY 2024	SSN 812	Lockheed Martin	C/CPIF	Jun 2024	Option	2	25.201

Delivery Date:

Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date
FY 2022	SSN 808	Dec 2030	26	24	Oct 2026
FY 2023	SSN 810	Dec 2031	26	24	Oct 2027
FY 2024	SSN 812	Jun 2033	26	24	Apr 2029

Competition/Second Source Initiatives:
 Multi-Functional Modular Mast inboard Contract: Full and open competition for SSN 802 through SSN 813.

Remarks:
 This exhibit includes funding for both the inboard subsystem and the outboard sensors both provided by the prime contractor Lockheed Martin Syracuse, NY.

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2013 / Virginia Class Submarine			
Equipment Item: Photonics Masts						PARM Code: N/A	
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	2	29.699	2	30.292	2	30.898	
Technical Engineering Services		1.334		1.361		1.388	
Other Costs		9.739		9.934		10.133	
Total	2	40.772	2	41.587	2	42.419	
Description: The VIRGINIA Class Command, Control, Communications and Intelligence (C3I) System is the electronics suite which will provide required operational and warfighting capability for the Navy's newest attack submarine. The C3I System includes 15 subsystems (23 if all electronically interfaced subsystems are included) integrated by an overarching Architecture Subsystem. This P-35 covers the procurement requirements for the following: Photonics subsystem Prime Contractor Furnished Equipment; spares; systems engineering; technical engineering services; computer program support; field engineering services; management support services; shipboard certification; maintenance of technical data; and contractor support services efforts. This system consists of two outboard mast/antenna/camera assemblies and the associated inboard processing and display equipment. This system supports visual and infrared (IR) imaging, RF signal communications, early warning and contact direction finding capability.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	SSN 808	Lockheed Martin	C/FFP	Sep 2022	Option	2	14.850
FY 2023	SSN 810	Lockheed Martin	C/FFP	Sep 2023	Option	2	15.146
FY 2024	SSN 812	Lockheed Martin	C/FFP	Sep 2024	Option	2	15.449
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	SSN 808	Dec 2030	26	24	Oct 2026		
FY 2023	SSN 810	Dec 2031	26	24	Oct 2027		
FY 2024	SSN 812	Jun 2033	26	24	Apr 2029		
Competition/Second Source Initiatives: AN/BVY-1 Integrated Submarine Imaging System (ISIS) Inboard Contract: Full and open competition for SSN 802 through SSN 813.							
Remarks: This exhibit includes funding for both the inboard subsystem provided by prime contractor Lockheed Martin, Manassas VA and the outboard sensors provided by L3Harris.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2013 / Virginia Class Submarine																																																										
Equipment Item: Universal Modular Mast (UMM)						PARM Code: N/A																																																								
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	2	18.260	2	18.626	2	18.999																																																								
Technical Engineering Services		3.029		3.090		3.151																																																								
Other Costs		1.963		2.002		2.042																																																								
Total	2	23.252	2	23.718	2	24.192																																																								
<p>Description:</p> <p>The VIRGINIA Class Command, Control, Communications and Intelligence (C3I) System is the electronics suite which will provide required operational and warfighting capability for the Navy's newest attack submarine. The C3I System includes 15 subsystems (23 if all electronically interfaced subsystems are included) integrated by an overarching Architecture Subsystem. This P-35 covers the procurement requirements for the following: Modular Mast Prime Contractor Furnished Equipment; technical data documentation; spares; systems engineering; technical engineering services; management support services; shipboard certification; and maintenance of technical data efforts. This system consists of eight common masts for purposes of housing, raising and lowering antenna and other sensor units.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>SSN 808</td><td>L3 KEO</td><td>SS/FP</td><td>Apr 2022</td><td>Option</td><td>2</td><td>9.130</td></tr><tr><td>FY 2023</td><td>SSN 810</td><td>L3 KEO</td><td>SS/FP</td><td>Apr 2023</td><td>Option</td><td>2</td><td>9.313</td></tr><tr><td>FY 2024</td><td>SSN 812</td><td>L3 KEO</td><td>SS/FP</td><td>Apr 2024</td><td>Option</td><td>2</td><td>9.499</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>SSN 808</td><td>Dec 2030</td><td>37</td><td>21</td><td>Feb 2026</td></tr><tr><td>FY 2023</td><td>SSN 810</td><td>Dec 2031</td><td>37</td><td>21</td><td>Feb 2027</td></tr><tr><td>FY 2024</td><td>SSN 812</td><td>Jun 2033</td><td>37</td><td>21</td><td>Aug 2028</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	SSN 808	L3 KEO	SS/FP	Apr 2022	Option	2	9.130	FY 2023	SSN 810	L3 KEO	SS/FP	Apr 2023	Option	2	9.313	FY 2024	SSN 812	L3 KEO	SS/FP	Apr 2024	Option	2	9.499	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	SSN 808	Dec 2030	37	21	Feb 2026	FY 2023	SSN 810	Dec 2031	37	21	Feb 2027	FY 2024	SSN 812	Jun 2033	37	21	Aug 2028
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2013 / Virginia Class Submarine																																																										
Equipment Item: Exterior Communications System (ECS) Recurring						PARM Code: N/A																																																								
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	2	38.877	2	39.654	2	40.447																																																								
Technical Engineering Services		6.589		6.721		6.855																																																								
Other Costs		9.535		9.726		9.921																																																								
Total	2	55.001	2	56.101	2	57.223																																																								
<p>Description:</p> <p>The VIRGINIA Class Command, Control, Communications and Intelligence (C3I) System is the electronics suite which will provide required operational and warfighting capability for the Navy's newest attack submarine. The C3I System includes 15 subsystems (23 if all electronically interfaced subsystems are included) integrated by an overarching Architecture Subsystem. Exterior Communications Systems (ECS) is an integration effort with multiple Government-Off-The-Shelf (GOTS) components providing the core ECS capability. The GOTS components of ECS will be provided using existing contracts. This P-35 covers the procurement requirements for the following: ECS GOTS equipment; fabrication/production; systems engineering; system test & evaluation; training; data; technical engineering services; spares and repair parts; and program management. This system provides the capability for seamless, transparent, secure connectivity for information exchange between submarine users and the Global Command and Communications System (GCCS).</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>SSN 808</td><td>SAIC</td><td>C/IDIQ</td><td>May 2024</td><td>Option</td><td>2</td><td>19.439</td></tr><tr><td>FY 2023</td><td>SSN 810</td><td>SAIC</td><td>C/IDIQ</td><td>May 2025</td><td>Option</td><td>2</td><td>19.827</td></tr><tr><td>FY 2024</td><td>SSN 812</td><td>SAIC</td><td>C/IDIQ</td><td>Jun 2026</td><td>Option</td><td>2</td><td>20.224</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>SSN 808</td><td>Dec 2030</td><td>24</td><td>9</td><td>Mar 2028</td></tr><tr><td>FY 2023</td><td>SSN 810</td><td>Dec 2031</td><td>24</td><td>9</td><td>Mar 2029</td></tr><tr><td>FY 2024</td><td>SSN 812</td><td>Jun 2033</td><td>24</td><td>9</td><td>Sep 2030</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: SAIC is the prime contractor for fabrication and production.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	SSN 808	SAIC	C/IDIQ	May 2024	Option	2	19.439	FY 2023	SSN 810	SAIC	C/IDIQ	May 2025	Option	2	19.827	FY 2024	SSN 812	SAIC	C/IDIQ	Jun 2026	Option	2	20.224	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	SSN 808	Dec 2030	24	9	Mar 2028	FY 2023	SSN 810	Dec 2031	24	9	Mar 2029	FY 2024	SSN 812	Jun 2033	24	9	Sep 2030
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2013 / Virginia Class Submarine																																		
Equipment Item: Propulsor						PARM Code: N/A																																
P-35 Category	FY 2022		FY 2023		FY 2024																																	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																
Major Hardware	2	81.234	2	82.345	2	83.784																																
TECH ENGINEERING SERVICES		11.387		11.615		11.847																																
Total	2	92.621	2	93.960	2	95.631																																
Description: The propulsor consists of Ni-Al-bronze blades and a large steel and inconel fabrication piece. The purpose of the propulsor is to generate proper thrust to propel the ship at a rated speed within the approved limits of torque and shaft RPM, while at the same time meeting acoustic and structural requirements. This design is unique to the VIRGINIA Class. The propulsor consists of a large quantity of government supplied material and a contract for the fixed portion construction and assembly.																																						
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Prime Contractor</th> <th>Contract Method/Type</th> <th>Award Date</th> <th>New/Option</th> <th>Quantity (Each)</th> <th>Unit Cost (\$ M)</th> </tr> <tr> <td>FY 2022</td> <td>SSN 808</td> <td>BAE Systems</td> <td>C/FFP</td> <td>Mar 2022</td> <td>Option</td> <td>2</td> <td>32.696</td> </tr> <tr> <td>FY 2023</td> <td>SSN 810</td> <td>BAE Systems</td> <td>C/FFP</td> <td>Mar 2023</td> <td>Option</td> <td>2</td> <td>33.350</td> </tr> <tr> <td>FY 2024</td> <td>SSN 812</td> <td>BAE Systems</td> <td>C/FFP</td> <td>Mar 2024</td> <td>Option</td> <td>2</td> <td>34.017</td> </tr> </table>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	SSN 808	BAE Systems	C/FFP	Mar 2022	Option	2	32.696	FY 2023	SSN 810	BAE Systems	C/FFP	Mar 2023	Option	2	33.350	FY 2024	SSN 812	BAE Systems	C/FFP	Mar 2024	Option	2	34.017
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Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																	
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FY 2023	SSN 810	Dec 2031	40	30	Feb 2026																																	
FY 2024	SSN 812	Jun 2033	40	30	Aug 2027																																	
Competition/Second Source Initiatives: N/A																																						
Remarks: VCS includes additional hardware funding to insert Improved Advanced Hybrid (IAH) Propulsors beginning with SSNs authorized in FY 2022. Construction of these Propulsors is within existing foundry capacity and has been successfully proven during at-sea demonstration. The IAH Propulsor provides significantly enhanced capability, reduced maintenance complexity, and mproved performance. Insertion of IAH Propulsors accounts for the increase to Propulsor hardware material costs above inflation.																																						

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Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy							Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2013 / Virginia Class Submarine					
First System (2024) Award Date:		First System (2024) Completion Date:			Interval Between Systems: 0 Months				
Cost Elements	Production Leadtime (Months)	When Required* (Months)	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
Advance Procurement									
Nuclear Propulsion Plant Equipment ⁽¹⁾	30-72	Various	1,121.470	1,004.950	1,035.070	1,066.120	1,097.900	1,130.900	640.655
Electronics Equipment ⁽²⁾	37-43	Various	31.150	31.774	32.408	33.056	33.718	34.392	35.080
NON-Nuclear Propulsion Plant Equipment - Propulsor ⁽³⁾	36-54	Various	47.214	48.538	49.508	50.498	51.508	52.538	53.589
Long Lead-Time CFE One Year AP ⁽⁴⁾	24-58	Various	533.556	723.879	568.247	820.076	598.620	611.172	623.395
Long Lead-Time CFE Two Year AP (4) ⁽⁵⁾	24-58	Various	372.017	216.510	170.269	245.234	268.518	273.856	131.703
<i>Total: Advance Procurement</i>			2,105.407	2,025.651	1,855.502	2,214.984	2,050.264	2,102.858	1,484.422
Economic Order of Quantity									
EOQ for FY22 SSNs	-	-	-	-	0.000	-	-	-	-
EOQ for FY23 SSNs	-	-	-	-	0.000	-	-	-	-
EOQ for FY25 SSNs	-	Various	-	-	272.007	-	-	-	-
EOQ for FY26 SSNs	-	Various	-	-	272.006	324.586	-	-	-
EOQ for FY27 SSNs	-	Various	-	-	272.008	324.588	235.954	-	-
EOQ for FY28 SSNs	-	Various	-	-	272.008	324.587	235.954	-	-
EOQ For FY 29 SSNs	-	Various	-	-	272.008	324.588	235.954	-	-
<i>Total: Economic Order of Quantity</i>			-	-	1,360.037	1,298.349	707.862	-	-
Total Advance Procurement/Obligation Authority			2,105.407	2,025.651	3,215.539	3,513.333	2,758.126	2,102.858	1,484.422
<p>*Note: "When Required" is the number of months required before ship delivery.</p>									

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy				Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2013 / Virginia Class Submarine			
Cost Elements	FY 2024						
	Production Leadtime (Months)	When Required* (Months)	Unit Cost (\$ M)	Contract Forecast Date	2024 Qty (Each)	For FY	Total Cost Request (\$ M)
Advance Procurement							
Nuclear Propulsion Plant Equipment ⁽¹⁾	30-72	Various	-	Oct 2023	-	2026	1,035.070
Electronics Equipment ⁽²⁾	37-43	Various	-	Dec 2023	-	2025	32.408
NON-Nuclear Propulsion Plant Equipment - Propulsor ⁽³⁾	36-54	Various	-	Dec 2023	-	2025	49.508
Long Lead-Time CFE One Year AP ⁽⁴⁾	24-58	Various	-	Jan 2024	-	2025	568.247
Long Lead-Time CFE Two Year AP (4) ⁽⁵⁾	24-58	Various	-	Jan 2024	-	2026	170.269
Total: Advance Procurement							1,855.502
Economic Order of Quantity							
EOQ for FY22 SSNs	-	-	-		-		0.000
EOQ for FY23 SSNs	-	-	-		-		0.000
EOQ for FY25 SSNs	-	Various	-	Jan 2024	-	2025	272.007
EOQ for FY26 SSNs	-	Various	-	Jan 2024	-	2026	272.006
EOQ for FY27 SSNs	-	Various	-	Jan 2024	-	2027	272.008
EOQ for FY28 SSNs	-	Various	-	Jan 2024	-	2028	272.008
EOQ For FY 29 SSNs	-	Various	-	Jan 2024	-	2029	272.008
Total: Economic Order of Quantity							1,360.037
Total Advance Procurement/Obligation Authority							3,215.539
Description: Advance Procurement and EOQ funds essential Long Lead Time materials to meet in yard need dates and multi-year savings for large lot procurements within the multi-year contracts. The footnotes below describe in further details. *Note: "When Required" is the number of months required before ship delivery. Footnotes: ⁽¹⁾ Propulsion Plant Equipment Advance Procurement is required to fund long-lead time propulsion plant equipment, which is the longest lead-time equipment required for construction of nuclear-powered attack submarines and ensure production capability that supports projected production quantities. VCS propulsion plant budgets have been reduced beginning in FY 2023 as a direct result of a steady demand signal. The Navy's two VCS per year cadence, the two-CVN buy of CVN 80 and 81, ramp up to serial production of COLUMBIA, construction schedule accelerations that reduce production gaps between COLUMBIA shipsets, and the support of 3-year AP funding for COLUMBIA has level-loaded demand and allowed optimized use of capacity across the nuclear industrial base. Preparations for generational shipbuilding volume included implementation of streamlined processes that eliminated unnecessary overhead, optimized material procurements, and improved production. Providing a consistent demand signal to principal suppliers has further improved the efficiency and effectiveness of long-term planning, including required vendor self-capitalization.							

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2013 / Virginia Class Submarine
<p>(2) Electronics Equipment AP is required to fund the long-lead time material for the Command and Control System Module (CCSM). AP for the CCSM plays a critical role in early system installation and test in order to keep the CCSM out of the critical path to ship delivery and minimize risk to ship construction. AP is required to procure selected electronics and associated pre-cable kits, cabling, connector plates and mechanical structures to be installed in this module in accordance with Shipyard Required in Yard Dates (RIYD). Pre-cable kits allow the shipyard to establish cable runs and checkout platform interfaces prior to electronics installation. Mechanical structures establish footprint unique packaging to allow electronics to install efficiently. Additionally, this one year AP is for long lead items such as metal fabrication parts (mechanical structures, chassis, drawer slides, mounting hardware), power supplies and cable connectors, subcontract items (Aft Sonar Receive Unit), and acoustic hull sensors (such as DT-574 LAB Hydrophones).</p> <p>(3) Non-Nuclear Propulsion Plant Equipment Propulsor AP is required to satisfy in-yard need dates for ship delivery. Other prior year non-nuclear propulsion plant equipment has been negotiated as CFE in the Construction Contract.</p> <p>(4) Long Lead-Time CFE AP is required to fund long lead time contractor furnished material including the Weapons Handling and Reactor Plant Modules, the Main Propulsion Unit (MPU)/Ship Service Turbine Generator (SSTG), and material procurement associated with VPM (i.e. electrical, valves, flanges, fittings, pipe, fabricated parts, hardware, and tools, etc.) to maintain anticipated ship construction schedules. These and other components are required early in the construction phase to meet the delivery schedule. FY 2024 CFE One Year AP reflects FY 2025 SSN material procurements.</p> <p>(5) FY 2024 CFE Two Year AP reflects FY 2026 SSN initial material procurements.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy								Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships						P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls						
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 (<i>Units in Each</i>)	7	-	-	-	-	-	1	-	-	-	1	9
Gross/Weapon System Cost (<i>\$ in Millions</i>)	29,355.087	0.000	0.000	0.000	0.000	0.000	6,381.893	0.000	0.000	0.000	6,882.750	42,619.730
Less PY Advance Procurement (<i>\$ in Millions</i>)	6,025.023	-	-	-	-	-	1,530.273	-	-	-	1,750.051	9,305.347
Less Cost To Complete (<i>\$ in Millions</i>)	990.489	-	-	-	-	-	-	-	-	-	-	990.489
Less Subsequent Year Full Funding (<i>\$ in Millions</i>)	14,040.939	-	-	-	-	-	2,184.126	-	-	-	2,751.774	18,976.839
Less Transfer (<i>\$ in Millions</i>)	128.131	-	-	-	-	-	-	-	-	-	-	128.131
Less Previously Appropriated OPN (<i>\$ in Millions</i>)	481.789	-	-	-	-	-	538.583	-	-	-	568.210	1,588.582
Net Procurement (P-1) (<i>\$ in Millions</i>)	7,688.716	0.000	0.000	0.000	0.000	0.000	2,128.911	0.000	0.000	0.000	1,812.715	11,630.342
Plus Subsequent Year Full Funding (<i>\$ in Millions</i>)	11,616.721	2,424.218	-	-	-	-	-	2,184.126	-	-	2,751.774	18,976.839
Full Funding TOA (<i>\$ in Millions</i>)	19,305.437	2,424.218	-	-	-	-	2,128.911	2,184.126	-	-	4,564.489	30,607.181
Plus CY Advance Procurement (<i>\$ in Millions</i>)	6,059.307	66.262	612.081	817.646	-	817.646	-	15.762	259.075	552.634	922.580	9,305.347
Plus Cost To Complete (<i>\$ in Millions</i>)	366.798	350.098	62.000	42.422	-	42.422	169.171	-	-	-	-	990.489
Plus Transfer (<i>\$ in Millions</i>)	128.131	-	-	-	-	-	-	-	-	-	-	128.131
Plus Previously Appropriated OPN (<i>\$ in Millions</i>)	1,588.582	-	-	-	-	-	-	-	-	-	-	1,588.582
Total Obligation Authority (<i>\$ in Millions</i>)	27,448.255	2,840.578	674.081	860.068	0.000	860.068	2,298.082	2,199.888	259.075	552.634	5,487.069	42,619.730
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	163.798	35.222	19.074	37.566	-	37.566	42.637	17.546	24.201	19.990	69.621	429.655
Total (<i>\$ in Millions</i>)	27,612.053	2,875.800	693.155	897.634	-	897.634	2,340.719	2,217.434	283.276	572.624	5,556.690	43,049.385
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	4,193.584	-	-	-	-	-	6,381.893	-	-	-	6,882.750	4,735.526
Description: To support and operate aircraft to engage in attacks on targets afloat and ashore which threaten our use of the sea and to engage in sustained operations in support of other forces. The refueling of the reactors and repair and upgrade of the main propulsion equipment will provide for reliable operations during its remaining 23 plus years of ship life using only the normal maintenance cycle.												

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships			P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls		
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					
Characteristics:	CVN 73	CVN 74	Systems:		
Length Overall	1092 ft	1092 ft	Electronics	Hull, Mechanical, and Electrical (HM&E)	Ordnance
Beam	252 ft	252 ft	-C4ISR	-FURNITURE (NON PROPULSION PLANT)	-AVIATION EQUIPMENT & SUPPORT
Displacement	101,200 LT	100,700 LT	-INTEGRATED COMMUNICATION NETWORK (ICAN / DDCN & IVCN)	-AIRCRAFT ELECTRICAL SERVICE STATION (AESS) INSTALL	-NATO SEASPARROW SURFACE MISSILE SYSTEM (NSSMS)
Draft	39.96 ft	39.81 ft	-SHIP SELF DEFENSE SYSTEM (SSDS) MK2 MOD 1E	-LOW PRESSURE AIR PLANT (LPAP)	-AN/SPS-48G - 3D AIR SEARCH RADAR
			-ELECTRONIC CONSOLIDATED AUTOMATED SUPPORT SYSTEM (ECASS)	-AUTOMATIC VOLTAGE REGULATOR (AVR)	-AN/SPS-49(V)1 OVERHAUL/REFURBISHMENT
			-JOINT PRECISION APPROACH AND LANDING SYSTEM (JPALS)	-VSA O2 GENERATOR	-CIWS/RAM DEFENSE CAPABILITY (CRDC) BLOCK 1
			-AN/SPN-46 OVERHAUL/UPGRADE	-NODE ROOM RIPOUT/INSTALL	-AN/SPQ-14 - ADVANCED SENSOR DISTRIBUTION SYSTEM (ASDS)
			-AN/USG-2B - COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	-COMBAT SYSTEMS SUPPORT CENTER (CSSC) RIPOUT/INSTALL	-MK 38 MOD 3 GUN SYSTEM
			-AN/SLQ-59 - ELECTRONIC WARFARE (EW) SYSTEM	-PASSIVE COUNTER MEASURE SYSTEM (PCMS)	-ENTERPRISE AIR SURVEILLANCE RADAR (EASR)
			-AN/SPN-41 REFURBISHMENT	-LAUNDRY DRYERS	-SURFACE ELECTRONIC WARFARE IMPROVEMENT PROGRAM (SEWIP) BLOCK 2
			-AN/SPN-50(V)1 - AIR TRAFFIC CONTROL RADAR	-AFT CREW MESS	-COMBAT DIRECTION CENTER (CDC)/FLAG RIPOUT/INSTALL
			-MQ-25 - UNMANNED AVIATION WARFARE CENTER (UAWC)	-COMBI-OVENS	-AN/SPQ-9B - ANTI-SHIP CRUISE MISSILE DEFENSE RADAR
			-AN/SLQ-32A(V)4 - ELECTRONIC WARFARE SUITE	-CARRIER INTELLIGENCE CENTER (CVIC) RIPOUT/INSTALL	-RAM GUIDED MISSILE LAUNCHING SYSTEM
			-BATTLE FORCE TACTICAL TRAINING (BFTT) SYSTEM	-MODULAR REFRIGERATION UNIT (MRU)	-AN/SQQ-34C - CARRIER TACTICAL SUPPORT CENTER
			-AN/SPN-43C REFURBISHMENT	-MEDICAL AND DENTAL SUITE	-AN/SPS-73 NEXT GENERATION SURFACE SEARCH RADAR (NGSSR)
			-AN/UPX-29 - IDENTIFICATION FRIEND OR FOE (IFF) INTERROGATOR SET	-ACE PLC CONTROL SYSTEM UPGRADE	-MK 53 DECOY LAUNCHING SYSTEM (DLS)
			-NAVAL STRIKE WARFARE PLANNING CENTER (NSWPC)	-OPERATOR BALLISTIC PROTECTION FOR CREW SERVED WEAPONS STATIONS	-AN/SPA-25 INDICATOR GROUP
			-JOINT STRIKE FIGHTER AUTONOMIC LOGISTICS INFORMATION SYSTEM (JSF-ALIS)	-FOOD SERVICE EQUIPMENT	
			-AN/TPX-42(V)15 UPGRADE		
			-AN/SYY-1 - AIR TRAFFIC CONTROL SYSTEM		
Production Status:	CVN 73	CVN 74			
Contract Award Date	Aug 2017	Jan 2021			
Months to Completion					
a) Award to Delivery	70 months	55 months			
b) Construction Start to Delivery	70 months	51 months			
Delivery Date	Jun 2023	Aug 2025			
Completion Of Fitting Out	Aug 2023	Dec 2025			
Obligation Work Limit Date	Jul 2024	Nov 2026			

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls		
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				
Design Schedule	Start / Issue	Complete / Response	Reissue	Reissue Complete / Response
Issue Date for TLR	Jan 2000	Feb 2000	Mar 2000	Apr 2000
Issue Date for TLS	Jan 2001	Feb 2001	Mar 2001	Apr 2001
Preliminary Design	Jan 2002	Feb 2002	N/A	N/A
Contract Design	Jan 2003	Feb 2003	N/A	N/A
Detail Design	Jan 2004	Feb 2004	N/A	Apr 2004
Request for Proposals	Jan 2005	Feb 2005	Mar 2005	N/A
Design Agent	[Design Agent]			
Classification of Cost Estimate: [cost estimate]				
Justification: FY 2022 funding shown on exhibit P-40 includes \$191.0M FY 2022 Full Funding rescinded by the Department of Defense Appropriations Act, 2023. FY 2024 is the fifth of five years of advance procurement for CVN 75. The CVN 75 RCOH starts in FY 2025 with five years of advance procurement from FY 2020 to FY 2024. The FY 2024 advance procurement request for CVN 75 RCOH includes funding for a multi-use facility (\$55.0M) and parking garages (\$40.0M). These structures are to support sailor quality of life initiatives. Previously appropriated OPN represents reactor power units procured for CVN 74-76 RCOHs. Funding was included with the end cost per Section 1018 of the 2019 National Defense Authorization Act.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls		
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2016		FY 2020	
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>
Plan Costs	1	65.430	1	68.054
Basic Construction/Conversion		4,332.605		4,386.981
Electronics (†)		384.981		406.404
Propulsion Equipment		156.148		615.548
Hull, Mechanical, and Electrical (HM&E) (†)		184.998		200.867
Ordnance (†)		137.063		241.122
Other Cost		88.751		101.173
Total Ship Estimate		5,349.976		6,020.149
Less Advance Procurement FY 2012		14.008		-
Less Advance Procurement FY 2013		69.918		-
Less Advance Procurement FY 2014		245.793		-
Less Advance Procurement FY 2015		483.600		-
Less Advance Procurement FY 2016		-		14.951
Less Advance Procurement FY 2017		-		233.149
Less Advance Procurement FY 2018		-		75.897
Less Advance Procurement FY 2019		-		425.873
Less Subsequent Full Funding FY 2017		1,699.120		-
Less Subsequent Full Funding FY 2018		1,569.669		-
Less Subsequent Full Funding FY 2021		-		1,531.153
Less Subsequent Full Funding FY 2022		-		2,424.218
Less Cost to Complete FY 2021		186.200		-
Less Cost to Complete FY 2022		350.098		-
Less Cost to Complete FY 2023		62.000		-
Less Cost to Complete FY 2024		-		42.422
Less Cost to Complete FY 2025		-		169.171
Less Previously Appropriated OPN FY 2004		-		234.028
Less Previously Appropriated OPN FY 2005		-		247.761
Net P-1 Funding		669.570		621.526
Remarks: Plan Costs revised to reflect actual costs incurred. The overall end-cost increase in CVN 73 RCOH of \$191.3M is to cover shipbuilder increases in Basic Construction costs through re-delivery.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls
<p>The total ship estimate for CVN 74 RCOH includes \$191.0M of FY 2022 full funding rescinded by the Department of Defense Appropriations Act, 2023. This funding is reflected in the Basic Construction/ Conversion category. After accounting for the rescission, the overall end-cost increase is \$20.6M.</p> <p>After accounting for the rescission, the \$17.2M decrease in Basic Construction for CVN 74 RCOH reflects the transfer of food service equipment from Basic Construction to HM&E.</p> <p>Propulsion Equipment revised to reflect actual costs incurred.</p> <p>Non-nuclear government furnished equipment (GFE) is captured in Electronics, HM&E, and Ordnance. The GFE Governance Program was initiated to target soft costs by challenging performers to achieve savings in program management, system engineering, and logistics support. Procurement details are recorded in NAVSEA Form 7300s and reviewed annually to refine and adjust estimates for required products and services to the most current data available. See further details in respective P-8a and P-35 exhibits.</p> <p>Other Cost revised to reflect actual costs incurred.</p>		

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
CVN 73	HUNTINGTON INGALLS INDUSTRIES	2016	Aug 2017	Aug 2017	Jun 2023
CVN 74	HUNTINGTON INGALLS INDUSTRIES	2020	Jan 2021	May 2021	Aug 2025
CVN 75	HUNTINGTON INGALLS INDUSTRIES	2025	May 2025	May 2025	Mar 2029

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls		
Electronics	FY 2016		FY 2020	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
C4ISR	1	156.426	1	173.696
INTEGRATED COMMUNICATION NETWORK (ICAN / DDCN & IVCN)	1	54.542	1	83.785
SHIP SELF DEFENSE SYSTEM (SSDS) MK2 MOD 1E	1	42.865	1	26.490
ELECTRONIC CONSOLIDATED AUTOMATED SUPPORT SYSTEM (ECASS)	1	36.631	1	38.796
JOINT PRECISION APPROACH AND LANDING SYSTEM (JPALS)	1	14.049	1	11.963
AN/SPN-46 OVERHAUL/UPGRADE	1	13.007	1	11.766
AN/USG-2B - COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	1	10.631	1	8.154
AN/SLQ-59 - ELECTRONIC WARFARE (EW) SYSTEM	1	7.979	0	-
AN/SPN-41 REFURBISHMENT	1	5.580	1	5.639
AN/SPN-50(V)1 - AIR TRAFFIC CONTROL RADAR	0	-	1	16.879
P-35 Items Subtotal		341.710		377.168
Major Items				
MQ-25 - UNMANNED AVIATION WARFARE CENTER (UAWC)	1	9.959	0	-
AN/SLQ-32A(V)4 - ELECTRONIC WARFARE SUITE	1	7.674	0	-
BATTLE FORCE TACTICAL TRAINING (BFTT) SYSTEM	1	5.193	1	1.601
AN/SPN-43C REFURBISHMENT	1	3.875	0	-
AN/UPX-29 - IDENTIFICATION FRIEND OR FOE (IFF) INTERROGATOR SET	1	3.529	1	4.905
NAVAL STRIKE WARFARE PLANNING CENTER (NSWPC)	1	2.758	1	5.220
JOINT STRIKE FIGHTER AUTONOMIC LOGISTICS INFORMATION SYSTEM (JSF-ALIS)	1	2.300	1	2.943
AN/TPX-42(V)15 UPGRADE	1	1.501	0	-
AN/SYY-1 - AIR TRAFFIC CONTROL SYSTEM	0	-	1	3.964
Major Items Subtotal		36.789		18.633
Other Cost Elements				
TEST & CERTIFICATIONS, MISC.		6.482		10.603
Other Cost Elements Subtotal		6.482		10.603
Total Electronics		384.981		406.404
Remarks: MQ-25 - UNMANNED AVIATION WARFARE CENTER (UAWC): CVN 73 revised to reflect actual incurred costs. CVN 74 program cancelled and will not be installed on USS John C. Stennis (CVN 74) during RCOH. AN/SLQ-32A(V)4 - ELECTRONIC WARFARE SUITE: Revised to reflect actual incurred costs.				

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls
BATTLE FORCE TACTICAL TRAINING (BFTT) SYSTEM: Revised to reflect actual incurred costs. AN/SPN-43C REFURBISHMENT: Revised to reflect actual incurred costs. AN/UPX-29 - IDENTIFICATION FRIEND OR FOE (IFF) INTERROGATOR SET: CVN 73 revised to reflect actual incurred costs. NAVAL STRIKE WARFARE PLANNING CENTER (NSWPC): CVN 73 revised to reflect actual incurred costs. AN/TPX-42(V)15 UPGRADE: Revised to reflect actual incurred costs. AN/SYY-1 - AIR TRAFFIC CONTROL SYSTEM: Revised to reflect actual incurred costs. CVN 73 RCOH Other Cost Elements includes eight unlisted systems, each under \$1 million in major hardware requirement. CVN 74 RCOH Other Cost Elements includes eight unlisted systems, each under \$1 million in major hardware requirement. Revised to reflect actual incurred costs.		

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls		
Hull, Mechanical, and Electrical (HM&E)	FY 2016		FY 2020	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
FURNITURE (NON PROPULSION PLANT)	1	14.940	0	15.975
AIRCRAFT ELECTRICAL SERVICE STATION (AESS) INSTALL	1	13.865	0	-
LOW PRESSURE AIR PLANT (LPAP)	1	6.081	1	6.142
AUTOMATIC VOLTAGE REGULATOR (AVR)	1	4.340	0	-
VSA O2 GENERATOR	0	-	1	5.150
P-35 Items Subtotal		39.226		27.267
Major Items				
NODE ROOM RIPOUT/INSTALL	1	9.953	1	10.857
COMBAT SYSTEMS SUPPORT CENTER (CSSC) RIPOUT/INSTALL	1	9.193	1	10.035
PASSIVE COUNTER MEASURE SYSTEM (PCMS)	1	7.254	1	6.065
LAUNDRY DRYERS	1	6.838	0	-
AFT CREW MESS	1	6.409	1	-
COMBI-OVENS	1	5.706	1	-
CARRIER INTELLIGENCE CENTER (CVIC) RIPOUT/INSTALL	1	4.489	1	4.988
MODULAR REFRIGERATION UNIT (MRU)	1	2.105	1	2.662
MEDICAL AND DENTAL SUITE	1	1.578	1	2.381
ACE PLC CONTROL SYSTEM UPGRADE	1	1.817	0	-
OPERATOR BALLISTIC PROTECTION FOR CREW SERVED WEAPONS STATIONS	0	-	1	9.271
FOOD SERVICE EQUIPMENT		-		25.697
Major Items Subtotal		55.342		71.956
Other Cost Elements				
ENGINEERING, TEST & CERTIFICATION		65.220		80.292
MISCELLANEOUS GOVERNMENT FURNISHED EQUIPMENT (GFE)		25.210		21.352
Other Cost Elements Subtotal		90.430		101.644
Total Hull, Mechanical, and Electrical (HM&E)		184.998		200.867
Remarks: NODE ROOM RIPOUT/INSTALL: Revised to reflect actual incurred costs. COMBAT SYSTEMS SUPPORT CENTER (CSSC) RIPOUT/INSTALL: Revised to reflect actual incurred costs. PASSIVE COUNTER MEASURE SYSTEM (PCMS): CVN 73 revised to reflect actual incurred costs. AFT CREW MESS: Revised to reflect actual incurred costs.				

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls
<p>COMBI-OVENS: Revised to reflect actual incurred costs.</p> <p>CARRIER INTELLIGENCE CENTER (CVIC) RIPOUT/INSTALL: Revised to reflect actual incurred costs.</p> <p>MEDICAL AND DENTAL SUITE: Revised to reflect actual incurred costs.</p> <p>ACE PLC CONTROL SYSTEM UPGRADE: Revised to reflect actual incurred costs.</p> <p>OPERATOR BALLISTIC PROTECTION FOR CREW SERVED WEAPONS STATIONS: Overall increase of \$2.371M is revised to reflect the actual costs of incorporating this system aboard CVN 73.</p> <p>FOOD SERVICE EQUIPMENT: Replaces Aft Crew Mess and Combi-Ovens on the CVN 74 RCOH. This requirement was previously funded under Basic in previous budget submissions.</p> <p>ENGINEERING, TEST & CERTIFICATION: CVN 73 revised to reflect actual incurred costs. CVN 74 engineering requirements were not entirely set at the time of the FY 2023 budget request. Overall increase of \$7.123M from the CVN 74 RCOH FY 2023 budget request represents the full requirement for the availability based on lessons learned from CVN 73.</p> <p>MISCELLANEOUS GOVERNMENT FURNISHED EQUIPMENT (GFE): The CVN 73 RCOH includes twenty-eight unlisted systems, each under \$1 million in major hardware requirement. The CVN 74 RCOH includes twenty-one unlisted systems, each under \$1 million in major hardware requirement. Revised to reflect actual incurred costs.</p>		

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls		
Ordnance	FY 2016		FY 2020	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
AVIATION EQUIPMENT & SUPPORT	1	46.573	1	46.501
NATO SEASPARROW SURFACE MISSILE SYSTEM (NSSMS)	1	19.312	1	26.614
AN/SPS-48G - 3D AIR SEARCH RADAR	1	13.098	0	-
AN/SPS-49(V)1 OVERHAUL/REFURBISHMENT	1	8.076	0	-
CIWS/RAM DEFENSE CAPABILITY (CRDC) BLOCK 1	0	5.120	1	27.869
AN/SPQ-14 - ADVANCED SENSOR DISTRIBUTION SYSTEM (ASDS)	1	3.449	0	-
MK 38 MOD 3 GUN SYSTEM	0	2.800	1	7.225
ENTERPRISE AIR SURVEILLANCE RADAR (EASR)	0	-	1	54.656
SURFACE ELECTRONIC WARFARE IMPROVEMENT PROGRAM (SEWIP) BLOCK 2	0	-	1	17.379
P-35 Items Subtotal		98.428		180.244
Major Items				
COMBAT DIRECTION CENTER (CDC)/FLAG RIPOUT/INSTALL	1	24.240	1	25.803
AN/SPQ-9B - ANTI-SHIP CRUISE MISSILE DEFENSE RADAR	1	3.748	1	3.770
RAM GUIDED MISSILE LAUNCHING SYSTEM	1	1.607	1	2.366
AN/SQQ-34C - CARRIER TACTICAL SUPPORT CENTER	1	1.209	1	2.599
AN/SPS-73 NEXT GENERATION SURFACE SEARCH RADAR (NGSSR)	0	1.038	1	3.704
MK 53 DECOY LAUNCHING SYSTEM (DLS)	1	0.772	1	4.482
AN/SPA-25 INDICATOR GROUP	0	-	1	1.742
Major Items Subtotal		32.614		44.466
Other Cost Elements				
TEST & CERTIFICATIONS, MISC		6.021		16.412
Other Cost Elements Subtotal		6.021		16.412
Total Ordnance		137.063		241.122
Remarks: COMBAT DIRECTION CENTER (CDC)/FLAG RIPOUT/INSTALL: Revised to reflect actual incurred costs. AN/SPQ-9B - ANTI-SHIP CRUISE MISSILE DEFENSE RADAR: Revised to reflect actual incurred costs. RAM GUIDED MISSILE LAUNCHING SYSTEM: Revised to reflect actual incurred costs. AN/SQQ-34C - CARRIER TACTICAL SUPPORT CENTER: CVN 73 revised to reflect actual incurred costs. CVN 74 revised to add costs for added deployment-required modernization. AN/SPS-73 NEXT GENERATION SURFACE SEARCH RADAR (NGSSR): Revised to reflect actual incurred costs.				

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls
<p>MK 53 DECOY LAUNCHING SYSTEM (DLS): Revised to reflect actual incurred costs.</p> <p>AN/SPA-25 INDICATOR GROUP: Revised to reflect actual incurred costs.</p> <p>CVN 73 RCOH and CVN 74 RCOH Other Cost Elements includes four unlisted systems, each under \$1 million in major hardware requirement. Revised to reflect actual incurred costs.</p>		

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls																											
Equipment Item: C4ISR						PARM Code: NAVWAR PMW 750																									
P-35 Category	FY 2016		FY 2020																												
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																											
Major Hardware	1	50.516	1	67.023																											
Ancillary Equipment		2.317		0.047																											
Technical Data and Documentation		0.242		0.671																											
Spares		0.569		2.886																											
System Engineering		9.721		5.730																											
Technical Engineering Services		82.047		82.770																											
Other Costs		11.014		14.569																											
Total	1	156.426	1	173.696																											
Description: Provides an integrated communications infrastructure to support both tactical and non-tactical applications in all warfare and support areas, an improved shipboard RF distribution system and multiband antennas, and capabilities for the control and monitoring of RF assets introducing network automation and provide interoperable communications for joint operations. It will interconnect forces of the Battle Group (BG)/ Amphibious Readiness Group (ARG) and connects the BG/ARG with expeditionary forces and the Commander-in-Chief Command Complex (CCC) ashore crossing all available media including Ultra High Frequency (UHF), Super High Frequency (SHF), Extremely High Frequency (EHF), commercial satellite links, and new medium-to-high data rate HF and UHF line of sight (LOS) links. C4ISR includes RCS, weather, navigational, signal exploitation, and command and control equipment.																															
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Prime Contractor</th> <th>Contract Method/Type</th> <th>Award Date</th> <th>New/Option</th> <th>Quantity (Each)</th> <th>Unit Cost (\$ M)</th> </tr> <tr> <td>FY 2016</td> <td>CVN 73</td> <td>Various</td> <td>Various</td> <td>Various</td> <td>Various</td> <td style="text-align: center;">1</td> <td style="text-align: right;">50.516</td> </tr> <tr> <td>FY 2020</td> <td>CVN 74</td> <td>Various</td> <td>Various</td> <td>Various</td> <td>Various</td> <td style="text-align: center;">1</td> <td style="text-align: right;">67.023</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2016	CVN 73	Various	Various	Various	Various	1	50.516	FY 2020	CVN 74	Various	Various	Various	Various	1	67.023
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																								
FY 2016	CVN 73	Various	Various	Various	Various	1	50.516																								
FY 2020	CVN 74	Various	Various	Various	Various	1	67.023																								
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Earliest Ship Delivery Date</th> <th>Months Required Before Delivery</th> <th>Production Leadtime</th> <th>Required Award Date</th> </tr> <tr> <td>FY 2016</td> <td>CVN 73</td> <td>Jun 2023</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td>Jun 2023</td> </tr> <tr> <td>FY 2020</td> <td>CVN 74</td> <td>Aug 2025</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td>Aug 2025</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2016	CVN 73	Jun 2023	0	0	Jun 2023	FY 2020	CVN 74	Aug 2025	0	0	Aug 2025						
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																										
FY 2016	CVN 73	Jun 2023	0	0	Jun 2023																										
FY 2020	CVN 74	Aug 2025	0	0	Aug 2025																										
Competition/Second Source Initiatives: N/A																															
Remarks: CVN 73 RCOH - Comprised of 36 discretely funded line items. Overall increase of \$9.189M is due to additional costs associated to re-starting stop-work orders and contractor growth work to support CANES requirements. CVN 74 RCOH - Comprised of 36 discretely funded line items. Revised to reflect estimates based on CVN 73 lessons learned. Overall increase of \$3.729M is due to the incorporation of CVN 73 lessons learned.																															

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: INTEGRATED COMMUNICATION NETWORK (ICAN / DDCN & IVCN)						PARM Code: NAVSEA 05H3, NSWC Philadelphia	

P-35 Category	FY 2016		FY 2020	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Major Hardware	1	23.924	1	25.291
Ancillary Equipment		0.080		1.049
Technical Data and Documentation		1.182		1.017
Spares		0.519		0.222
System Engineering		8.707		9.572
Technical Engineering Services		14.526		38.192
Other Costs		5.604		8.442
Total	1	54.542	1	83.785

Description:
The Integrated Communication Network consists of the following systems: An Integrated Communications System (ICS) that provides the ship's Internal Command and Control Communications. In addition, ICS provides connectivity to other onboard systems such as Announcing Systems, Sound Powered Circuits, Secure / Non Secure off-ship Communications, Shipboard Air Traffic Control Communications (SATCC) and Hierarchical Yet Dynamically Reprogrammable Architecture (HYDRA). The Machinery Control Monitoring System (MCMS) controls and monitors approximately 3500 machinery signals for various HM&E auxiliary systems (e.g. JP5, firemain, IC/SM panels) for aircraft carriers. It utilizes the Machinery Control Network (MCN) for signals. The MCN is the core network that provides communication services and transport for the MCMS system and part of the backbone that rides over the Fiber Optic Cable Plant (FOCP). It consists of five network switches, associated racks, and cabling. The Navigation Critical Distribution System (NAVCRT) is a switched network providing communication services and transport for the NAV Standard Message, which is originated in the Naval Sensor System Interface (NAVSSI) system. The NAVCRIT Distribution consists of three backbone switches and eight I/O controllers to convert digital NAV data for analog outputs. It will use the FOCP to the maximum extent for connectivity. The Ship Control System (SCS) provides control and display of rudder position, Engine and Propeller Order Telegraph functions. SCS provides data for heading, speed, and rudder angles through NAVCRIT Network from NAVSSI. The SCS interfaces to an Electronic Chart Display Information System. Shipboard Multipurpose Copiers includes the acquisition and installation of Class III Copier/Printer (B&W), Class III Color Copier/Printer, Class IV Copier/Printer (B&W) and Class IV Color Copier/Printer. The related equipment is for use on surface vessels in the US Navy as part of the Shipboard Multipurpose Copier Program.

Contract Data:

Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Various	Various	Various	Various	1	23.924
FY 2020	CVN 74	Various	Various	Various	Various	1	25.291

Delivery Date:

Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date
FY 2016	CVN 73	Jun 2023	0	0	Jun 2023
FY 2020	CVN 74	Aug 2025	0	0	Aug 2025

Competition/Second Source Initiatives:
N/A

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls
Equipment Item: INTEGRATED COMMUNICATION NETWORK (ICAN / DDCN & IVCN)		PARM Code: NAVSEA 05H3, NSWC Philadelphia
<p>Remarks:</p> <p>CVN 73 RCOH - Comprised of 24 discretely funded line items. Revised to reflect actual incurred costs.</p> <p>CVN 74 RCOH - Comprised of 30 discretely funded line items. Revised to reflect estimates based on CVN 73 lessons learned.</p>		

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: SHIP SELF DEFENSE SYSTEM (SSDS) MK2 MOD 1E						PARM Code: NAVSEA PEO IWS 10	
P-35 Category	FY 2016			FY 2020			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	11.562		1	10.743		
Technical Data and Documentation		0.490			0.495		
Spares		0.659			0.849		
System Engineering		7.706			4.640		
Technical Engineering Services		4.858			4.663		
Other Costs		17.590			5.100		
Total	1	42.865		1	26.490		
Description: The Ship Self Defense System (SSDS) MK2 provides primary support for force/own ship combat systems control and enhanced self-defense capabilities. SSDS is the heart of the Combat System integrating sensors, weapons systems, data links, and command and control elements into a unified Combat System.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Raytheon/Lockheed Martin	C/CPFF	Apr 2018	Option	1	11.562
FY 2020	CVN 74	Lockheed Martin	Various	Sep 2020	Various	1	10.743
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	26	18	Oct 2019		
FY 2020	CVN 74	Aug 2025	28	24	Apr 2021		
Competition/Second Source Initiatives: N/A							
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs. CVN 74 RCOH - Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: ELECTRONIC CONSOLIDATED AUTOMATED SUPPORT SYSTEM (ECASS)						PARM Code: NAVAIR PMA 260	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	34.953	1	36.024			
Technical Engineering Services		1.678		2.622			
Other Costs		-		0.150			
Total	1	36.631	1	38.796			
Description: The Electronic Consolidated Automated Support System (eCASS) provides repair capability for aircraft instruments, components ("black boxes"), subcomponents (e.g. circuit cards), avionics and missile systems for all current deployable aircraft, F/A-18 ATFLIR (Forward Looking Infrared Receiver) and ALQ-99 (electronic jamming) systems, as well as new and future aircraft such as E-2D and F-35C. The eCASS replaces the obsolete Consolidated Automated Support System (CASS) that formerly provided this support. The eCASS suite provides expeditious, on-site repair capability for more than 1,100 different components, without which parts support for the ship's AIRWING (which routinely operates at great distances from logistics supply points) would be degraded to the point that it would result in increased support costs and negatively affect mission accomplishment, combat readiness, and required sortie generation rates.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Lockheed Martin	C/CPFF	Oct 2018	New	1	34.953
FY 2020	CVN 74	Lockheed Martin	SS/FFP	Nov 2021	Option	1	36.024
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	27	12	Mar 2020		
FY 2020	CVN 74	Aug 2025	25	12	Jul 2022		
Competition/Second Source Initiatives: N/A							
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs. CVN 74 RCOH - Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: JOINT PRECISION APPROACH AND LANDING SYSTEM (JPALS)						PARM Code: NAVAIR PMA 213	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	11.401	1	7.797			
Spares		0.649		1.288			
System Engineering		0.214		0.479			
Technical Engineering Services		1.201		1.213			
Other Costs		0.584		1.186			
Total	1	14.049	1	11.963			
Description: The Joint Precision Approach and Landing System (JPALS) is the future precision approach and landing system which will be the primary landing system for the Joint Strike Fighter (F-35B/F-35C), Unmanned Carrier Aviation Air System (MQ-25A), and future aircraft platforms onboard CVNs and LHA/LHD type ships. JPALS is the Navy certified sea-based system to have the capabilities necessary to provide ship range/bearing for JPALS-equipped aircraft operating within 200NM; provide air traffic control surveillance of JPALS-equipped aircraft via secure, two-way data link with the ship; and support auto-land functionality for the F-35C, MQ-25A, and future platforms to CVNs. JPALS is critical for MQ-25A as currently no secondary landing system exists for MQ-25A operations at sea.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Raytheon	C/FPIF	May 2019	New	1	11.401
FY 2020	CVN 74	Raytheon	SS/FFP	Oct 2020	Option	1	7.797
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	19	12	Nov 2020		
FY 2020	CVN 74	Aug 2025	34	17	May 2021		
Competition/Second Source Initiatives: N/A							
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs. CVN 74 RCOH - Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AN/SPN-46 OVERHAUL/UPGRADE						PARM Code: NAVAIR PMA 213	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	6.615	1	4.867			
System Engineering		0.405		0.617			
Technical Engineering Services		4.331		3.372			
Other Costs		1.656		2.910			
Total	1	13.007	1	11.766			
Description: The AN/SPN-46 Automatic Carrier Landing System (ACLS) is a precision approach landing system (PALS) which provides electronic guidance to carrier-based aircraft and allows them to land in all-weather conditions with no limitations due to low ceiling or restricted visibility. AN/SPN-46 is a fully automated, all-weather approach landing aid for carrier aircraft that enhances safety of flight during recovery, enables the execution of all-weather air combat operations, and is required to achieve full air traffic control certification following RCOH. AN/SPN-46 is required to be removed during the RCOH to prevent damage and allow for major infrastructure recapitalization and reconfiguration of the ship's island, mast, and tower.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	NAWC Aircraft Division	WR	Mar 2016		1	6.615
FY 2020	CVN 74	NAWC Aircraft Division	WR	Oct 2020		1	4.867
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	28	41	Sep 2017		
FY 2020	CVN 74	Aug 2025	13	38	May 2021		
Competition/Second Source Initiatives: N/A							
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs. CVN 74 RCOH - Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls																											
Equipment Item: AN/USG-2B - COOPERATIVE ENGAGEMENT CAPABILITY (CEC)						PARM Code: NAVSEA PEO IWS 6.0																									
P-35 Category	FY 2016		FY 2020																												
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																											
Major Hardware	1	3.448	1	3.550																											
Technical Data and Documentation		0.115		-																											
Spares		0.314		0.476																											
System Engineering		2.637		0.491																											
Technical Engineering Services		3.178		2.719																											
Other Costs		0.939		0.918																											
Total	1	10.631	1	8.154																											
Description: AN/USG-2B - Cooperative Engagement Capability (CEC) provides Battle Force Anti-Air Warfare (AAW) capability by coordinating all force AAW sensors into a single real time, fire control quality composite track picture. CEC distributes sensor measurement data from each Cooperating Unit (CU) to all other CUs. Each CU has a Data Distribution System (DDS) and a Cooperative Engagement Processor (CEP). The DDS encodes and distributes ownship sensor and engagement data to other CUs, and receives and decodes other CU's data. The CEP processes ownship data and DDS supplied remote sensor and weapon data needed to provide the common air picture.																															
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Prime Contractor</th> <th>Contract Method/Type</th> <th>Award Date</th> <th>New/Option</th> <th>Quantity (Each)</th> <th>Unit Cost (\$ M)</th> </tr> <tr> <td>FY 2016</td> <td>CVN 73</td> <td>Raytheon/Sechan Electronics</td> <td>C/FFP</td> <td>Jan 2016</td> <td>Option</td> <td style="text-align: center;">1</td> <td style="text-align: right;">3.448</td> </tr> <tr> <td>FY 2020</td> <td>CVN 74</td> <td>Leonardo DRS</td> <td>C/FFP</td> <td>May 2020</td> <td>Option</td> <td style="text-align: center;">1</td> <td style="text-align: right;">3.550</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2016	CVN 73	Raytheon/Sechan Electronics	C/FFP	Jan 2016	Option	1	3.448	FY 2020	CVN 74	Leonardo DRS	C/FFP	May 2020	Option	1	3.550
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																								
FY 2016	CVN 73	Raytheon/Sechan Electronics	C/FFP	Jan 2016	Option	1	3.448																								
FY 2020	CVN 74	Leonardo DRS	C/FFP	May 2020	Option	1	3.550																								
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th>Program Year</th> <th>Hull</th> <th>Earliest Ship Delivery Date</th> <th>Months Required Before Delivery</th> <th>Production Leadtime</th> <th>Required Award Date</th> </tr> <tr> <td>FY 2016</td> <td>CVN 73</td> <td>Jun 2023</td> <td style="text-align: center;">38</td> <td style="text-align: center;">18</td> <td style="text-align: center;">Oct 2018</td> </tr> <tr> <td>FY 2020</td> <td>CVN 74</td> <td>Aug 2025</td> <td style="text-align: center;">38</td> <td style="text-align: center;">18</td> <td style="text-align: center;">Dec 2020</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2016	CVN 73	Jun 2023	38	18	Oct 2018	FY 2020	CVN 74	Aug 2025	38	18	Dec 2020						
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																										
FY 2016	CVN 73	Jun 2023	38	18	Oct 2018																										
FY 2020	CVN 74	Aug 2025	38	18	Dec 2020																										
Competition/Second Source Initiatives: N/A																															
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs. CVN 74 RCOH - Revised to reflect actual incurred costs.																															

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AN/SLQ-59 - ELECTRONIC WARFARE (EW) SYSTEM						PARM Code: NAVSEA PEO IWS 2E	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	1.403	0	-			
Ancillary Equipment		0.180		-			
Spares		0.045		-			
System Engineering		0.231		-			
Technical Engineering Services		5.893		-			
Other Costs		0.227		-			
Total	1	7.979	0	-			
Description: AN/SLQ-59 - ELECTRONIC WARFARE (EW) SYSTEM is a CNO designated program in response to PACFLT/CJTF519 Urgent Operational Needs Statement (UONS) designed to enhance existing shipboard Surface Electronic Warfare Systems. AN/SLQ-59 provides enhanced shipboard Electronic Support (ES) and Electronic Attack (EA) capabilities.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Electro Impulse Laboratory	SS/IDIQ	Nov 2018	Option	1	1.403
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	22	12	Aug 2020		
Competition/Second Source Initiatives: N/A							
Remarks: Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AN/SPN-41 REFURBISHMENT						PARM Code: NAVAIR PMA 213	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	3.563	1	3.682			
System Engineering		0.368		0.359			
Technical Engineering Services		1.464		1.377			
Other Costs		0.185		0.221			
Total	1	5.580	1	5.639			
Description: The AN/SPN-41 Aircraft Approach Control Transmitting Set provides all-weather instrument approach guidance from the ship to the aircraft. It is used as the ship's Instrument Landing System (ILS) and Monitor to provide azimuth and elevation alignment information to landing aircraft on final approach to the deck. It also serves as an independent monitor of other shipboard landing systems for the pilot as well as providing a backup landing guidance option. AN/SPN-41 enhances safety of flight during recovery, enables the execution of all-weather air combat operations, and is required to achieve full air traffic control certification following RCOH. AN/SPN-41 is required to be removed during the RCOH to prevent damage and allow for major infrastructure recapitalization and reconfiguration of the ship's island, mast, and tower.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	NAWC Aircraft Division	WR	Jul 2017		1	3.563
FY 2020	CVN 74	NAWC Aircraft Division	WR	Dec 2020		1	3.682
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	29	24	Jan 2019		
FY 2020	CVN 74	Aug 2025	25	24	Jul 2021		
Competition/Second Source Initiatives: N/A							
Remarks: Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AN/SPN-50(V)1 - AIR TRAFFIC CONTROL RADAR						PARM Code: NAVAIR PMA 213	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	0	-	1	12.432			
Technical Data and Documentation		-		0.130			
Spares		-		1.034			
System Engineering		-		0.593			
Technical Engineering Services		-		2.192			
Other Costs		-		0.498			
Total	0	-	1	16.879			
Description: Digital radar system capable of modern radar processing to improve target detection and track in the presence of competing clutter. C-band radar alleviating operational congestion of new shipboard S-band radars and restrictions caused by increasing spectrum encroachment and National Broadband Plan.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 74	SAAB	C/FPIF	Jul 2020	New	1	12.432
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 74	Aug 2025	24	22	Oct 2021		
Competition/Second Source Initiatives: N/A							
Remarks: No change from the FY 2023 budget request.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls																			
Equipment Item: FURNITURE (NON PROPULSION PLANT)						PARM Code: NSWC Philadelphia																	
P-35 Category	FY 2016		FY 2020																				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																			
Major Hardware	1	4.647	0	-																			
Ancillary Equipment		0.190		-																			
System Engineering		0.376		-																			
Technical Engineering Services		9.670		15.975																			
Other Costs		0.057		-																			
Total	1	14.940	0	15.975																			
Description: Replaces damaged/worn furniture for 250 spaces. During the RCOH, all furniture is offloaded and evaluated for reuse. Most furniture is stored and reinstalled. However, damaged furniture must be replaced as it cannot be properly secured and poses a personnel risk during high sea states.																							
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="text-align: center;">Program Year</th> <th style="text-align: center;">Hull</th> <th style="text-align: center;">Prime Contractor</th> <th style="text-align: center;">Contract Method/Type</th> <th style="text-align: center;">Award Date</th> <th style="text-align: center;">New/Option</th> <th style="text-align: center;">Quantity (Each)</th> <th style="text-align: center;">Unit Cost (\$ M)</th> </tr> <tr> <td style="text-align: center;">FY 2016</td> <td style="text-align: center;">CVN 73</td> <td style="text-align: center;">Tecnico</td> <td style="text-align: center;">C/CPFF</td> <td style="text-align: center;">Dec 2016</td> <td style="text-align: center;">New</td> <td style="text-align: center;">1</td> <td style="text-align: right;">4.647</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2016	CVN 73	Tecnico	C/CPFF	Dec 2016	New	1	4.647
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																
FY 2016	CVN 73	Tecnico	C/CPFF	Dec 2016	New	1	4.647																
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="text-align: center;">Program Year</th> <th style="text-align: center;">Hull</th> <th style="text-align: center;">Earliest Ship Delivery Date</th> <th style="text-align: center;">Months Required Before Delivery</th> <th style="text-align: center;">Production Leadtime</th> <th style="text-align: center;">Required Award Date</th> </tr> <tr> <td style="text-align: center;">FY 2016</td> <td style="text-align: center;">CVN 73</td> <td style="text-align: center;">Jun 2023</td> <td style="text-align: center;">43</td> <td style="text-align: center;">6</td> <td style="text-align: center;">May 2019</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2016	CVN 73	Jun 2023	43	6	May 2019				
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																		
FY 2016	CVN 73	Jun 2023	43	6	May 2019																		
Competition/Second Source Initiatives: N/A																							
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs.																							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AIRCRAFT ELECTRICAL SERVICE STATION (AESS) INSTALL						PARM Code: NSWC Philadelphia	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	6.669	0	-			
System Engineering		0.243		-			
Technical Engineering Services		6.784		-			
Other Costs		0.169		-			
Total	1	13.865	0	-			
<p>Description: Aircraft Electrical Service Station (AESS) supports the F-35 Joint Strike Fighter (JSF) and JUCAS electrical requirements. They require 270VDC electrical power for maintenance and pre-flight operations. This type of power is not currently available on CVN 68 class aircraft carriers. This ship alteration will equip CVN 68 class ships with a dual purpose AESS station providing either: 90KVA of 115VAC, 400Hz, power for the Advanced Hawkeye (E-2D), and all legacy aircraft, or 70KW of 270VDC electrical power for the JSF (F-35) and JUCAS. This upgrade will replace the obsolete components now part of the AESS with a quiet, lightweight, low-cost, dual-purpose system that decreases maintenance costs and improves habitability.</p>							
<p>Contract Data:</p>							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Various	C/FFP	Jan 2017	New	1	6.669
<p>Delivery Date:</p>							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	55	12	Nov 2017		
<p>Competition/Second Source Initiatives: N/A</p>							
<p>Remarks: Revised to reflect actual incurred costs.</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: LOW PRESSURE AIR PLANT (LPAP)						PARM Code: NSWC Philadelphia	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	5.934	1	5.726			
Ancillary Equipment		-		0.199			
Spares		-		0.060			
System Engineering		0.064		0.061			
Technical Engineering Services		0.019		0.035			
Other Costs		0.064		0.061			
Total	1	6.081	1	6.142			
Description: Remove three Ship Service Air Compressors (SSAC), four Control Air Compressors, and associated dryers from two machinery rooms and two reactor rooms. Install nine MARC 350 Low Pressure Air Plants (LPAPs) to serve both ship service air and control air systems.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	RIX Industries	SS/IDIQ	Feb 2015	Option	1	5.934
FY 2020	CVN 74	RIX Industries	SS/FFP	Sep 2019	Option	1	5.726
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	55	12	Nov 2017		
FY 2020	CVN 74	Aug 2025	48	16	Apr 2020		
Competition/Second Source Initiatives: N/A							
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs. CVN 74 RCOH - Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AUTOMATIC VOLTAGE REGULATOR (AVR)					PARM Code: NAVSEA PMS 312		
P-35 Category	FY 2016			FY 2020			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	4.340		0	-		
Total	1	4.340		0	-		
Description: The Turbine Generator Automatic Voltage Regulator is a digital upgrade to the legacy voltage regulator. Its purpose is to regulate output voltage from shipboard turbine generators to meet electrical requirements for all ship systems. This upgrade is required to improve operational safety of the turbine generators and eliminate material shortages due to obsolescence of legacy voltage regulator system components.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Northrop Grumman Power/Control Systems	C/FFP	Jun 2015	Option	1	4.340
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	51	26	Jan 2017		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: VSA O2 GENERATOR						PARM Code: NSWC Philadelphia	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	0	-	1	3.527			
Ancillary Equipment		-		0.235			
Spares		-		0.240			
System Engineering		-		0.602			
Technical Engineering Services		-		0.254			
Other Costs		-		0.292			
Total	0	-	1	5.150			
Description: One liquid oxygen generating and storage plant with associated support equipment; one gaseous nitrogen generator with associated storage flasks.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 74	Pacific Consolidated Industries	SS/FFP	Jan 2020	Option	1	3.527
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 74	Aug 2025	36	24	Aug 2020		
Competition/Second Source Initiatives: N/A							
Remarks: Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AVIATION EQUIPMENT & SUPPORT						PARM Code: NAVAIR PMA 251	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	25.053	1	32.153			
Ancillary Equipment		0.014		0.061			
Technical Data and Documentation		-		0.095			
Spares		0.081		0.332			
System Engineering		5.446		2.905			
Technical Engineering Services		10.102		6.108			
Other Costs		5.877		4.847			
Total	1	46.573	1	46.501			
Description: Provides procurement, engineering and logistics support for launch and recovery equipment (includes overhaul/replacement of catapult launch valves and arresting gear engines), ADMACS (Aviation Data Management and Control System Phase II upgrade; includes Cyber Security requirement and future aircraft ready), Moriah Wind System, ILARTS (Integrated Launch and Recovery TV Surveillance System; includes Technical Refresh Service Change to mitigate obsolescence issues), mission pods, Jet Blast Deflectors (includes Service Change to provide side panel cooling to meet JSF requirements), aviation maintenance facility, weapons compatibility, aircraft spotting, aviation servicing facilities, Landing Signal Officer Display System (LSODS; includes ADMACS interfacing and Cyber Security updates), Long Range Lineup System (LRLS), Improved Fresnel Lens Optical Landing System (IFLOLS; includes Phase IV upgrade), Manually Operated Visual Landing Aid System (MOVLAS) and Flight Deck Lighting and Marking and Lighting. All of these systems are required to be repaired, updated, overhauled as required and tested during RCOH to attain final Flight Deck Certification authorizing launch and recovery of USN aircraft.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Various	Various	Various	Various	1	25.053
FY 2020	CVN 74	Various	Various	Various	Various	1	32.153
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	0	0	Jun 2023		
FY 2020	CVN 74	Aug 2025	0	0	Aug 2025		
Competition/Second Source Initiatives: N/A							
Remarks: CVN 73 RCOH - Comprised of 18 discretely funded line items. Revised to reflect actual incurred costs. CVN 74 RCOH - Comprised of 19 discretely funded line items. Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls																											
Equipment Item: NATO SEASPARROW SURFACE MISSILE SYSTEM (NSSMS)						PARM Code: NAVSEA PEO IWS 12																									
P-35 Category	FY 2016		FY 2020																												
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																											
Major Hardware	1	6.148	1	13.258																											
Ancillary Equipment		-		0.198																											
Spares		0.913		1.260																											
System Engineering		0.455		0.861																											
Technical Engineering Services		10.345		9.346																											
Other Costs		1.451		1.691																											
Total	1	19.312	1	26.614																											
Description: The NATO Seasparrow Surface Missile System (NSSMS) is a medium range self defense missile system capable of defeating near/mid-term air/surface threats.																															
Contract Data: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="text-align: center;">Program Year</th> <th style="text-align: center;">Hull</th> <th style="text-align: center;">Prime Contractor</th> <th style="text-align: center;">Contract Method/Type</th> <th style="text-align: center;">Award Date</th> <th style="text-align: center;">New/Option</th> <th style="text-align: center;">Quantity (Each)</th> <th style="text-align: center;">Unit Cost (\$ M)</th> </tr> <tr> <td style="text-align: center;">FY 2016</td> <td style="text-align: center;">CVN 73</td> <td style="text-align: center;">Raytheon</td> <td style="text-align: center;">SS/FFP</td> <td style="text-align: center;">Apr 2017</td> <td style="text-align: center;">New</td> <td style="text-align: center;">1</td> <td style="text-align: right;">6.148</td> </tr> <tr> <td style="text-align: center;">FY 2020</td> <td style="text-align: center;">CVN 74</td> <td style="text-align: center;">Raytheon</td> <td style="text-align: center;">SS/FFP</td> <td style="text-align: center;">Nov 2020</td> <td style="text-align: center;">Option</td> <td style="text-align: center;">1</td> <td style="text-align: right;">13.258</td> </tr> </table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2016	CVN 73	Raytheon	SS/FFP	Apr 2017	New	1	6.148	FY 2020	CVN 74	Raytheon	SS/FFP	Nov 2020	Option	1	13.258
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																								
FY 2016	CVN 73	Raytheon	SS/FFP	Apr 2017	New	1	6.148																								
FY 2020	CVN 74	Raytheon	SS/FFP	Nov 2020	Option	1	13.258																								
Delivery Date: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="text-align: center;">Program Year</th> <th style="text-align: center;">Hull</th> <th style="text-align: center;">Earliest Ship Delivery Date</th> <th style="text-align: center;">Months Required Before Delivery</th> <th style="text-align: center;">Production Leadtime</th> <th style="text-align: center;">Required Award Date</th> </tr> <tr> <td style="text-align: center;">FY 2016</td> <td style="text-align: center;">CVN 73</td> <td style="text-align: center;">Jun 2023</td> <td style="text-align: center;">32</td> <td style="text-align: center;">30</td> <td style="text-align: center;">Apr 2018</td> </tr> <tr> <td style="text-align: center;">FY 2020</td> <td style="text-align: center;">CVN 74</td> <td style="text-align: center;">Aug 2025</td> <td style="text-align: center;">19</td> <td style="text-align: center;">31</td> <td style="text-align: center;">Jun 2021</td> </tr> </table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2016	CVN 73	Jun 2023	32	30	Apr 2018	FY 2020	CVN 74	Aug 2025	19	31	Jun 2021						
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																										
FY 2016	CVN 73	Jun 2023	32	30	Apr 2018																										
FY 2020	CVN 74	Aug 2025	19	31	Jun 2021																										
Competition/Second Source Initiatives: N/A																															
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs. CVN 74 RCOH - Revised to reflect actual incurred costs.																															

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AN/SPS-48G - 3D AIR SEARCH RADAR						PARM Code: NAVSEA PEO IWS 2RI	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	8.113	0	-			
Technical Data and Documentation		0.017		-			
Spares		0.328		-			
System Engineering		2.082		-			
Technical Engineering Services		2.098		-			
Other Costs		0.460		-			
Total	1	13.098	0	-			
Description: AN/SPS-48G (V)1 is a long range three dimensional (3D) radar used to search, detect and provide space-stabilized, three-coordinate (range, bearing, height) data to track airborne contacts.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Harris	SS/FPIF	Sep 2016	Option	1	8.113
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	32	18	Apr 2019		
Competition/Second Source Initiatives: N/A							
Remarks: Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AN/SPS-49(V)1 OVERHAUL/REFURBISHMENT						PARM Code: NAVSEA PEO IWS 2RI	
P-35 Category	FY 2016			FY 2020			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	3.498		0	-		
Spares		0.275			-		
System Engineering		0.428			-		
Technical Engineering Services		3.403			-		
Other Costs		0.472			-		
Total	1	8.076		0	-		
Description: The AN/SPS-49A(V)1 Radar is a narrow beam, very long range, two dimensional air search radar. This is the primary air search radar for the ship providing early detection of airborne contacts (range, bearing, and altitude).							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	NSWC Crane	WR	Apr 2017		1	3.498
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	26	30	Oct 2018		
Competition/Second Source Initiatives: N/A							
Remarks: Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: CIWS/RAM DEFENSE CAPABILITY (CRDC) BLOCK 1					PARM Code: NAVSEA PEO IWS 3G		
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	0	-	1	19.575			
Ancillary Equipment		-		0.572			
System Engineering		-		0.595			
Technical Engineering Services		5.043		7.047			
Other Costs		0.077		0.080			
Total	0	5.120	1	27.869			
Description: Close-In Weapon System (CIWS)/Rolling Airframe Missile (RAM) Defense Capability (CRDC) is a high fire rate gun weapon system that automatically acquires, tracks, and destroys threats. Active radars, supporting platforms, below deck equipment, and interfaces them to CIWS for Quick Reaction Capability (QRC).							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 74	Raytheon	C/FFP	Dec 2020	New	1	19.575
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 74	Aug 2025	24	24	Aug 2021		
Competition/Second Source Initiatives: N/A							
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs. CVN 74 RCOH - Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: AN/SPQ-14 - ADVANCED SENSOR DISTRIBUTION SYSTEM (ASDS)						PARM Code: NAVSEA PEO IWS 1.0	
P-35 Category	FY 2016			FY 2020			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	1	0.123		0	-		
Ancillary Equipment		0.669			-		
Spares		0.046			-		
System Engineering		1.073			-		
Technical Engineering Services		1.122			-		
Other Costs		0.415			-		
Total	1	3.448		0	-		
Description: AN/SPQ-14(V) - Advanced Sensor Distribution System (ASDS) provides the distribution of radar sensor data and video to radar displays on board the ship.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2016	CVN 73	Lockheed Martin/DRS Technologies	C/FFP	Jan 2018	Option	1	0.123
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2016	CVN 73	Jun 2023	26	18	Oct 2019		
Competition/Second Source Initiatives: N/A							
Remarks: Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: MK 38 MOD 3 GUN SYSTEM						PARM Code: NAVSEA PEO IWS 3C	
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	0	-	1	5.002			
Technical Data and Documentation		-		0.020			
Spares		-		0.097			
Technical Engineering Services		2.706		2.056			
Other Costs		0.094		0.050			
Total	0	2.800	1	7.225			
Description: MK 38 Mod 3 Gun System is a 25mm stabilized gun with auto tracking and day/night capability that is also capable of interfacing with 7.62 mm MK 52 MOD 0 Coaxial gun.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 74	BAE Systems	SS/FP	Jun 2020	New	1	5.002
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 74	Aug 2025	37	18	Jan 2021		
Competition/Second Source Initiatives: N/A							
Remarks: CVN 73 RCOH - Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: ENTERPRISE AIR SURVEILLANCE RADAR (EASR)					PARM Code: NAVSEA PEO IWS 2RI		
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	0	-	1	27.634			
Ancillary Equipment		-		0.075			
Spares		-		3.765			
System Engineering		-		5.387			
Technical Engineering Services		-		12.209			
Other Costs		-		5.586			
Total	0	-	1	54.656			
Description: Enterprise Air Surveillance Radar (EASR) is the next generation S-band air search radar with 3-D search capability supporting: Anti-Air Warfare, Anti-Surface Warfare, Air Traffic Control.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 74	Raytheon	C/CPIF	Jul 2020	Option	1	27.634
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 74	Aug 2025	30	24	Feb 2021		
Competition/Second Source Initiatives: N/A							
Remarks: Revised to reflect actual incurred costs.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls			
Equipment Item: SURFACE ELECTRONIC WARFARE IMPROVEMENT PROGRAM (SEWIP) BLOCK 2					PARM Code: NAVSEA PEO IWS 2E		
P-35 Category	FY 2016		FY 2020				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	0	-	1	10.182			
Ancillary Equipment		-		0.198			
Spares		-		0.391			
System Engineering		-		0.731			
Technical Engineering Services		-		4.814			
Other Costs		-		1.063			
Total	0	-	1	17.379			
Description: Surface Electronic Warfare Improvement Program (SEWIP) Block 2 detects and classifies special signals not processed by other SLQ-32 receivers. SEWIP Block 2 provides enhanced Electronic Support (ES) capability with improved detection and accuracy to pace evolving threats through an upgraded ES antenna & receiver along with an open combat system interface.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2020	CVN 74	Lockheed Martin	C/FFP	Mar 2020	Option	1	10.182
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2020	CVN 74	Aug 2025	29	29	Oct 2020		
Competition/Second Source Initiatives: N/A							
Remarks: Revised to reflect actual incurred costs.							

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Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy							Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls						
First System (2024) Award Date: June 2025		First System (2024) Completion Date: March 2029			Interval Between Systems: 41 Months					
Cost Elements		Production Leadtime (Months)	When Required* (Months)	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
Advance Procurement										
Plans		-	Various	4.686	11.706	28.982	-	1.348	25.355	29.014
Basic (Ship)		-	Various	10.625	521.906	511.075	-	2.145	181.206	445.488
Basic (Parking Garages)		-	Various	-	-	40.000	-	-	-	-
Basic (Multi-Use Facility)		-	Various	-	-	55.000	-	-	-	-
Other		-	Various	0.666	10.472	14.350	-	-	-	8.667
Propulsion Equipment		-	Various	47.355	20.555	12.560	-	12.257	52.118	20.188
HM&E		-	Various	0.682	1.644	3.230	-	-	-	12.060
Electronics		-	Various	2.248	25.159	78.931	-	0.012	0.396	27.954
Ordnance		-	Various	-	20.639	73.518	-	-	-	9.263
Total: Advance Procurement				66.262	612.081	817.646	-	15.762	259.075	552.634
Total Advance Procurement/Obligation Authority				66.262	612.081	817.646	-	15.762	259.075	552.634

*Note: "When Required" is the number of months required before ship delivery.

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy	Date: March 2023
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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1	P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls
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Cost Elements	FY 2024						
	Production Leadtime (Months)	When Required* (Months)	Unit Cost (\$ M)	Contract Forecast Date	2024 Qty (Each)	For FY	Total Cost Request (\$ M)
Advance Procurement							
Plans	-	Various	-	Apr 2024	-	2025	28.982
Basic (Ship)	-	Various	-	Apr 2024	-	2025	511.075
Basic (Parking Garages)	-	Various	-	Apr 2024	-	2025	40.000
Basic (Multi-Use Facility)	-	Various	-	Apr 2024	-	2025	55.000
Other	-	Various	-	Apr 2024	-	2025	14.350
Propulsion Equipment	-	Various	-	Apr 2024	-	2025	12.560
HM&E	-	Various	-	Apr 2024	-	2025	3.230
Electronics	-	Various	-	Apr 2024	-	2025	78.931
Ordnance	-	Various	-	Apr 2024	-	2025	73.518
<i>Total: Advance Procurement</i>							817.646
Total Advance Procurement/Obligation Authority							817.646

Description:
FY 2024 is the fifth of five years of advance procurement for CVN 75 RCOH. Full funding begins in FY 2025 with one year of subsequent full funding in FY 2026. FY 2024 continues the required advance procurement funding profile including increased engineering support, technical support services, authorized work package development, and GFI/GFE long-lead procurement to support a May 2025 RCOH execution start date. In FY 2024, there is major activity in Basic, Electronics, and Ordnance requirements, explained further below. CVN 75 RCOH Basic Construction includes funding for three parking garages and one multi-use facility to support quality of life for crew members.

Plans: In FY 2024, will complete planning efforts performed by the public shipyards, warfare centers, and SUPSHIP; includes engineering support, authorized work package (AWP), ship-checks and ship-check oversight, detailed design and engineering drawing development, technical reviews, oversight, and direction.

Basic (Ship): FY 2024 is the second year of prime contractor advance planning, with significant increase for long lead-time material procurement and fabrication; completion of critical planning products such as the integrated master schedule; Ship's Force work package material procurement; and technical support. FY 2024 Basic includes procurement of long lead-time material for required repairs to catapult trough covers. All four catapult trough track channel wear limits are exceeded and cover sets will need to be replaced and updated with Inconel clad track channels during the CVN 75 RCOH.

Basic (Parking Garages): Supports commencement of parking garage facilities construction for sailor quality of life improvements.

Basic (Multi-Use Facility): Supports commencement of multi-use facility construction for sailor quality of life improvements.

Other: In FY 2024, there are increased efforts for risk management program; Integrated Logistics Support (ILS) planning; aircraft carrier RCOH maintenance cost reduction initiatives; Carriers Integrated Digital Environment (IDE); Carrier Team One (CT1); and essential program management.

Propulsion Equipment: FY 2024 is the third year of nuclear component procurement and technical support services.

HM&E: FY 2024 is the third year of long-lead procurement and technical services for hull, mechanical and electrical (HM&E) systems.

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2086 / CVN Refueling Overhauls
<p>Electronics: FY 2024 is the primary year for GFI/GFE long lead-time procurement and technical planning for modernization of combat systems, interior communications, and C4I systems. Anticipated FY 2023 bulk buy opportunity did not materialize, resulting in \$18.6M increase in hardware procurements in FY 2024. Significant FY 2024 long-lead material procurements to meet in-yard required dates include hardware for Network Tactical Common Data Link (NTCDL), Hierarchical Yet Dynamically Reprogrammable Architecture (HYDRA), Integrated Voice Communications Network (IVCN/IVN), Ship Self Defense System (SSDS), and Automatic Carrier Landing System (ACLS), AN/SPN-46(V) modernization.</p> <p>Ordnance: FY 2024 is the primary year for GFI/GFE long lead-time procurement and technical planning for modernization of radars and weapons systems. Significant FY 2024 long-lead material procurements to meet in-yard required dates include hardware for Launcher (Catapults), Recovery (Arresting Gear Engine Overhaul), Automatic Carrier Landing System (ACLS) AN/SPN-46(V), Close In Weapon System (CIWS) Rolling Airframe Missile (RAM) Defense Capability (CRDC) Block 1, Close In Weapon System (CIWS) Block 1B, and Machine Gun System (MGS) MK-38 modernization.</p> <p>FY 2022 and FY 2023 revised to reflect actual incurred costs.</p> <p>*Note: "When Required" is the number of months required before ship delivery.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships							P-1 Line Item Number / Title: 2119 / DDG 1000					
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 (<i>Units in Each</i>)	3	-	-	-	-	-	-	-	-	-	-	3
Gross/Weapon System Cost (<i>\$ in Millions</i>)	13,793.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	13,793.234
Less PY Advance Procurement (<i>\$ in Millions</i>)	1,160.113	-	-	-	-	-	-	-	-	-	-	1,160.113
Less Subsequent Year Full Funding (<i>\$ in Millions</i>)	8,541.347	-	-	-	-	-	-	-	-	-	-	8,541.347
Net Procurement (P-1) (<i>\$ in Millions</i>)	4,091.774	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	4,091.774
Plus Subsequent Year Full Funding (<i>\$ in Millions</i>)	7,969.074	56.597	72.976	410.400	-	410.400	32.300	-	-	-	-	8,541.347
Full Funding TOA (<i>\$ in Millions</i>)	12,060.848	56.597	72.976	410.400	-	410.400	32.300	-	-	-	-	12,633.121
Plus CY Advance Procurement (<i>\$ in Millions</i>)	1,160.113	-	-	-	-	-	-	-	-	-	-	1,160.113
Total Obligation Authority (<i>\$ in Millions</i>)	13,220.961	56.597	72.976	410.400	0.000	410.400	32.300	0.000	0.000	0.000	-	13,793.234
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	410.310	62.399	38.705	-	-	-	-	-	-	-	-	511.414
Total (<i>\$ in Millions</i>)	13,631.271	118.996	111.681	410.400	-	410.400	32.300	-	-	-	-	14,304.648
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	4,597.745	-	-	-	-	-	-	-	-	-	-	4,597.745

Description:
DDG 1000, a multi-mission surface combatant, will serve as a versatile asset in the context of future Naval Strategy. Armed with an array of weapons, DDG 1000 will provide the Joint Force Commander with precision strike and volume fires. Designed with sustainable payload, multi-spectral stealth and optimal manning, DDG 1000 will take the fight to the enemy with unprecedented striking power.

The program is continuing to integrate the Conventional Prompt Strike (CPS) weapons system onto the class with speed and agility. This naval surface hypersonic strike capability will be able to conduct independent forward deployed operations and prosecute deep-inland, time-critical, soft and medium-hardened targets in a contested environment. The CPS capability, combined with the low observable characteristics of the ZUMWALT platform, creates a uniquely lethal and survivable naval surface platform. ZUMWALT Class will enhance U.S. conventional power projection by providing an independent forward deployed strike platform, with longer range, shorter time of flight, and higher survivability against enemy defenses compared to current capabilities.

The Navy will integrate CPS into USS ZUMWALT (DDG 1000) and USS MICHAEL MONSOOR (DDG 1001) during Building Yard Modernization Periods (BYMP) instead of traditional Docking Selected Restricted Availabilities. This shipyard period type maximizes learning and efficiency in order to speed the capability to the fleet. The program will integrate CPS on Lyndon B. Johnson (DDG 1002) during new construction, prior to the ship's arrival in homeport and prior to installation of CPS on DDG 1001. Full CPS operational capability on ZUMWALT Class is achieved when CPS is installed on all three ships and they are turned over for Fleet operations.

DDG 1000 and DDG 1001 are commissioned ships and the CPS installations for these ships is budgeted with Other Procurement, Navy (OPN LI 0947) funding. DDG 1002 CPS installation is budgeted in Shipbuilding and Conversion, Navy funding.

Note:

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships		P-1 Line Item Number / Title: 2119 / DDG 1000	
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			
FY24 funding will support DDG 1002 Combat System Availability, Mission System Activation, Total Shipboard Computing Environment (TSCE) Modernization, and Integration of Conventional Prompt Strike (CPS) capability.			
FY24 increases from FY 2023 submission total \$382M.			
- \$234M added for DDG 1002 CPS production and material.			
- \$57M added for DDG 1002 TSCE modernization.			
- \$91M added to complete DDG 1002 combat system availability and mission systems activation			
Characteristics:	DDG	Systems:	
Length Overall	610 ft	Electronics	
Beam	80.7 ft	-EXTERIOR COMMUNICATIONS (EXCOMMS)	
Displacement	15,742 TONS	-MULTI FUNCTION RADAR (MFR)	
Draft	27.6 ft	-TOTAL SHIP COMPUTING ENVIRONMENT (TSCE)	
		-DDG 1002 TSCE MODERNIZATION	
		Hull, Mechanical, and Electrical (HM&E)	Ordnance
		-MAIN TURBINE GENERATOR (MTG)	-ADVANCED GUN SYSTEM (AGS)
			-CLOSE-IN GUN SYSTEM (CIGS)
Production Status:	DDG 1001 ⁽¹⁾	DDG 1002 ⁽²⁾	
Contract Award Date	Sep 2011	Sep 2011	
Months to Completion			
a) Award to Delivery	145 months	183 months	
b) Construction Start to Delivery	163 months	176 months	
Delivery Date	Oct 2023	Dec 2026	
Completion Of Fitting Out	Oct 2023	Dec 2026	
Obligation Work Limit Date	Sep 2024	Nov 2027	
Design Schedule	Start / Issue	Complete / Response	Reissue
Issue Date for TLR	N/A	N/A	
Issue Date for TLS	N/A	N/A	
Preliminary Design	N/A	N/A	
Contract Design	N/A	N/A	
Detail Design	N/A	N/A	
Request for Proposals	Jan 2006	Apr 2006	
Design Agent	Northrop Grumman Ship Systems		
Classification of Cost Estimate: CLASS C BUDGET ESTIMATE			

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships		P-1 Line Item Number / Title: 2119 / DDG 1000
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>Justification: The FY24 funding is to finance CPS procurements and installation necessary to integrate CPS into DDG 1002. Additionally, FY24 funding will support DDG 1002 Combat System Availability, Mission System Activation, and Total Shipboard Computing Environment (TSCE) Modernization.</p> <p>Footnotes: (1) USS Michael Monsoor (DDG 1001) is currently activating weapons, sensors, and communication systems. Delay in SPY-3 parts has pushed the mission systems activation completion to August 2023. (2) The Navy will install Conventional Prompt Strike capability on DDG 1002 prior to final delivery. The ship is currently at Huntington Ingalls Industries (HII) shipyard in Pascagoula, MS for Combat Systems installation and activation.</p>		

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2119 / DDG 1000		
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2007		FY 2009	
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>
Plan Costs	2	1,553.687	1	563.435
Basic Construction/Conversion		3,645.347		1,608.283
Change Orders		320.320		80.328
Electronics ^(†)		2,805.702		1,576.758
Hull, Mechanical, and Electrical (HM&E) ^(†)		242.156		76.848
Ordnance ^(†)		515.811		305.311
Other Cost		367.807		131.441
Total Ship Estimate		9,450.830		4,342.404
Less Advance Procurement FY 2005		304.046		-
Less Advance Procurement FY 2006		706.240		-
Less Advance Procurement FY 2008		-		149.827
Less Subsequent Full Funding FY 2008		3,009.929		-
Less Subsequent Full Funding FY 2010		313.025		1,065.507
Less Subsequent Full Funding FY 2011		107.020		140.062
Less Subsequent Full Funding FY 2012		437.938		70.789
Less Subsequent Full Funding FY 2013		536.503		138.020
Less Subsequent Full Funding FY 2014		230.944		31.349
Less Subsequent Full Funding FY 2015		374.916		85.933
Less Subsequent Full Funding FY 2016		277.658		155.643
Less Subsequent Full Funding FY 2017		198.180		73.576
Less Subsequent Full Funding FY 2018		150.006		66.962
Less Subsequent Full Funding FY 2019		81.518		189.447
Less Subsequent Full Funding FY 2020		93.714		62.230
Less Subsequent Full Funding FY 2021		26.675		51.530
Less Subsequent Full Funding FY 2022		14.950		41.647
Less Subsequent Full Funding FY 2023		-		72.976
Less Subsequent Full Funding FY 2024		-		410.400
Less Subsequent Full Funding FY 2025		-		32.300
Net P-1 Funding		2,587.568		1,504.206
Remarks: Basic Construction Increase in FY24 (\$250M) - \$56M - DDG 1002 will be continuing the combat systems availability at Huntington Ingalls Industries' (HII) shipyard in Pascagoula, MS - \$194M - DDG 1002 Conventional Prompt Strike (CPS) production and shipbuilder material.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2119 / DDG 1000
<div>Basic Construction Increase in FY25 (\$32M)<ul style="list-style-type: none">- Funding will support the remaining CPS production work on DDG 1002Electronics Increase in FY24 (\$92M)<ul style="list-style-type: none">- \$35M for DDG 1002 Mission System Activation being executed at HII in conjunction with Raytheon.- \$57M for TSCE Modernization being executed at HII in conjunction with Raytheon.Ordnance Increase in FY24 (\$40M)<ul style="list-style-type: none">- \$26M DDG 1002 large missile tubes for CPS integration.- \$14M DDG 1002 Rubber Boots, Hatches, Shock Isolation for CPS integration.</div>		

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 02 / 1

P-1 Line Item Number / Title:
2119 / DDG 1000

Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
DDG 1001 ⁽¹⁾	BIW	2007	Sep 2011	Mar 2010	Oct 2023
DDG 1002 ⁽²⁾	BIW	2009	Sep 2011	Apr 2012	Dec 2026

Footnotes:

⁽¹⁾ USS Michael Monsoor (DDG 1001) is currently activating weapons, sensors, and communication systems. Delay in SPY-3 parts has pushed the mission systems activation completion to August 2023.

⁽²⁾ The Navy will install Conventional Prompt Strike capability on DDG 1002 prior to final delivery. The ship is currently at Huntington Ingalls Industries (HII) shipyard in Pascagoula, MS for Combat Systems installation and activation.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2119 / DDG 1000		
Electronics	FY 2007		FY 2009	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
EXTERIOR COMMUNICATIONS (EXCOMMS)	2	470.348	1	79.962
INTEGRATED UNDERSEA WARFARE (IUSW) SYSTEM	2	216.263	1	105.136
MULTI FUNCTION RADAR (MFR)	2	519.609	1	297.999
COMMON ARRAY POWER SYSTEM (CAPS)	2	97.017	1	16.409
TOTAL SHIP COMPUTING ENVIRONMENT (TSCE)	2	382.591	1	259.191
ELECTRO-OPTICAL / INFRARED (EO/IR)	2	94.411	1	31.452
IDENTIFICATION FRIEND OR FOE (IFF)	2	35.532	1	28.138
COMMON ARRAY COOLING SYSTEM (CACS)	2	20.065	1	0.965
SHIP CONTROL SYSTEM (SCS)	2	111.527	1	117.229
COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	2	16.025	1	7.800
SURFACE ELECTRONIC WARFARE IMPROVEMENT PROGRAM (SEWIP)	2	40.242	1	17.682
VERTICAL LAUNCHING SYSTEM (VLS) MK 57 4-CELL MODULES	40	276.782	20	302.815
DDG 1002 TSCE MODERNIZATION	0	-	1	56.730
P-35 Items Subtotal		2,280.412		1,321.508
Other Cost Elements				
MISSION SYSTEM ENGR INTEGR & TEST (MSEIT)		322.274		132.510
MISSION SYSTEM ACTIVATION		193.016		117.240
SPARES		10.000		5.500
Other Cost Elements Subtotal		525.290		255.250
Total Electronics		2,805.702		1,576.758

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity:		P-1 Line Item Number / Title:		
1611N / 02 / 1		2119 / DDG 1000		
Hull, Mechanical, and Electrical (HM&E)	FY 2007		FY 2009	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
MAIN TURBINE GENERATOR (MTG)	4	84.797	2	39.412
P-35 Items Subtotal		84.797		39.412
Major Items				
BATTLE SPARES (MTG)		32.168		-
RIGID HULL INFLATABLE BOAT (RHIB)	4	2.100	2	1.100
Major Items Subtotal		34.268		1.100
Other Cost Elements				
HM&E (NGVLA, Moriah Wind Measurement System (WMS), Aviation Integration)		68.492		12.446
MISSION SYSTEM ACTIVATION		18.781		16.390
INTERIM SPARES		35.818		7.500
Other Cost Elements Subtotal		123.091		36.336
Total Hull, Mechanical, and Electrical (HM&E)		242.156		76.848

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity:		P-1 Line Item Number / Title:		
1611N / 02 / 1		2119 / DDG 1000		
Ordnance	FY 2007		FY 2009	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
ADVANCED GUN SYSTEM (AGS)	4	458.711	2	248.596
CLOSE-IN GUN SYSTEM (CIGS)	4	36.151	2	13.795
P-35 Items Subtotal		494.862		262.391
Major Items				
BATTLE SPARES (AGS)		18.449		-
DDG 1002 Missile Tubes (CPS)	0	-	4	26.000
DDG 1002 Rubber Boots, Hatches, Shock Isolation (CPS)	0	-	4	14.420
Major Items Subtotal		18.449		40.420
Other Cost Elements				
MISSION SYSTEM ACTIVATION		2.500		2.500
Other Cost Elements Subtotal		2.500		2.500
Total Ordnance		515.811		305.311

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000			
Equipment Item: EXTERIOR COMMUNICATIONS (EXCOMMS)						PARM Code: PEOC4I	
P-35 Category	FY 2007			FY 2009			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	2	195.953		1	20.600		
Technical Support Services		33.947			6.585		
Other / NRE		240.448			52.777		
Total	2	470.348		1	79.962		
<p>Description: EXCOMMs are part of the DDG 1000 C3I Segment and consists of a set of seven (7) external communications elements. The EXCOMM Elements support the DDG 1000 system in achieving its mission by providing communications between DDG 1000 and other land, air, and sea based platforms as well as pier-side communications. These EXCOMM elements provide the voice, data, and video communications between DDG 1000 and the external world at sea as well as when in port. The 7 elements are: Satellite Communications (SATCOMs), Line of Sight (LOS), Common Data Link-Navy (CDL-N), Information Security (INFOSEC), Common Array Element (CAE), Cooperative Engagement Capability (CEC) and Integrated Communications Controller Software (ICCS). Government legacy systems include: Distributed Common Ground System, Navy (DCGS-N), Cooperative Engagement Capability (CEC), Communication Terminals, AN/WSC-6(V)9 Shipboard Terminal, Common Link Integrated Processor (CLIP), Automated Digital Network System (ADNS), Global Broadcast Service (GBS), Communications Data Link System (CDLS), & Naval Modular Automated Communications System (NAVMACS).</p>							
<p>Contract Data:</p>							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	97.977
FY 2009	DDG 1002	Raytheon	C/CPIF	May 2012		1	20.600
<p>Delivery Date:</p>							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2007	DDG 1001	Oct 2023	43	26	Jan 2018		
FY 2009	DDG 1002	Dec 2026	43	26	Mar 2021		
<p>Competition/Second Source Initiatives: N/A</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy					Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000			
Equipment Item: INTEGRATED UNDERSEA WARFARE (IUSW) SYSTEM					PARM Code: IWS 5.0 XR		
P-35 Category	FY 2007		FY 2009				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	2	95.829	1	54.300			
Technical Support Services		11.293		5.639			
Other / NRE		109.141		45.197			
Total	2	216.263	1	105.136			
<p>Description:</p> <p>The IUSW suite supports DDG 1000 in achieving Undersea and Surface Dominance with the capability to detect and track hostile surface vessels, submarines, and moored volume mines. It supports the Sensor Systems Segment in accomplishing its Integrated Air and Surface Dominance (IASD) and Integrated Undersea Dominance (IUSD) objectives by providing the capability to conduct Anti-Submarine Warfare (ASW), Torpedo Defense (TD) and Mine Warfare (MIW) missions. Military Operations Other than War (MOOTW) objectives, such as Search and Rescue (SAR) (locating downed aircraft and vessels in the ocean) are also supported. There are four major subcomponents: Bow Array Component, Towed Array Component, Towed Torpedo Countermeasures Component, as well as software.</p>							
<p>Contract Data:</p>							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	47.915
FY 2009	DDG 1002	Raytheon	C/CPIF	Oct 2012		1	54.300
<p>Delivery Date:</p>							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2007	DDG 1001	Oct 2023	47	18	May 2018		
FY 2009	DDG 1002	Dec 2026	46	18	Aug 2021		
<p>Competition/Second Source Initiatives:</p> <p>N/A</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																										
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																												
Equipment Item: MULTI FUNCTION RADAR (MFR)					PARM Code: IWS 2.0 SQ																																											
P-35 Category	FY 2007		FY 2009																																													
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	2	314.313	1	189.573																																												
Technical Support Services		21.993		11.145																																												
Other / NRE		183.303		97.281																																												
Total	2	519.609	1	297.999																																												
<p>Description:</p> <p>The Multi Function Radar (MFR) element supports the DDG 1000 system in achieving Integrated Air and Surface Dominance with the capability to neutralize hostile surface vessels and aircraft at short ranges. The MFR is comprised of X-Band (AN/SPY-3) arrays integrated through a common signal data processor offering surface and horizon search capabilities and 3-D air search radar capabilities. The X-Band portion also has two navigation modes (high power and lower power) for use in piloting and marine navigation.</p> <p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Raytheon</td><td>C/CPIF</td><td>Mar 2008</td><td></td><td>2</td><td>157.157</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Raytheon</td><td>C/CPIF</td><td>Oct 2012</td><td></td><td>1</td><td>189.573</td></tr></table> <p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>45</td><td>28</td><td>Sep 2017</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>36</td><td>28</td><td>Aug 2021</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Raytheon	C/CPIF	Mar 2008		2	157.157	FY 2009	DDG 1002	Raytheon	C/CPIF	Oct 2012		1	189.573	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	45	28	Sep 2017	FY 2009	DDG 1002	Dec 2026	36	28	Aug 2021
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																									
FY 2007	DDG 1001	Raytheon	C/CPIF	Mar 2008		2	157.157																																									
FY 2009	DDG 1002	Raytheon	C/CPIF	Oct 2012		1	189.573																																									
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																											
FY 2007	DDG 1001	Oct 2023	45	28	Sep 2017																																											
FY 2009	DDG 1002	Dec 2026	36	28	Aug 2021																																											

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																											
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																													
Equipment Item: COMMON ARRAY POWER SYSTEM (CAPS)						PARM Code: IWS 2.0 SQ																																											
P-35 Category	FY 2007			FY 2009																																													
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	2	56.185		1	12.624																																												
Battle Spares		1.000			-																																												
Technical Support Services		4.490			0.420																																												
Other / NRE		35.342			3.365																																												
Total	2	97.017		1	16.409																																												
<p>Description:</p> <p>The Common Array Power System (CAPS) provides electrical power for the Multi Function Radar (MFR), Identification of Friend or Foe (IFF), EW/Cryptology and External Communications (EXCOMMs) Elements. The CAPS is a distributed power system designed to operate from the ship-supplied medium voltage distribution Integrated Power System's (IPS) 13.8 kV AC power source. The CAPS consists of two Power Distribution Units (PDUs) and four Power Conversion Units (PCUs).</p> <p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Raytheon</td><td>C/CPIF</td><td>Mar 2008</td><td></td><td>2</td><td>28.093</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Raytheon</td><td>C/CPIF</td><td>Nov 2012</td><td></td><td>1</td><td>12.624</td></tr></table> <p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>48</td><td>28</td><td>Jun 2017</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>35</td><td>28</td><td>Sep 2021</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Raytheon	C/CPIF	Mar 2008		2	28.093	FY 2009	DDG 1002	Raytheon	C/CPIF	Nov 2012		1	12.624	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	48	28	Jun 2017	FY 2009	DDG 1002	Dec 2026	35	28	Sep 2021
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																										
FY 2007	DDG 1001	Raytheon	C/CPIF	Mar 2008		2	28.093																																										
FY 2009	DDG 1002	Raytheon	C/CPIF	Nov 2012		1	12.624																																										
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																												
FY 2007	DDG 1001	Oct 2023	48	28	Jun 2017																																												
FY 2009	DDG 1002	Dec 2026	35	28	Sep 2021																																												

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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																												
Equipment Item: TOTAL SHIP COMPUTING ENVIRONMENT (TSCE)					PARM Code: IWS 9.0 XV																																											
P-35 Category	FY 2007		FY 2009																																													
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	2	196.450	1	147.453																																												
Technical Support Services		21.834		10.499																																												
Other / NRE		164.307		101.239																																												
Total	2	382.591	1	259.191																																												
<p>Description:</p> <p>The Total Ship Computing Environment (TSCE) Segment provides all computing resources and associated software to the DDG 1000 System. It is a single computing environment for Ship, Combat and Support Systems. The TSCE provides a common middleware platform upon which all application/functional software can build and execute. The segment applications software, combined with TSCE hardware and software infrastructure represent the majority of the computing resources and associated software for the DDG 1000 System.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Raytheon</td><td>C/CPIF</td><td>May 2008</td><td></td><td>2</td><td>98.225</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Raytheon</td><td>C/CPIF</td><td>Oct 2012</td><td></td><td>1</td><td>147.453</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>48</td><td>21</td><td>Jan 2018</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>43</td><td>21</td><td>Aug 2021</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	98.225	FY 2009	DDG 1002	Raytheon	C/CPIF	Oct 2012		1	147.453	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	48	21	Jan 2018	FY 2009	DDG 1002	Dec 2026	43	21	Aug 2021
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																									
FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	98.225																																									
FY 2009	DDG 1002	Raytheon	C/CPIF	Oct 2012		1	147.453																																									
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																											
FY 2007	DDG 1001	Oct 2023	48	21	Jan 2018																																											
FY 2009	DDG 1002	Dec 2026	43	21	Aug 2021																																											

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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																													
Equipment Item: ELECTRO-OPTICAL / INFRARED (EO/IR)						PARM Code: IWS 2.0 SJ																																											
P-35 Category	FY 2007			FY 2009																																													
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	2	33.368		1	12.973																																												
Technical Support Services		6.900			1.551																																												
Other / NRE		54.143			16.928																																												
Total	2	94.411		1	31.452																																												
<p>Description:</p> <p>The Electro-Optical / Infrared (EO/IR) Sensor Suite Element is composed of both the hardware and software components required to detect and range on specified targets and report track data to C2. The EO/IR sensor suite consists of five (5) gimballed EO sensors located on the cardinal faces of the deckhouse and associated electronics in Electronic Modular Enclosures (EMEs). Also included are Detect and Tracking Software components that provide embedded control and generate tracks for the C2 system and Mine Like Object (MLO) detection algorithm.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Raytheon</td><td>C/CPIF</td><td>May 2008</td><td></td><td>2</td><td>16.684</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Raytheon</td><td>C/CPIF</td><td>Nov 2012</td><td></td><td>1</td><td>12.973</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>47</td><td>22</td><td>Jan 2018</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>41</td><td>22</td><td>Sep 2021</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	16.684	FY 2009	DDG 1002	Raytheon	C/CPIF	Nov 2012		1	12.973	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	47	22	Jan 2018	FY 2009	DDG 1002	Dec 2026	41	22	Sep 2021
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																										
FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	16.684																																										
FY 2009	DDG 1002	Raytheon	C/CPIF	Nov 2012		1	12.973																																										
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																												
FY 2007	DDG 1001	Oct 2023	47	22	Jan 2018																																												
FY 2009	DDG 1002	Dec 2026	41	22	Sep 2021																																												

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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																												
Equipment Item: IDENTIFICATION FRIEND OR FOE (IFF)					PARM Code: NAVAIR																																											
P-35 Category	FY 2007			FY 2009																																												
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)																																											
Major Hardware	2	16.018		1	8.640																																											
Technical Support Services		2.186			2.163																																											
Other / NRE		17.328			17.335																																											
Total	2	35.532		1	28.138																																											
<p>Description: Identification Friend or Foe (IFF) sensor element supports the DDG 1000 Ship System segment in accomplishing Anti-Air Warfare (AAW) and Anti-Surface Warfare (ASUW) missions. The IFF Sensor Element is a cooperative "challenge and reply" system that assists in the rapid identification, tracking and control of friendly platforms. IFF is comprised of three hardware components to include the Interrogator component, the Transponder component and the Electronically Scanned Antenna (ESA) component, as well as software.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Raytheon</td><td>C/CPIF</td><td>May 2008</td><td></td><td>2</td><td>8.009</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Raytheon</td><td>C/CPIF</td><td>Dec 2012</td><td></td><td>1</td><td>8.640</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>40</td><td>29</td><td>Jan 2018</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>33</td><td>29</td><td>Oct 2021</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	8.009	FY 2009	DDG 1002	Raytheon	C/CPIF	Dec 2012		1	8.640	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	40	29	Jan 2018	FY 2009	DDG 1002	Dec 2026	33	29	Oct 2021
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																									
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FY 2009	DDG 1002	Raytheon	C/CPIF	Dec 2012		1	8.640																																									
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																											
FY 2007	DDG 1001	Oct 2023	40	29	Jan 2018																																											
FY 2009	DDG 1002	Dec 2026	33	29	Oct 2021																																											

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy					Date: March 2023																																										
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2119 / DDG 1000																																												
Equipment Item: COMMON ARRAY COOLING SYSTEM (CACS)			PARM Code: IWS 2.0 SQ																																												
P-35 Category	FY 2007		FY 2009																																												
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																											
Major Hardware	2	11.766	1	-																																											
Battle Spares		1.000		-																																											
Technical Support Services		0.824		0.107																																											
Other / NRE		6.475		0.858																																											
Total	2	20.065	1	0.965																																											
<p>Description:</p> <p>The Common Array Cooling System (CACS) provides liquid cooling for the Multi Function Radar (MFR) and External Communications (EXCOMMs) arrays. CACS is a distributed cooling system consisting of three Cooling Equipment Units (CEUs). Each CEU operates an independent coolant loop used to transport, monitor and control coolant flow to the DBR and EXCOMMs Equipment. CEUs consist of redundant pumps, a heat exchanger and filtration system. It is designed to provide liquid coolant to the MFR and EXCOMM equipment and dissipate heat to the ship-supplied chilled water.</p> <p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Raytheon</td><td>C/CPIF</td><td>May 2008</td><td></td><td>2</td><td>5.883</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Raytheon</td><td>C/CPIF</td><td>Nov 2012</td><td></td><td>1</td><td>0.000</td></tr></table> <p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>49</td><td>28</td><td>May 2017</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>35</td><td>28</td><td>Sep 2021</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p> <p>Remarks:</p> <p>CACS Technical Services are incorporated into DBR Technical Services. DDG 1002 CACS costs are included in the DDG 1002 MFR value.</p>						Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	5.883	FY 2009	DDG 1002	Raytheon	C/CPIF	Nov 2012		1	0.000	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	49	28	May 2017	FY 2009	DDG 1002	Dec 2026	35	28	Sep 2021
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																								
FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	5.883																																								
FY 2009	DDG 1002	Raytheon	C/CPIF	Nov 2012		1	0.000																																								
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																										
FY 2007	DDG 1001	Oct 2023	49	28	May 2017																																										
FY 2009	DDG 1002	Dec 2026	35	28	Sep 2021																																										

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																										
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																												
Equipment Item: SHIP CONTROL SYSTEM (SCS)					PARM Code: SPAWAR																																											
P-35 Category	FY 2007		FY 2009																																													
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	2	58.000	1	42.801																																												
Technical Support Services		6.031		8.256																																												
Other / NRE		47.496		66.172																																												
Total	2	111.527	1	117.229																																												
<p>Description:</p> <p>The Flight 1 Ship Control System (SCS) element is a system of hardware and software items that provide hierarchical and integrated ship control by the DDG 1000 crew. The SCS software architecture allows for various levels of automation for monitoring, control, reporting and configuration of SCS equipment and operations to support mission and low manning concepts. From workstation positions on the ship bridge or in the ship mission centers, the SCS coordinates, controls and monitors the navigation, hull, electric plant, machinery plant and damage control functions on the DDG 1000.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Raytheon</td><td>C/CPIF</td><td>May 2008</td><td></td><td>2</td><td>29.000</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Raytheon</td><td>C/CPIF</td><td>May 2012</td><td></td><td>1</td><td>42.801</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>38</td><td>31</td><td>Jan 2018</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>38</td><td>31</td><td>Mar 2021</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	29.000	FY 2009	DDG 1002	Raytheon	C/CPIF	May 2012		1	42.801	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	38	31	Jan 2018	FY 2009	DDG 1002	Dec 2026	38	31	Mar 2021
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																									
FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		2	29.000																																									
FY 2009	DDG 1002	Raytheon	C/CPIF	May 2012		1	42.801																																									
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																											
FY 2007	DDG 1001	Oct 2023	38	31	Jan 2018																																											
FY 2009	DDG 1002	Dec 2026	38	31	Mar 2021																																											

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																											
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																													
Equipment Item: COOPERATIVE ENGAGEMENT CAPABILITY (CEC)						PARM Code: IWS 6.0 XN																																											
P-35 Category	FY 2007			FY 2009																																													
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	2	12.000		1	6.800																																												
Technical Support Services		4.025			1.000																																												
Total	2	16.025		1	7.800																																												
<p>Description:</p> <p>Cooperative Engagement Capability (CEC) is a sensor network with Integrated Fire Control capability that significantly improves Battle Force air and missile defense capabilities by coordinating measurement data from Battle Force air search sensors on CEC-equipped units into a single, real-time, composite 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 grid locking (relative spatial positioning) between CUs. Each CU independently employs high capacity, parallel processing and advanced algorithms to combine all distributed sensor data into a high quality track picture that is the same for all CUs. CEC data is presented as a superset of the best air and missile defense sensor capabilities from each CU, all of which are integrated into a single input to each CU's combat weapon system. CEC significantly improves Battle Force defense in depth, including both local and area defense capabilities against current and future air missile threats.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Raytheon</td><td>C/FPIF</td><td>Feb 2007</td><td></td><td>2</td><td>6.000</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Raytheon</td><td>C/FPIF</td><td>Oct 2013</td><td></td><td>1</td><td>6.800</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>34</td><td>18</td><td>Jun 2019</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>34</td><td>18</td><td>Aug 2022</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Raytheon	C/FPIF	Feb 2007		2	6.000	FY 2009	DDG 1002	Raytheon	C/FPIF	Oct 2013		1	6.800	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	34	18	Jun 2019	FY 2009	DDG 1002	Dec 2026	34	18	Aug 2022
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																										
FY 2007	DDG 1001	Raytheon	C/FPIF	Feb 2007		2	6.000																																										
FY 2009	DDG 1002	Raytheon	C/FPIF	Oct 2013		1	6.800																																										
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																												
FY 2007	DDG 1001	Oct 2023	34	18	Jun 2019																																												
FY 2009	DDG 1002	Dec 2026	34	18	Aug 2022																																												

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																										
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																												
Equipment Item: SURFACE ELECTRONIC WARFARE IMPROVEMENT PROGRAM (SEWIP)					PARM Code: IWS 2.0 SJ																																											
P-35 Category	FY 2007		FY 2009																																													
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	2	36.214	1	15.906																																												
Technical Support Services		2.406		0.935																																												
Other / NRE		1.622		0.841																																												
Total	2	40.242	1	17.682																																												
<p>Description: SEWIP provides enhanced Electronic Warfare (EW) capabilities to improve anti-ship missile defense, counter-targeting and counter surveillance capabilities, as well as improved situational awareness to pace the threat, improving detection, accuracy, and mitigation of EMI. The SEWIP Block 2 is an upgraded antenna, receiver and combat system interface for AN/SLQ-32.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Lockheed Martin</td><td>C/FPIF</td><td>Jul 2012</td><td></td><td>2</td><td>18.107</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Lockheed Martin</td><td>C/FPIF</td><td>Jan 2015</td><td></td><td>1</td><td>15.906</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>2</td><td>19</td><td>Jan 2022</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>2</td><td>16</td><td>Jun 2025</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Lockheed Martin	C/FPIF	Jul 2012		2	18.107	FY 2009	DDG 1002	Lockheed Martin	C/FPIF	Jan 2015		1	15.906	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	2	19	Jan 2022	FY 2009	DDG 1002	Dec 2026	2	16	Jun 2025
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																									
FY 2007	DDG 1001	Lockheed Martin	C/FPIF	Jul 2012		2	18.107																																									
FY 2009	DDG 1002	Lockheed Martin	C/FPIF	Jan 2015		1	15.906																																									
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																											
FY 2007	DDG 1001	Oct 2023	2	19	Jan 2022																																											
FY 2009	DDG 1002	Dec 2026	2	16	Jun 2025																																											

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																											
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																													
Equipment Item: VERTICAL LAUNCHING SYSTEM (VLS) MK 57 4-CELL MODULES						PARM Code: IWS 3L S8																																											
P-35 Category	FY 2007			FY 2009																																													
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	40	180.987		20	234.670																																												
Technical Support Services		9.029			4.231																																												
Other / NRE		86.766			63.914																																												
Total	40	276.782		20	302.815																																												
<p>Description:</p> <p>The MK 57 VLS is a general purpose, operationally unmanned launching system capable of stowing, preparing, and launching missiles in support of DDG-1000 mission areas including: land attack warfare, integrated air and surface dominance, and integrated undersea dominance. The MK57 VLS provides the capability for rapid launch of missiles into a 360-degree hemispherical volume above and about the ship. The canistered missiles are stowed within the launching systems below-deck cells. DDG-1000 will have 80 total cells grouped into 20 four-cell modules. Flight 1 missiles to be carried include: Enhanced Sea Sparrow Missile (ESSM), Standard Missile-2 (SM-2) Blk III, Tomahawk Land Attack Missile (TLAM) Blk III/IV, and Vertical Launch Anti-Submarine Rocket (VLA).</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Raytheon</td><td>C/CPIF</td><td>May 2008</td><td></td><td>40</td><td>4.525</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Raytheon</td><td>C/CPIF</td><td>Oct 2012</td><td></td><td>20</td><td>11.734</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>40</td><td>24</td><td>Jun 2018</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>40</td><td>24</td><td>Aug 2021</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		40	4.525	FY 2009	DDG 1002	Raytheon	C/CPIF	Oct 2012		20	11.734	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	40	24	Jun 2018	FY 2009	DDG 1002	Dec 2026	40	24	Aug 2021
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																										
FY 2007	DDG 1001	Raytheon	C/CPIF	May 2008		40	4.525																																										
FY 2009	DDG 1002	Raytheon	C/CPIF	Oct 2012		20	11.734																																										
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																												
FY 2007	DDG 1001	Oct 2023	40	24	Jun 2018																																												
FY 2009	DDG 1002	Dec 2026	40	24	Aug 2021																																												

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000			
Equipment Item: DDG 1002 TSCE MODERNIZATION						PARM Code: IWS 9	
P-35 Category	FY 2007			FY 2009			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware		-			56.730		
Total		-			56.730		
<p>Description:</p> <p>Total Shipboard Computing Environment (TSCE) Modernization DDG 1002 procurement is for software integration and procurement of modernized network infrastructure and data center, peripherals (lab, shipboard tactical assets and ZUMWALT Training facility).</p> <p>Final delivery has moved to December 2026 to support installation of CPS, in line with her current combat systems activation. Additionally, TSCE Modernization procurement previously budgeted in LI 0947 DDG 1000 Class Support Equipment and has been moved to SCN LI 2119 to be completed onboard DDG 1002 prior to final delivery. Procurement(s) occur in FY24 for an FY25-FY26 work start and completion. Regarding TSCE, the combat system computing infrastructure (data centers, network infrastructure & communications devices) is more than a decade old and requires extensive modernization and technology refresh to sustain operations, mitigate obsolescence, provide a hardware baseline and software development processes that align to PEO IWS Integrated Combat System efforts. The Zumwalt-class Operational Availability (Ao), as specified in the Operational Requirements Document (ORD), is the driving requirement for TSCE modernization.</p>							
<p>Contract Data:</p>							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2009	DDG 1002	Raytheon	C/CPIF	Apr 2022	Option	1	56.730
<p>Delivery Date:</p>							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2009	DDG 1002	Dec 2026	12	18	Jun 2024		
<p>Competition/Second Source Initiatives:</p> <p>N/A</p>							
<p>Remarks:</p> <p>\$56.7M added for DDG 1002 TSCE modernization. Funding was previously budgeted in LI 0947 DDG 1000 Class Support Equipment and has moved to SCN LI 2119 as a result of final delivery moving to December 2026.</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																										
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																																												
Equipment Item: MAIN TURBINE GENERATOR (MTG)					PARM Code: PMS 500 WA																																											
P-35 Category	FY 2007		FY 2009																																													
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																												
Major Hardware	4	73.262	2	39.412																																												
Technical Support Services		6.126		-																																												
Other / NRE		5.409		-																																												
Total	4	84.797	2	39.412																																												
<p>Description:</p> <p>The Main Turbine Generator Set (MTG) shall be capable of being utilized as the prime power source on the DDG 1000 Destroyer for electrical power applications (propulsion, ship services, and combat systems loads). The DDG 1000 baseline includes two MTGs. The minimum output power from each MTG shall be 35.25 MWe. The engine utilizes a Full Authority Digital Control Local Operating Panel (FADC LOCOP) and electric start system. The generator contains redundant automatic voltage regulators (AVR) with automatic changeover.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Rolls-Royce</td><td>C/FFP</td><td>Mar 2007</td><td>New</td><td>4</td><td>18.316</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Rolls-Royce</td><td>C/FFP</td><td>Jan 2008</td><td>Option</td><td>2</td><td>19.706</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>33</td><td>24</td><td>Jan 2019</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>33</td><td>24</td><td>Mar 2022</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	Rolls-Royce	C/FFP	Mar 2007	New	4	18.316	FY 2009	DDG 1002	Rolls-Royce	C/FFP	Jan 2008	Option	2	19.706	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	33	24	Jan 2019	FY 2009	DDG 1002	Dec 2026	33	24	Mar 2022
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																									
FY 2007	DDG 1001	Rolls-Royce	C/FFP	Mar 2007	New	4	18.316																																									
FY 2009	DDG 1002	Rolls-Royce	C/FFP	Jan 2008	Option	2	19.706																																									
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																											
FY 2007	DDG 1001	Oct 2023	33	24	Jan 2019																																											
FY 2009	DDG 1002	Dec 2026	33	24	Mar 2022																																											

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000			
Equipment Item: ADVANCED GUN SYSTEM (AGS)					PARM Code: IWS 3C YF		
P-35 Category	FY 2007			FY 2009			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	4	298.654		2	206.747		
Technical Support Services		14.500			3.860		
Other / NRE		145.557			37.989		
Total	4	458.711		2	248.596		
Description: The Advanced Gun System is a fully automated, single barrel, 155mm, vertically loaded, stabilized gun mount that is capable of storing, initializing/programming, loading and firing projectiles and propelling charges. Its primary mission is Land Attack Warfare in support of ground and expeditionary forces beyond the Line of Sight in the DDG 1000 system's littoral engagement area where precise, rapid-response, high-volume, long-range fire support is required. Each DDG 1000 will carry two complete AGS systems - Mount 61 and 62. The above deck configurations are identical but each has a slightly different below deck configuration.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2007	DDG 1001	BAE	C/CPIF	Apr 2008		4	74.664
FY 2009	DDG 1002	BAE	C/CPIF	Apr 2012		2	103.374
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2007	DDG 1001	Oct 2023	31	39	Dec 2017		
FY 2009	DDG 1002	Dec 2026	31	39	Feb 2021		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2119 / DDG 1000																										
Equipment Item: CLOSE-IN GUN SYSTEM (CIGS)					PARM Code: IWS 3C YF																									
P-35 Category	FY 2007		FY 2009																											
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																										
Major Hardware	4	16.034	2	7.534																										
Technical Support Services		7.177		3.381																										
Other / NRE		12.940		2.880																										
Total	4	36.151	2	13.795																										
<p>Description:</p> <p>The Close-In Gun System (CIGS) supports the DDG 1000 system in achieving Integrated Air and Surface Dominance with the capability to neutralize hostile surface vessels and aircraft at short ranges. CIGS also supports the Military Operations Other than War (MOOTW) missions, such as performing maritime interdiction, conducting maritime law enforcement, and supporting hostage rescue. Two (2) CIGS will be mounted on the aft end of the hanger. The CIGS MK 46 MOD 2 GWS is composed of a turret assembly that houses the MK 44 MOD 2 cannon and an advanced Fire Control System that includes a ballistic solution computer, an electro-optical sensor package, and an eye-safe laser range finder. The system uses a forward-looking infrared sensor, a low-light television camera, and eye safe laser range finder with a closed-loop tracking system to optimize accuracy against small, high-speed surface targets. The system can be operated locally from the gun control station inside the turret, remotely from the MK 46 MOD 2 GWS Remote Gun Station Operator (RGSO) panel in the Combat Information Center (CIC), or manually using hand cranks from inside the turret. The 30mm cannon, MK 44 MOD 2, is a single barrel, open bolt, dual feed, electrically powered, chain-driven automatic cannon. The system has a magazine capacity of 424 rounds, a dual-feed capability with a firing rate of 200 rounds per minute, and is capable of selectively switching between ammunition types and firing modes.</p>																														
<p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>General Dynamics Land Systems</td><td>C/FFP</td><td>Jan 2015</td><td></td><td>4</td><td>4.008</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>General Dynamics Land Systems</td><td>C/FFP</td><td>Mar 2016</td><td></td><td>2</td><td>3.767</td></tr></table>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2007	DDG 1001	General Dynamics Land Systems	C/FFP	Jan 2015		4	4.008	FY 2009	DDG 1002	General Dynamics Land Systems	C/FFP	Mar 2016		2	3.767
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																							
FY 2007	DDG 1001	General Dynamics Land Systems	C/FFP	Jan 2015		4	4.008																							
FY 2009	DDG 1002	General Dynamics Land Systems	C/FFP	Mar 2016		2	3.767																							
<p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2007</td><td>DDG 1001</td><td>Oct 2023</td><td>6</td><td>22</td><td>Jun 2021</td></tr><tr><td>FY 2009</td><td>DDG 1002</td><td>Dec 2026</td><td>6</td><td>18</td><td>Dec 2024</td></tr></table>							Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2007	DDG 1001	Oct 2023	6	22	Jun 2021	FY 2009	DDG 1002	Dec 2026	6	18	Dec 2024						
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																									
FY 2007	DDG 1001	Oct 2023	6	22	Jun 2021																									
FY 2009	DDG 1002	Dec 2026	6	18	Dec 2024																									
<p>Competition/Second Source Initiatives:</p> <p>N/A</p>																														

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy								Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships						P-1 Line Item Number / Title: 2122 / DDG-51						
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 (<i>Units in Each</i>)	87	2	3	2	-	2	2	2	2	2	2	104
Gross/Weapon System Cost (<i>\$ in Millions</i>)	99,459.611	3,930.919	6,987.537	4,432.767	0.000	4,432.767	4,333.557	4,404.784	4,811.470	4,609.133	5,005.028	137,974.806
Less PY Advance Procurement (<i>\$ in Millions</i>)	2,910.850	-	-	-	-	-	-	-	-	-	-	2,910.850
Less Cost To Complete (<i>\$ in Millions</i>)	2,203.070	-	-	-	-	-	-	-	-	-	-	2,203.070
Less Subsequent Year Full Funding (<i>\$ in Millions</i>)	433.000	-	-	-	-	-	-	-	-	-	-	433.000
Less Hurricane (<i>\$ in Millions</i>)	227.100	-	-	-	-	-	-	-	-	-	-	227.100
Less EOQ (<i>\$ in Millions</i>)	1,621.241	254.932	41.000	233.588	-	233.588	232.995	232.990	591.126	-	77.300	3,285.172
Less Escalation (<i>\$ in Millions</i>)	48.200	-	-	-	-	-	-	-	-	-	-	48.200
Less Transfer (<i>\$ in Millions</i>)	218.500	-	-	-	-	-	-	-	-	-	-	218.500
Net Procurement (P-1) (<i>\$ in Millions</i>)	91,797.650	3,675.987	6,946.537	4,199.179	0.000	4,199.179	4,100.562	4,171.794	4,220.344	4,609.133	4,927.728	128,648.914
Plus Subsequent Year Full Funding (<i>\$ in Millions</i>)	433.000	-	-	-	-	-	-	-	-	-	-	433.000
Full Funding TOA (<i>\$ in Millions</i>)	92,230.650	3,675.987	6,946.537	4,199.179	-	4,199.179	4,100.562	4,171.794	4,220.344	4,609.133	4,927.728	129,081.914
Plus CY Advance Procurement (<i>\$ in Millions</i>)	3,332.434	-	-	-	-	-	-	-	-	-	-	3,332.434
Plus Cost To Complete (<i>\$ in Millions</i>)	1,149.086	45.753	228.577	225.917	-	225.917	114.695	149.446	130.912	158.684	-	2,203.070
Plus EOQ (<i>\$ in Millions</i>)	1,454.589	120.000	695.652	284.035	-	284.035	309.312	-	-	-	-	2,863.588
Plus Escalation (<i>\$ in Millions</i>)	48.200	-	-	-	-	-	-	-	-	-	-	48.200
Plus Transfer (<i>\$ in Millions</i>)	218.500	-	-	-	-	-	-	-	-	-	-	218.500
Plus Hurricane (<i>\$ in Millions</i>)	227.100	-	-	-	-	-	-	-	-	-	-	227.100
Total Obligation Authority (<i>\$ in Millions</i>)	98,660.559	3,841.740	7,870.766	4,709.131	0.000	4,709.131	4,524.569	4,321.240	4,351.256	4,767.817	4,927.728	137,974.806
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	2,693.579	104.654	150.909	96.433	-	96.433	211.463	238.161	260.549	210.391	1,289.128	5,255.267
Total (<i>\$ in Millions</i>)	101,354.138	3,946.394	8,021.675	4,805.564	-	4,805.564	4,736.032	4,559.401	4,611.805	4,978.208	6,216.856	143,230.073
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	1,143.214	1,965.460	2,329.179	2,216.384	-	2,216.384	2,166.779	2,202.392	2,405.735	2,304.567	2,502.514	1,326.681
Description: DDG 51 will be able to operate offensively and defensively, independently or as units of Carrier Strike Groups and Surface Action Groups, in support of Marine Amphibious Task Forces in multi-threat environments that include air, surface and subsurface threats. These ships will respond to Low Intensity Conflict/Coastal and Littoral Offshore Warfare (LIC/CALOW) scenarios as well as open ocean conflict providing or augmenting power projection and forward presence requirements, and escort operations at sea. Beginning in FY17, DDG 51 Flight III with the Air and Missile Defense Radar (SPY-6(V)1) will significantly enhance Integrated Air and Missile Defense capability against current and future threats. Starting in FY22, DDG 51 Flight III AN/SLQ-32 system is upgraded from AN/SLQ-32(V)6 to AN/SLQ-32(V)7, with the addition of SEWIP Block 3, which provides advanced Electronic Attack (EA) capability to keep pace with the evolving Anti-Ship Missile (ASM) threat and counter-targeting. Starting in FY23, the MK38												

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships		P-1 Line Item Number / Title: 2122 / DDG-51
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>Gun Weapon System is being upgraded to the Mod 4 configuration and transitions from a post construction to an in-line installation, the WSN-7 inertial navigation system is being replaced with the follow-on WSN-12 navigation system, 15 additional berths are being introduced, and the Bridgemaster Surface Search Radar is being replaced by the Next-Generation Surface Search Radar (NGSSR).</p> <p>Note: (1) The FY18-22 acquisition strategy is a 10 ship Multi-year Procurement (MYP) with options. This budget request reflects savings for the ships in FY18-FY22 associated with EOQ procurement and a MYP strategy. Additional ships in FY19 and FY20 also reflect quantity savings over annual ship prices. (2) The Navy received authority to award Multi-year Procurement (MYP) contracts for FY 2023 - FY 2027 for up to 15 ships.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy					Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships				P-1 Line Item Number / Title: 2122 / DDG-51			
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							
Characteristics:	FLIGHT IIA	FLIGHT III					
Length Overall	509 ft	509 ft					
Beam	59 ft	59 ft					
Displacement	9217 TONS	9650 TONS					
Draft	-						
Production Status:	DDG 122 ⁽¹⁾	DDG 124	DDG 127	DDG 125	DDG 126	DDG 128	DDG 129
Contract Award Date	Jun 2013	Jun 2013	Sep 2017	Jun 2013	Jun 2013	Sep 2018	Sep 2018
Months to Completion							
a) Award to Delivery	125 months	135 months	95 months	120 months	157 months	78 months	88 months
b) Construction Start to Delivery	74 months	74 months	76 months	61 months	76 months	59 months	60 months
Delivery Date	Nov 2023	Sep 2024	Aug 2025	Jun 2023	Jul 2026	Mar 2025	Jan 2026
Completion Of Fitting Out	Mar 2024	Jan 2025	Dec 2025	Mar 2024	Nov 2026	Jul 2025	May 2026
Obligation Work Limit Date	Feb 2025	Dec 2025	Nov 2026	Feb 2025	Oct 2027	Jun 2026	Apr 2027
Production Status:	DDG 130	DDG 131	DDG 132	DDG 133	DDG 134 ⁽²⁾	DDG 135	DDG 137
Contract Award Date	Sep 2018	Sep 2018	Dec 2018	Sep 2018	Sep 2018	Jun 2020	Sep 2018
Months to Completion							
a) Award to Delivery	103 months	97 months	110 months	105 months	122 months	92 months	121 months
b) Construction Start to Delivery	71 months	59 months	72 months	54 months	66 months	57 months	60 months
Delivery Date	Apr 2027	Oct 2026	Feb 2028	Jun 2027	Nov 2028	Feb 2028	Oct 2028
Completion Of Fitting Out	Aug 2027	Feb 2027	Jul 2028	Oct 2027	Mar 2029	Jun 2028	Feb 2029
Obligation Work Limit Date	Jul 2028	Jan 2028	Jun 2029	Aug 2028	Feb 2030	May 2029	Jan 2030
Production Status:	DDG 136	DDG 139	DDG 138	DDG 140 ⁽³⁾	DDG 141	DDG 142	DDG 143
Contract Award Date	Sep 2018	Sep 2018	Sep 2018	Jun 2023	Jun 2023	Sep 2023	Jun 2023
Months to Completion							
a) Award to Delivery	131 months	129 months	140 months	90 months	90 months	93 months	102 months
b) Construction Start to Delivery	66 months	63 months	66 months	60 months	60 months	60 months	60 months
Delivery Date	Aug 2029	Jun 2029	May 2030	Dec 2030	Dec 2030	Jun 2031	Dec 2031
Completion Of Fitting Out	Nov 2029	Oct 2029	Sep 2030	Apr 2031	Apr 2031	Oct 2031	Apr 2032
Obligation Work Limit Date	Oct 2030	Sep 2030	Aug 2031	Mar 2032	Mar 2032	Sep 2032	Mar 2033
Production Status:	DDG 144						
Contract Award Date	Jun 2023						
Months to Completion							
a) Award to Delivery	102 months						
b) Construction Start to Delivery	60 months						
Delivery Date	Dec 2031						
Completion Of Fitting Out	Apr 2032						
Obligation Work Limit Date	Mar 2033						

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships		P-1 Line Item Number / Title: 2122 / DDG-51		
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				
<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>
Issue Date for TLR	Jun 1983	N/A		
Issue Date for TLS	N/A	N/A		
Preliminary Design	Mar 1982	Dec 1982		
Contract Design	May 1983	Jun 1984		
Detail Design	N/A	N/A		
Request for Proposals	N/A	N/A		
Design Agent	BIW			
Classification of Cost Estimate: CLASS C BUDGET ESTIMATE				
Footnotes: (1) DDG 122 - DDG 133 reflects actual and contract milestone dates based on ship production progress. (2) DDG 134 - DDG 139 reflects contract milestone dates based on ship production progress. (3) DDG 140 and follow reflect notional dates.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 02 / 1P-1 Line Item Number / Title:
2122 / DDG-51

Cost Categories <small>([†]) indicates the presence of a P-8a</small>	FY 2015		FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	2	68.814	3	204.436	2	81.454	2	72.811	3	74.195	3	75.713	2	77.117	2	86.682
Basic Construction/Conversion		1,519.913		2,447.400		1,879.669		1,772.067		2,860.810		2,894.944		2,215.906		1,905.348
Change Orders		60.411		127.571		89.053		48.959		85.449		85.974		56.334		77.417
Electronics ([†])		343.296		502.100		346.044		379.000		576.510		597.388		413.024		535.327
Hull, Mechanical, and Electrical (HM&E) ([†])		141.283		219.752		147.668		166.433		231.606		229.166		163.945		164.030
Ordnance ([†])		829.697		1,443.896		1,111.357		921.269		1,546.010		1,583.703		1,136.092		1,085.130
Other Cost		77.775		73.033		73.971		75.846		77.216		81.468		77.593		76.985
Total Ship Estimate		3,041.189		5,018.188		3,729.216		3,436.385		5,451.796		5,548.356		4,140.011		3,930.919
Less Advance Procurement FY 2015		-		134.039		-		-		-		-		-		-
Less Subsequent Full Funding FY 2017		-		433.000		-		-		-		-		-		-
Less Cost to Complete FY 2021		9.634		-		-		-		-		-		-		-
Less Cost to Complete FY 2022		44.577		1.176		-		-		-		-		-		-
Less Cost to Complete FY 2023		30.231		24.238		168.178		5.930		-		-		-		-
Less Cost to Complete FY 2024		-		104.090		121.827		-		-		-		-		-
Less Cost to Complete FY 2025		-		-		74.830		39.865		-		-		-		-
Less Cost to Complete FY 2026		-		-		-		33.511		115.935		-		-		-
Less Cost to Complete FY 2027		-		-		-		-		46.662		84.250		-		-
Less Cost to Complete FY 2028		-		-		-		-		-		35.151		123.533		-
Less EOQ FY 2013		224.851		108.345		13.677		-		-		-		-		-
Less EOQ FY 2014		69.989		130.650		168.912		-		-		-		-		-
Less EOQ FY 2018		-		-		-		-		39.362		25.940		12.517		12.517
Less EOQ FY 2019		-		-		-		-		-		337.720		152.104		101.104
Less EOQ FY 2020		-		-		-		-		-		-		632.014		112.014
Less EOQ FY 2021		-		-		-		-		-		-		-		29.297
Less EOQ FY 2022		-		-		-		-		-		-		-		-

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy												Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1								P-1 Line Item Number / Title: 2122 / DDG-51								
Cost Categories ^(†) indicates the presence of a P-8a	FY 2015		FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Less EOQ FY 2023		-		-		-		-		-		-		-		-
Net P-1 Funding		2,661.907		4,082.650		3,181.792		3,357.079		5,249.837		5,065.295		3,219.843		3,675.987

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2122 / DDG-51		
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2023		FY 2024	
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>
Plan Costs	3	92.152	2	82.697
Basic Construction/Conversion		3,673.502		2,290.444
Change Orders		97.545		64.078
Electronics ^(†)		911.969		619.811
Hull, Mechanical, and Electrical (HM&E) ^(†)		295.732		100.673
Ordnance ^(†)		1,834.441		1,187.380
Other Cost		82.196		87.684
Total Ship Estimate		6,987.537		4,432.767
Less Advance Procurement FY 2015		-		-
Less Subsequent Full Funding FY 2017		-		-
Less Cost to Complete FY 2021		-		-
Less Cost to Complete FY 2022		-		-
Less Cost to Complete FY 2023		-		-
Less Cost to Complete FY 2024		-		-
Less Cost to Complete FY 2025		-		-
Less Cost to Complete FY 2026		-		-
Less Cost to Complete FY 2027		-		-
Less Cost to Complete FY 2028		-		-
Less EOQ FY 2013		-		-
Less EOQ FY 2014		-		-
Less EOQ FY 2018		-		-
Less EOQ FY 2019		-		-
Less EOQ FY 2020		-		-
Less EOQ FY 2021		-		-
Less EOQ FY 2022		41.000		79.000
Less EOQ FY 2023		-		154.588
Net P-1 Funding		6,946.537		4,199.179
Remarks: Total Ship Estimates include incorporation of Bridge System Navigation Modifications beginning with FY15 ships, realized cost adjustments for GFE Systems in ORDNANCE for FY17 - FY21 ships, and realized costs of construction for FY13 - FY19 ships. Total Ship Estimates for FY21 include 1) \$130M of FY20 Congressionally added advance procurement for the Surface Combatant Supplier Base, and 2) \$215M of Congressionally added full funding for Surface Combatant Shipyard Infrastructure. The amounts are shown in the Basic Construction/Conversion cost category.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2122 / DDG-51
Total Ship Estimates for FY23 include \$380M of Congressionally added full funding for large surface combatant infrastructure (shown in Basic Construction/Conversion cost category).		
Total Ship Estimates for FY24 include \$60M for a multi-use facility at Bath Iron Works. This structure is to support sailor quality of life initiatives. This is shown in the Basic Construction/Conversion cost category.		
Total Ship Estimates for FY23-FY27 are based on a Multi-year Procurement acquisition strategy with options.		

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2122 / DDG-51		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
DDG 122 ⁽¹⁾	Bath Iron Works	2015	Jun 2013	Sep 2017	Nov 2023
DDG 124	Bath Iron Works	2016	Jun 2013	Jul 2018	Sep 2024
DDG 127	Bath Iron Works	2016	Sep 2017	Apr 2019	Aug 2025
DDG 125	Huntington Ingalls Industries	2017	Jun 2013	May 2018	Jun 2023
DDG 126	Bath Iron Works	2017	Jun 2013	Mar 2020	Jul 2026
DDG 128	Huntington Ingalls Industries	2018	Sep 2018	Apr 2020	Mar 2025
DDG 129	Huntington Ingalls Industries	2018	Sep 2018	Jan 2021	Jan 2026
DDG 130	Bath Iron Works	2019	Sep 2018	May 2021	Apr 2027
DDG 131	Huntington Ingalls Industries	2019	Sep 2018	Nov 2021	Oct 2026
DDG 132	Bath Iron Works	2019	Dec 2018	Feb 2022	Feb 2028
DDG 133	Huntington Ingalls Industries	2020	Sep 2018	Dec 2022	Jun 2027
DDG 134 ⁽²⁾	Bath Iron Works	2020	Sep 2018	May 2023	Nov 2028
DDG 135	Huntington Ingalls Industries	2020	Jun 2020	May 2023	Feb 2028
DDG 137	Huntington Ingalls Industries	2021	Sep 2018	Oct 2023	Oct 2028
DDG 136	Bath Iron Works	2021	Sep 2018	Feb 2024	Aug 2029
DDG 139	Huntington Ingalls Industries	2022	Sep 2018	Mar 2024	Jun 2029
DDG 138	Bath Iron Works	2022	Sep 2018	Nov 2024	May 2030
DDG 140 ⁽³⁾	TBD	2023	Jun 2023	Dec 2025	Dec 2030
DDG 141	TBD	2023	Jun 2023	Dec 2025	Dec 2030
DDG 142	TBD	2023	Sep 2023	Jun 2026	Jun 2031
DDG 143	TBD	2024	Jun 2023	Dec 2026	Dec 2031
DDG 144	TBD	2024	Jun 2023	Dec 2026	Dec 2031
DDG 145	TBD	2025	Jun 2023	Sep 2027	Sep 2032
DDG 146	TBD	2025	Jun 2023	Sep 2027	Sep 2032
DDG 147	TBD	2026	Jun 2023	Jun 2028	Jun 2033
DDG 148	TBD	2026	Jun 2023	Jun 2028	Jun 2033
DDG 149	TBD	2027	Jun 2023	Feb 2029	Feb 2034
DDG 150	TBD	2027	Sep 2027	Feb 2029	Feb 2034
DDG 151	TBD	2028	Jun 2028	Oct 2029	Oct 2034
DDG 152	TBD	2028	Jun 2028	Oct 2029	Oct 2034

Footnotes:

⁽¹⁾ DDG 122 - DDG 133 reflects actual and contract milestone dates based on ship production progress.

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2122 / DDG-51
<p>(2) DDG 134 - DDG 139 reflects contract milestone dates based on ship production progress.</p> <p>(3) DDG 140 and follow reflect notional dates.</p>		

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2122 / DDG-51			
Electronics	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items						
SQQ 89 ASW	2	102.229	3	170.526	2	115.958
AN/SLQ-32 SEWIP V(7)	2	150.213	3	237.675	2	161.619
USQ 82(V) GEDMS	2	30.560	3	46.757	2	31.794
EXCOMM	2	108.714	3	186.621	2	126.902
AN/UPX 29(V) IFF and TACAN	2	15.752	3	23.561	2	16.022
CEC	2	11.989	3	19.293	2	13.119
P-35 Items Subtotal		419.457		684.433		465.414
Major Items						
NGSSR	0	-	3	7.755	2	5.273
NAVIGATION SYSTEM	2	8.514	3	12.984	2	8.829
SLQ 25 NIXIE	2	3.517	3	9.167	2	6.233
SRQ 4 LAMPS III	2	9.417	3	19.535	2	13.283
SPECTRAL	2	35.374	3	64.638	2	43.954
MIDS	2	7.326	3	11.210	2	7.622
MK 53 NULKA	2	4.803	3	7.344	2	4.994
TSA ANTENNA	2	3.826	3	6.327	2	4.302
Major Items Subtotal		72.777		138.960		94.490
Other Cost Elements						
MISC. ELECTRONICS	2	43.093	3	88.576	2	59.907
Other Cost Elements Subtotal		43.093		88.576		59.907
Total Electronics		535.327		911.969		619.811

Remarks:
FY23 and future years include the upgrade of the Surface Search Radar to the Next Generation Surface Search Radar (NGSSR) and upgrade of NIXIE from SLQ-25C to the SLQ-25E.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2122 / DDG-51			
Hull, Mechanical, and Electrical (HM&E)	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items						
STC 3 IVCS	2	16.484	3	25.221	2	17.150
Main Reduction Gear	2	80.772	3	123.581	0	-
P-35 Items Subtotal		97.256		148.802		17.150
Major Items						
Machinery Control System	2	11.498	3	39.958	2	13.566
Integrated Bridge Navigation System	2	13.817	3	21.140	2	14.375
CYBER BDC	2	7.000	3	13.851	2	9.419
WSN 12	0	-	3	12.530	2	8.520
Major Items Subtotal		32.315		87.479		45.880
Other Cost Elements						
MISC. HM&E	2	34.459	3	59.451	2	37.643
Other Cost Elements Subtotal		34.459		59.451		37.643
Total Hull, Mechanical, and Electrical (HM&E)		164.030		295.732		100.673

Remarks:
Beginning in FY24, Main Reduction Gear transitions from government furnished equipment to part of ship construction and is included in basic construction / conversion funding.

FY23 includes procurement of Machinery Control System hardware for the upgrade of the Land Based Engineering Site (LBES) required for HM&E system testing and software.

WSN-12 inertial navigation system added on FY23 and follow ships as a replacement to the WSN-7 inertial navigation system.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2122 / DDG-51			
Ordnance	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items						
AEGIS WEAPON SYSTEM (MK-7)	2	303.244	3	447.635	2	304.390
AN/SPY-6(V)1 (AMDR)	2	364.113	3	727.790	2	452.860
VLS MK 41	2	149.405	3	218.436	2	143.782
MK 45 Light Weight Gun (LWG)	2	57.239	3	87.228	2	59.315
MK 37 TOMAHAWK	2	28.146	3	49.022	2	33.335
PHALANX (CIWS)	2	18.295	3	27.996	2	19.037
SPQ-9B Radar	2	20.682	3	31.644	2	21.518
MK-38 Gun Weapon System (GWS)	0	-	3	22.137	2	15.053
P-35 Items Subtotal		941.124		1,611.888		1,049.290
Major Items						
MK 32 Surface Vessel Torpedo Tubes (SVTT)	2	6.603	3	10.104	2	6.871
ELECTRO-OPTICAL SYSTEM	2	6.988	3	10.692	2	7.271
MK 160 Gun Fire Control System (GFCS)	2	7.268	3	11.120	2	7.561
Major Items Subtotal		20.859		31.916		21.703
Other Cost Elements						
MISC. ORDNANCE	2	123.147	3	190.637	2	116.387
Other Cost Elements Subtotal		123.147		190.637		116.387
Total Ordnance		1,085.130		1,834.441		1,187.380
<div>Remarks:</div> <div>FY23 and future years include estimated costs based on Economic Order Quantity (EOQ) savings for Aegis Weapon System (AWS) components</div> <div>Beginning in FY23, power conversion modules, a component of the AEGIS Weapons System, transitions from government furnished equipment to part of ship construction and is included in basic construction/ conversion funding.</div> <div>FY23 and future years include the MK 38 Gun Weapon System (GWS).</div>						

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51																																																										
Equipment Item: SQQ 89 ASW						PARM Code: N/A																																																								
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	2	65.586	3	109.404	2	74.395																																																								
Spares		1.090		1.818		1.236																																																								
System Engineering		9.152		15.266		12.361																																																								
Technical Engineering Services		5.314		8.864		6.027																																																								
Other Costs		21.087		35.174		21.939																																																								
Total	2	102.229	3	170.526	2	115.958																																																								
<p>Description: Detect, classify, localize and track submerged submarines under all environmental conditions at long range from ASW ships, using bottom reflected and convergence zone acoustic paths. Starting in FY20, the Multi-Function Towed Array (MFTA) sensor along with the Handling and Stowage Gear (H&SG) is included as part of in-line construction of new DDG-51 class ships.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>LOCKHEED MARTIN</td><td>C/CPIF</td><td>May 2022</td><td>Option</td><td>2</td><td>32.793</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>LOCKHEED MARTIN</td><td>C/CPIF</td><td>Mar 2023</td><td>Option</td><td>3</td><td>36.468</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>TBD</td><td>TBD</td><td>Mar 2024</td><td>New</td><td>2</td><td>37.198</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>Jun 2029</td><td>41</td><td>24</td><td>Jan 2024</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>Dec 2030</td><td>41</td><td>24</td><td>Jul 2025</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>Dec 2031</td><td>41</td><td>24</td><td>Jul 2026</td></tr></table> <p>Competition/Second Source Initiatives: Competitive</p> <p>Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships.</p> <p>FY23 SQQ-89 ASW system costs increase above inflation based on anticipated pricing for TR-343 transducers, a component of the ASW system.</p> <p>FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	DDG 138	LOCKHEED MARTIN	C/CPIF	May 2022	Option	2	32.793	FY 2023	DDG 140	LOCKHEED MARTIN	C/CPIF	Mar 2023	Option	3	36.468	FY 2024	DDG 143	TBD	TBD	Mar 2024	New	2	37.198	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	DDG 138	Jun 2029	41	24	Jan 2024	FY 2023	DDG 140	Dec 2030	41	24	Jul 2025	FY 2024	DDG 143	Dec 2031	41	24	Jul 2026
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	DDG 138	LOCKHEED MARTIN	C/CPIF	May 2022	Option	2	32.793																																																							
FY 2023	DDG 140	LOCKHEED MARTIN	C/CPIF	Mar 2023	Option	3	36.468																																																							
FY 2024	DDG 143	TBD	TBD	Mar 2024	New	2	37.198																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	DDG 138	Jun 2029	41	24	Jan 2024																																																									
FY 2023	DDG 140	Dec 2030	41	24	Jul 2025																																																									
FY 2024	DDG 143	Dec 2031	41	24	Jul 2026																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51			
Equipment Item: AN/SLQ-32 SEWIP V(7)						PARM Code: N/A	
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	2	135.521	3	214.368	2	145.770	
Spares		3.622		7.650		4.861	
System Engineering		5.992		8.523		6.646	
Technical Engineering Services		0.290		0.623		0.448	
Other Costs		4.788		6.511		3.894	
Total	2	150.213	3	237.675	2	161.619	

Description:
AN/SLQ-32 Surface Electronic Warfare Improvement Program (SEWIP)V(7) begins in FY2022. This upgrade will include all the capabilities of the AN/SLQ-32(V)6 providing the DDG 51 Class Destroyers with the electronic warfare capability of automatically detecting, sorting, classifying, tracking, engaging and continually displaying emitter and platform densities. The AN/SLQ-32(V)7 will also provide the addition of SEWIP Block 3, which provides advanced Electronic Attack (EA) capability to keep pace with the evolving Anti-Ship Missile (ASM) threat and counter-targeting.

Contract Data:

Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	DDG 138	NORTHROP GRUMMAN	C/FFP	Jun 2022	New	2	67.761
FY 2023	DDG 140	NORTHROP GRUMMAN	C/FFP	Mar 2023	Option	3	71.456
FY 2024	DDG 143	NORTHROP GRUMMAN	C/FFP	Mar 2024	Option	2	72.885

Delivery Date:

Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date
FY 2022	DDG 138	Jun 2029	34	30	Feb 2024
FY 2023	DDG 140	Dec 2030	34	30	Aug 2025
FY 2024	DDG 143	Dec 2031	34	30	Aug 2026

Competition/Second Source Initiatives:
Competitive

Remarks:
Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships.

FY23 SEWIP V(7) system costs increase above inflation due to anticipated pricing for primary hardware with ancillary equipment and production engineering efforts for the FY23 MYP ship configuration baseline.

FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51			
Equipment Item: USQ 82(V) GEDMS						PARM Code: N/A	
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	2	16.380	3	22.256	2	15.134	
Technical Data and Documentation		1.456		2.228		1.515	
System Engineering		3.532		5.404		3.713	
Technical Engineering Services		0.596		4.285		1.862	
Other Costs		8.596		12.584		9.570	
Total	2	30.560	3	46.757	2	31.794	
Description: Gigabit Ethernet Data Multiplex System (GEDMS) is the mission critical ship-wide network that transfers data associated with Machinery, Steering, Navigation, Combat, Alarms & Indicating, and Damage Control Systems. It is a general purpose modular data transfer system that provides high speed, reliable and survivable data from source systems to user systems automatically or on demand.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	DDG 138	BOEING/DRS	C/FFP	Mar 2023	Option	2	8.190
FY 2023	DDG 140	BOEING/DRS	C/FFP	Apr 2024	Option	3	7.419
FY 2024	DDG 143	BOEING/DRS	C/FFP	Mar 2025	Option	2	7.567
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	DDG 138	Jun 2029	40	16	Oct 2024		
FY 2023	DDG 140	Dec 2030	40	16	Apr 2026		
FY 2024	DDG 143	Dec 2031	40	16	Apr 2027		
Competition/Second Source Initiatives: Competitive							
Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships. FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51			
Equipment Item: EXCOMM						PARM Code: N/A	

P-35 Category	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Major Hardware	2	65.122	3	111.790	2	76.017
Technical Data and Documentation		0.262		0.450		0.306
Spares		0.602		1.033		0.703
System Engineering		6.778		11.635		7.912
Technical Engineering Services		3.956		6.791		4.618
Other Costs		12.586		21.605		14.691
Assembly & Integration		19.408		33.317		22.655
Total	2	108.714	3	186.621	2	126.902

Description:
 The Exterior Communication System (EXCOMM) provides voice, data, teletypewriter (TTY), continuous wave (CW), and other communication services on designated frequencies from very low frequency (VLF) to ultra-high frequency (UHF) for tactical and record requirements. It includes all external radio communication devices aboard the ship.

Contract Data:

Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	DDG 138	VARIOUS	Various	Various	Various	2	32.561
FY 2023	DDG 140	VARIOUS	Various	Various	Various	3	37.263
FY 2024	DDG 143	VARIOUS	Various	Various	Various	2	38.009

Delivery Date:

Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date
FY 2022	DDG 138	Jun 2029	31	24	Nov 2024
FY 2023	DDG 140	Dec 2030	31	24	May 2026
FY 2024	DDG 143	Dec 2031	31	24	May 2027

Competition/Second Source Initiatives:
 Numerous contract arrangements (sole source/competitive)

Remarks:
 Note: There are numerous components and contracts resulting in various award dates. Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships.

FY23 and follow years EXCOMM system costs increase above inflation due to anticipated pricing for primary hardware across the communication services systems.
 FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51																																																										
Equipment Item: AN/UPX 29(V) IFF and TACAN						PARM Code: N/A																																																								
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	2	13.566	3	19.947	2	13.565																																																								
Spares		0.170		0.821		0.558																																																								
System Engineering		0.824		0.194		0.132																																																								
Technical Engineering Services		0.344		0.951		0.647																																																								
Other Costs		0.848		1.648		1.120																																																								
Total	2	15.752	3	23.561	2	16.022																																																								
<p>Description:</p> <p>The UPX-29 Interrogator System is a centralized Mark XIIA interrogator and target processor. It employs a cooperative challenge and reply technique to positively identify friendly platforms. The system is capable of interrogating Mark XII, Mark XIIA, International Civil Aviation Organization (ICAO), or Federal Aviation Administration (FAA)-compliant IFF transponders using a standard shipboard interrogator set, a target processor, and an Electronically Steerable Antenna (ESA) system. TACAN is a navigational beacon system that provides azimuth, slant range, and station identification information to TACAN equipped aircraft, permitting 24/7, all weather landing operations.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>BAE</td><td>SS/FFP</td><td>Mar 2022</td><td>Option</td><td>2</td><td>6.783</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>BAE</td><td>SS/FFP</td><td>Mar 2023</td><td>Option</td><td>3</td><td>6.649</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>TBD</td><td>TBD</td><td>Mar 2024</td><td>New</td><td>2</td><td>6.783</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>Jun 2029</td><td>29</td><td>24</td><td>Jan 2025</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>Dec 2030</td><td>29</td><td>24</td><td>Jul 2026</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>Dec 2031</td><td>29</td><td>24</td><td>Jul 2027</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships. FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	DDG 138	BAE	SS/FFP	Mar 2022	Option	2	6.783	FY 2023	DDG 140	BAE	SS/FFP	Mar 2023	Option	3	6.649	FY 2024	DDG 143	TBD	TBD	Mar 2024	New	2	6.783	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	DDG 138	Jun 2029	29	24	Jan 2025	FY 2023	DDG 140	Dec 2030	29	24	Jul 2026	FY 2024	DDG 143	Dec 2031	29	24	Jul 2027
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
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FY 2024	DDG 143	TBD	TBD	Mar 2024	New	2	6.783																																																							
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FY 2024	DDG 143	Dec 2031	29	24	Jul 2027																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51																																																										
Equipment Item: CEC					PARM Code: N/A																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	2	10.288	3	15.957	2	10.851																																																								
System Engineering		0.527		1.389		0.945																																																								
Technical Engineering Services		0.378		0.887		0.603																																																								
Other Costs		0.796		1.060		0.720																																																								
Total	2	11.989	3	19.293	2	13.119																																																								
<p>Description: Cooperative Engagement Capability (CEC) is a sensor netting system which distributes sensor data from each CEC equipped ship, aircraft, and/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.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>L3 TECHNOLOGIES/ RAYTHEON</td><td>C/FFP</td><td>Jul 2022</td><td>New</td><td>2</td><td>5.144</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>L3 TECHNOLOGIES/ RAYTHEON</td><td>C/FFP</td><td>Jun 2023</td><td>Option</td><td>3</td><td>5.319</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>L3 TECHNOLOGIES/ RAYTHEON</td><td>C/FFP</td><td>Jun 2024</td><td>Option</td><td>2</td><td>5.426</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>Jun 2029</td><td>40</td><td>18</td><td>Aug 2024</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>Dec 2030</td><td>40</td><td>18</td><td>Feb 2026</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>Dec 2031</td><td>40</td><td>18</td><td>Feb 2027</td></tr></table> <p>Competition/Second Source Initiatives: Competitive</p> <p>Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships.</p> <p>FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.</p> <p>Contract Data Notes: USG-2B CEC Hardware - Contractor: L3 Technologies PAAA Antenna - Contractor: Raytheon</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	DDG 138	L3 TECHNOLOGIES/ RAYTHEON	C/FFP	Jul 2022	New	2	5.144	FY 2023	DDG 140	L3 TECHNOLOGIES/ RAYTHEON	C/FFP	Jun 2023	Option	3	5.319	FY 2024	DDG 143	L3 TECHNOLOGIES/ RAYTHEON	C/FFP	Jun 2024	Option	2	5.426	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	DDG 138	Jun 2029	40	18	Aug 2024	FY 2023	DDG 140	Dec 2030	40	18	Feb 2026	FY 2024	DDG 143	Dec 2031	40	18	Feb 2027
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	DDG 138	L3 TECHNOLOGIES/ RAYTHEON	C/FFP	Jul 2022	New	2	5.144																																																							
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FY 2024	DDG 143	L3 TECHNOLOGIES/ RAYTHEON	C/FFP	Jun 2024	Option	2	5.426																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
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FY 2023	DDG 140	Dec 2030	40	18	Feb 2026																																																									
FY 2024	DDG 143	Dec 2031	40	18	Feb 2027																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51			
Equipment Item: STC 3 IVCS					PARM Code: N/A		
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	2	10.606	3	16.311	2	11.091	
Spares		0.574		0.878		0.597	
System Engineering		1.994		3.051		2.019	
Technical Engineering Services		0.510		0.781		0.530	
Other Costs		2.800		4.200		2.913	
Total	2	16.484	3	25.221	2	17.150	
Description: A solid state integrated voice communication system (IVCS) for application with the AEGIS combat system.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	DDG 138	DRS	C/FFP	Jan 2022	Option	2	5.303
FY 2023	DDG 140	TBD	C/FFP	Sep 2023	New	3	5.437
FY 2024	DDG 143	TBD	C/FFP	Sep 2024	Option	2	5.546
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	DDG 138	Jun 2029	46	12	Aug 2024		
FY 2023	DDG 140	Dec 2030	46	12	Feb 2026		
FY 2024	DDG 143	Dec 2031	46	12	Feb 2027		
Competition/Second Source Initiatives: Competitive							
Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships. FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																										
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51																																												
Equipment Item: Main Reduction Gear					PARM Code: N/A																																											
P-35 Category	FY 2022		FY 2023		FY 2024																																											
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																										
Major Hardware	2	78.493	3	119.508	0	-																																										
Technical Engineering Services		2.279		4.073		-																																										
Total	2	80.772	3	123.581	0	-																																										
<p>Description: The contractor will engineer, manufacture, test and deliver a fully operational DDG 51 Main Reduction Gear (MRG). A DDG 51 Class MRG shipset consists of two gear assemblies. Each reduction gear combines the input of two LM2500 engines to convert the high speed, low torque of the engine to low speed, high torque output suitable to drive the propulsion shafting, and the related support systems and equipment.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>TIMKEN Gears & Services</td><td>C/FFP</td><td>May 2022</td><td>Option</td><td>2</td><td>39.247</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>TIMKEN Gears & Services</td><td>C/FFP</td><td>May 2023</td><td>Option</td><td>3</td><td>39.836</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>Jun 2029</td><td>38</td><td>32</td><td>Aug 2023</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>Dec 2030</td><td>38</td><td>32</td><td>Feb 2025</td></tr></table> <p>Competition/Second Source Initiatives: Competitive</p> <p>Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships.</p> <p>FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.</p> <p>Beginning in FY24, Main Reduction Gear transitions from government furnished equipment to part of ship construction and is included in basic construction / conversion funding.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	DDG 138	TIMKEN Gears & Services	C/FFP	May 2022	Option	2	39.247	FY 2023	DDG 140	TIMKEN Gears & Services	C/FFP	May 2023	Option	3	39.836	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	DDG 138	Jun 2029	38	32	Aug 2023	FY 2023	DDG 140	Dec 2030	38	32	Feb 2025
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																									
FY 2022	DDG 138	TIMKEN Gears & Services	C/FFP	May 2022	Option	2	39.247																																									
FY 2023	DDG 140	TIMKEN Gears & Services	C/FFP	May 2023	Option	3	39.836																																									
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																											
FY 2022	DDG 138	Jun 2029	38	32	Aug 2023																																											
FY 2023	DDG 140	Dec 2030	38	32	Feb 2025																																											

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51																																																										
Equipment Item: AEGIS WEAPON SYSTEM (MK-7)					PARM Code: N/A																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	2	169.685	3	243.285	2	165.433																																																								
System Engineering		1.914		2.928		1.991																																																								
Technical Engineering Services		1.801		2.754		1.873																																																								
Other Costs		27.888		39.784		29.015																																																								
Logistics Support		21.882		36.372		22.770																																																								
Combat System Integration		80.074		122.512		83.308																																																								
Total	2	303.244	3	447.635	2	304.390																																																								
<p>Description:</p> <p>AEGIS is a fast reaction, high firepower, all weather weapon system incorporating a high degree of system availability and effectiveness. It consists of a multi-function phase/plane array radar, high powered illuminators, advanced missile guidance and fully digitalized and integrated combat ship control for radar, weapons and command and decision. An Operational Readiness Test System performs continuous on-line assessment and fault detection.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>LM/ RTN/ GD</td><td>Various</td><td>Nov 2022</td><td>Option</td><td>2</td><td>84.843</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>LM/ RTN/ GD</td><td>Various</td><td>Jan 2023</td><td>Option</td><td>3</td><td>81.095</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>LM/ RTN/ GD</td><td>Various</td><td>Feb 2024</td><td>Option</td><td>2</td><td>82.717</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>Jun 2029</td><td>29</td><td>36</td><td>Jan 2024</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>Dec 2030</td><td>29</td><td>36</td><td>Jul 2025</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>Dec 2031</td><td>29</td><td>36</td><td>Jul 2026</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>Multiple contract arrangements (sole source/competitive)</p> <p>Remarks:</p> <p>Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships.</p> <p>AWS equipment procurements are partially funded with Advance Procurement funds beginning in FY23. AWS budget request includes anticipated EOQ Savings. Beginning in FY23, Power Conversion Modules (PCMs), a component of the AEGIS Weapon System, will transition from GFE to part of ship construction and is included in basic construction / conversion funding.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	DDG 138	LM/ RTN/ GD	Various	Nov 2022	Option	2	84.843	FY 2023	DDG 140	LM/ RTN/ GD	Various	Jan 2023	Option	3	81.095	FY 2024	DDG 143	LM/ RTN/ GD	Various	Feb 2024	Option	2	82.717	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	DDG 138	Jun 2029	29	36	Jan 2024	FY 2023	DDG 140	Dec 2030	29	36	Jul 2025	FY 2024	DDG 143	Dec 2031	29	36	Jul 2026
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	DDG 138	LM/ RTN/ GD	Various	Nov 2022	Option	2	84.843																																																							
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FY 2024	DDG 143	Dec 2031	29	36	Jul 2026																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2122 / DDG-51
Equipment Item: AEGIS WEAPON SYSTEM (MK-7)		PARM Code: N/A
FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.		
Contract Data Notes: AWS Antenna and Signal Processors - Contractor: Lockheed Martin Fire Control System Transmitter - Contractor: Raytheon AWS Director/Director Controller - Contractor: General Dynamics		

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51																																																											
Equipment Item: AN/SPY-6(V)1 (AMDR)					PARM Code: N/A																																																										
P-35 Category	FY 2022		FY 2023		FY 2024																																																										
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																									
Major Hardware	2	297.488	3	624.665	2	386.878																																																									
System Engineering		21.425		32.949		21.082																																																									
Technical Engineering Services		16.708		27.540		16.556																																																									
Other Costs		10.540		14.499		10.341																																																									
Logistics		17.952		28.137		18.003																																																									
Total	2	364.113	3	727.790	2	452.860																																																									
<p>Description:</p> <p>The AN/SPY-6(V)1 Air and Missile Defense Radar (AMDR) suite consists of an S-Band radar (AMDR-S), an X-band radar (via SPQ-9B starting with DDG 119), and a Radar Suite Controller (RSC). AMDR will provide multi-mission capabilities, simultaneously supporting both long range, exoatmospheric detection, tracking and discrimination of ballistic missiles, as well as Area and Self Defense against air and surface threats.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>RAYTHEON</td><td>C/FPIF</td><td>May 2022</td><td>New</td><td>2</td><td>148.744</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>RAYTHEON</td><td>C/FPIF</td><td>Mar 2023</td><td>Option</td><td>3</td><td>208.222</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>RAYTHEON</td><td>C/FPIF</td><td>Feb 2024</td><td>Option</td><td>2</td><td>193.439</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>Jun 2029</td><td>24</td><td>36</td><td>Jun 2024</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>Dec 2030</td><td>24</td><td>36</td><td>Dec 2025</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>Dec 2031</td><td>24</td><td>36</td><td>Dec 2026</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>Competitive</p> <p>Remarks:</p> <p>Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships.</p> <p>FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	DDG 138	RAYTHEON	C/FPIF	May 2022	New	2	148.744	FY 2023	DDG 140	RAYTHEON	C/FPIF	Mar 2023	Option	3	208.222	FY 2024	DDG 143	RAYTHEON	C/FPIF	Feb 2024	Option	2	193.439	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	DDG 138	Jun 2029	24	36	Jun 2024	FY 2023	DDG 140	Dec 2030	24	36	Dec 2025	FY 2024	DDG 143	Dec 2031	24	36	Dec 2026
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																								
FY 2022	DDG 138	RAYTHEON	C/FPIF	May 2022	New	2	148.744																																																								
FY 2023	DDG 140	RAYTHEON	C/FPIF	Mar 2023	Option	3	208.222																																																								
FY 2024	DDG 143	RAYTHEON	C/FPIF	Feb 2024	Option	2	193.439																																																								
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																										
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51																																																										
Equipment Item: VLS MK 41						PARM Code: N/A																																																								
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	2	108.175	3	163.808	2	111.389																																																								
Ancillary Equipment		3.452		5.282		3.591																																																								
Technical Data and Documentation		0.610		1.116		0.651																																																								
System Engineering		15.328		23.355		13.689																																																								
Technical Engineering Services		14.138		23.482		13.649																																																								
Other Costs		7.702		1.393		0.813																																																								
Total	2	149.405	3	218.436	2	143.782																																																								
<p>Description:</p> <p>The VLS is a Missile Launching System which provides Surface Combatants with a launcher to carry, prepare for launch and fire, Anti-Air Warfare, Strike/Surface Warfare, and Anti-Submarine Warfare weapons. The MK-41 VLS Launchers consist of twelve modules comprised of eight cells each.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>TBD</td><td>C/FFP</td><td>Mar 2023</td><td>New</td><td>2</td><td>54.088</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>TBD</td><td>C/FFP</td><td>Mar 2023</td><td>Option</td><td>3</td><td>54.603</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>TBD</td><td>C/FFP</td><td>Jan 2024</td><td>Option</td><td>2</td><td>55.695</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>Jun 2029</td><td>34</td><td>24</td><td>Aug 2024</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>Dec 2030</td><td>34</td><td>24</td><td>Feb 2026</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>Dec 2031</td><td>34</td><td>24</td><td>Feb 2027</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>Competitive</p> <p>Remarks:</p> <p>Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships.</p> <p>VLS equipment procurements are partially funded with Advance Procurement funds through FY22.</p> <p>FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	DDG 138	TBD	C/FFP	Mar 2023	New	2	54.088	FY 2023	DDG 140	TBD	C/FFP	Mar 2023	Option	3	54.603	FY 2024	DDG 143	TBD	C/FFP	Jan 2024	Option	2	55.695	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	DDG 138	Jun 2029	34	24	Aug 2024	FY 2023	DDG 140	Dec 2030	34	24	Feb 2026	FY 2024	DDG 143	Dec 2031	34	24	Feb 2027
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	DDG 138	TBD	C/FFP	Mar 2023	New	2	54.088																																																							
FY 2023	DDG 140	TBD	C/FFP	Mar 2023	Option	3	54.603																																																							
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51			
Equipment Item: MK 45 Light Weight Gun (LWG)					PARM Code: N/A		
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	2	42.374	3	64.575	2	43.910	
Spares		0.362		0.552		0.375	
System Engineering		5.120		7.803		5.306	
Technical Engineering Services		2.750		4.191		2.850	
Other Costs		6.633		10.107		6.874	
Total	2	57.239	3	87.228	2	59.315	
Description: The 5" 62 caliber MK 45 Mod 4 Gun is a digitized high energy system with the capability to automatically select, load and fire different types of 5"/62 caliber projectiles.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	DDG 138	BAE AD/MCNALLY	Various	Jun 2023	New	2	21.187
FY 2023	DDG 140	BAE AD/MCNALLY	Various	Jun 2023	Option	3	21.525
FY 2024	DDG 143	BAE AD/MCNALLY	Various	Mar 2024	Option	2	21.955
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	DDG 138	Jun 2029	40	24	Feb 2024		
FY 2023	DDG 140	Dec 2030	40	24	Aug 2025		
FY 2024	DDG 143	Dec 2031	40	24	Aug 2026		
Competition/Second Source Initiatives: Sole Source							
Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships. FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030. Contract Data notes: Gun Mount contract: BAE Armament Division - Sole Source Lower Hoist contract: McNally - Sole Source							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51			
Equipment Item: MK 37 TOMAHAWK					PARM Code: N/A		
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	2	9.676	3	15.408	2	10.478	
Spares		1.574		3.257		2.214	
System Engineering		4.896		9.136		6.322	
Technical Engineering Services		4.652		8.422		5.650	
Other Costs		7.348		12.799		8.671	
Total	2	28.146	3	49.022	2	33.335	
Description: The Tactical Tomahawk Weapon Control System (TTWCS) is an open system architecture of work stations, processors, printers, fiber optic Local Area Network (LAN) and the Navy Standard Mass Measurement storage device which provides target data management, engagement planning, weapon selection and initiation and launch functions for the TOMAHAWK cruise missile.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	DDG 138	NSWC PT HUENEME	WR	Jun 2023	Option	2	4.838
FY 2023	DDG 140	NSWC PT HUENEME	WR	Jun 2024	Option	3	5.136
FY 2024	DDG 143	NSWC PT HUENEME	WR	Jun 2025	Option	2	5.239
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	DDG 138	Jun 2029	24	12	Jun 2026		
FY 2023	DDG 140	Dec 2030	24	12	Dec 2027		
FY 2024	DDG 143	Dec 2031	24	12	Dec 2028		
Competition/Second Source Initiatives: Navy construction							
Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships. FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51																																																										
Equipment Item: PHALANX (CIWS)					PARM Code: N/A																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	2	13.558	3	22.133	2	15.050																																																								
System Engineering		0.916		1.422		0.966																																																								
Technical Engineering Services		1.640		1.854		1.160																																																								
Other Costs		2.181		2.587		1.861																																																								
Total	2	18.295	3	27.996	2	19.037																																																								
<p>Description: Phalanx Close-In Weapon System (CIWS) provides fast reaction terminal defense against anti-ship missiles, aircraft, helicopters, low-slow flyers (e.g. unmanned aerial vehicles) and surface threats. The system is an automatic, self-contained unit consisting of search/track radar, threat evaluation and fire control subsystem, and a 20 mm M61A1 Gatling gun subsystem all mounted in a single structure requiring a minimum of integration with other ship systems.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>RAYTHEON</td><td>SS/FFP</td><td>Mar 2022</td><td>Option</td><td>2</td><td>6.779</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>RAYTHEON</td><td>SS/FFP</td><td>Mar 2023</td><td>Option</td><td>3</td><td>7.378</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>RAYTHEON</td><td>SS/FFP</td><td>Mar 2024</td><td>Option</td><td>2</td><td>7.525</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>DDG 138</td><td>Jun 2029</td><td>36</td><td>24</td><td>Jun 2024</td></tr><tr><td>FY 2023</td><td>DDG 140</td><td>Dec 2030</td><td>36</td><td>24</td><td>Dec 2025</td></tr><tr><td>FY 2024</td><td>DDG 143</td><td>Dec 2031</td><td>36</td><td>24</td><td>Dec 2026</td></tr></table> <p>Competition/Second Source Initiatives: Sole Source</p> <p>Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships.</p> <p>FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	DDG 138	RAYTHEON	SS/FFP	Mar 2022	Option	2	6.779	FY 2023	DDG 140	RAYTHEON	SS/FFP	Mar 2023	Option	3	7.378	FY 2024	DDG 143	RAYTHEON	SS/FFP	Mar 2024	Option	2	7.525	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	DDG 138	Jun 2029	36	24	Jun 2024	FY 2023	DDG 140	Dec 2030	36	24	Dec 2025	FY 2024	DDG 143	Dec 2031	36	24	Dec 2026
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	DDG 138	RAYTHEON	SS/FFP	Mar 2022	Option	2	6.779																																																							
FY 2023	DDG 140	RAYTHEON	SS/FFP	Mar 2023	Option	3	7.378																																																							
FY 2024	DDG 143	RAYTHEON	SS/FFP	Mar 2024	Option	2	7.525																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	DDG 138	Jun 2029	36	24	Jun 2024																																																									
FY 2023	DDG 140	Dec 2030	36	24	Dec 2025																																																									
FY 2024	DDG 143	Dec 2031	36	24	Dec 2026																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51			
Equipment Item: SPQ-9B Radar						PARM Code: N/A	
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	2	17.496	3	26.769	2	18.203	
Spares		0.230		0.352		0.240	
System Engineering		0.912		1.395		0.949	
Technical Engineering Services		0.970		1.484		1.009	
Other Costs		1.074		1.644		1.117	
Total	2	20.682	3	31.644	2	21.518	
Description: The AN/SPQ-9B Radar detects and tracks low flying Anti-Ship Missile targets in heavy clutter. The mission of the AN/SPQ-9B includes the capability to detect and classify periscopes with the completion and incorporation of a Periscope Detection and Discrimination (PDD) capability designed to operate concurrently with the AN/SPY-6 capability.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	DDG 138	DRS	C/FFP	Mar 2022	Option	2	8.748
FY 2023	DDG 140	TBD	C/FFP	Sep 2023	New	3	8.923
FY 2024	DDG 143	TBD	C/FFP	Sep 2024	Option	2	9.102
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	DDG 138	Jun 2029	41	30	Jul 2023		
FY 2023	DDG 140	Dec 2030	41	30	Jan 2025		
FY 2024	DDG 143	Dec 2031	41	30	Jan 2026		
Competition/Second Source Initiatives: Competitive							
Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships. FY22 earliest ship delivery reflects DDG 139 delivery date of June 2029 vice DDG 138 delivery date of May 2030.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51			
Equipment Item: MK-38 Gun Weapon System (GWS)					PARM Code: N/A		
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	0	-	3	18.315	2	12.454	
Technical Data and Documentation		-		0.297		0.202	
System Engineering		-		1.830		1.244	
Technical Engineering Services		-		0.210		0.143	
Other Costs		-		1.485		1.010	
Total	0	-	3	22.137	2	15.053	
Description: The MK-38 Gun Weapon System (GWS) is a single barrel, lightweight, remote controlled, automatic and stabilized 30mm machine gun system with day and night sensors and eye-safe laser range finder to provide automatic target detection, tracking and engagement.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	DDG 140	MSI Defense Systems US	SS/FFP	Jun 2023	New	3	6.105
FY 2024	DDG 143	MSI Defense Systems US	SS/FFP	Jun 2024	Option	2	6.227
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	DDG 140	Dec 2030	36	18	Jun 2026		
FY 2024	DDG 143	Dec 2031	36	18	Jun 2027		
Competition/Second Source Initiatives: N/A							
Remarks: Note: Months Required Before Delivery reflect timeline for earliest ship delivery date of each Program Year. Additional deliveries for each program year may have a higher number of Months Required Before Delivery based on shipyard required delivery dates. FY23 and FY24 Months Required Before Delivery dates are notional due to notional ship delivery dates for FY23 and follow ships. The MK-38 Gun Weapon System (GWS) transitions from a post construction to an in-line installation beginning in FY23.							

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Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy						Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2122 / DDG-51						
First System (2024) Award Date: January 2018		First System (2024) Completion Date: July 2024			Interval Between Systems: 12 Months					
Cost Elements		Production Leadtime (Months)	When Required* (Months)	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
SHIP CONSTRUCTION ECONOMIC ORDER QUANTITY (EOQ)										
SHIP Construction EOQ FY23 Ships		VARIOUS	VARIOUS	41.000	-	0.000	-	-	-	-
SHIP Construction EOQ FY24 Ships		VARIOUS	VARIOUS	79.000	129.786	0.000	-	-	-	-
SHIP Construction EOQ FY25 Ships		VARIOUS	VARIOUS	-	129.786	75.748	-	-	-	-
SHIP Construction EOQ FY26 Ships		VARIOUS	VARIOUS	-	129.786	75.743	-	-	-	-
SHIP Construction EOQ FY27 Ships		VARIOUS	VARIOUS	-	129.786	124.567	309.312	-	-	-
SHIP Construction EOQ FY29 Ships		VARIOUS	VARIOUS	-	77.300	0.000	-	-	-	-
Total: SHIP CONSTRUCTION ECONOMIC ORDER QUANTITY (EOQ)				120.000	596.444	276.058	309.312	-	-	-
AWS EOQ										
AWS EOQ FY24 Ships		VARIOUS	VARIOUS	-	24.802	0.000	-	-	-	-
AWS EOQ FY25 Ships		VARIOUS	VARIOUS	-	24.802	0.000	-	-	-	-
AWS EOQ FY26 Ships		VARIOUS	VARIOUS	-	24.802	0.000	-	-	-	-
AWS EOQ FY27 Ships		VARIOUS	VARIOUS	-	24.802	0.000	-	-	-	-
Total: AWS EOQ				-	99.208	-	-	-	-	-
Other GFE										
CBSP AP for FY25 Ships ⁽⁶⁾		06	VARIOUS	-	-	2.659	-	-	-	-
CBSP AP for FY26 Ships		06	VARIOUS	-	-	2.659	-	-	-	-
CBSP AP for FY27 Ships		06	VARIOUS	-	-	2.659	-	-	-	-
Total: Other GFE				-	-	7.977	-	-	-	-
Total Advance Procurement/Obligation Authority				120.000	695.652	284.035	309.312	-	-	-

*Note: "When Required" is the number of months required before ship delivery.

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy	Date: March 2023
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Appropriation / Budget Activity / Budget Sub Activity:
1611N / 02 / 1

P-1 Line Item Number / Title:
2122 / DDG-51

Cost Elements	FY 2024						
	Production Leadtime (Months)	When Required* (Months)	Unit Cost (\$ M)	Contract Forecast Date	2024 Qty (Each)	For FY	Total Cost Request (\$ M)
SHIP CONSTRUCTION ECONOMIC ORDER QUANTITY (EOQ)							
SHIP Construction EOQ FY24 Ships	VARIOUS	VARIOUS	-		-	2024	0.000
SHIP Construction EOQ FY25 Ships	VARIOUS	VARIOUS	-	Jun 2024	-	2025	75.748
SHIP Construction EOQ FY26 Ships	VARIOUS	VARIOUS	-	Jun 2024	-	2026	75.743
SHIP Construction EOQ FY27 Ships	VARIOUS	VARIOUS	-	Jun 2024	-	2027	124.567
SHIP Construction EOQ FY29 Ships	VARIOUS	VARIOUS	-		-	2029	0.000
<i>Total: SHIP CONSTRUCTION ECONOMIC ORDER QUANTITY (EOQ)</i>							<i>276.058</i>
AWS EOQ							
AWS EOQ FY24 Ships	VARIOUS	VARIOUS	-		-		0.000
AWS EOQ FY25 Ships	VARIOUS	VARIOUS	-		-		0.000
AWS EOQ FY26 Ships	VARIOUS	VARIOUS	-		-		0.000
AWS EOQ FY27 Ships	VARIOUS	VARIOUS	-		-		0.000
<i>Total: AWS EOQ</i>							<i>-</i>
Other GFE							
CBSP AP for FY25 Ships ⁽⁶⁾	06	VARIOUS	-	Mar 2024	-	2025	2.659
CBSP AP for FY26 Ships	06	VARIOUS	-	Mar 2024	-	2026	2.659
CBSP AP for FY27 Ships	06	VARIOUS	-	Mar 2024	-	2027	2.659
<i>Total: Other GFE</i>							<i>7.977</i>
Total Advance Procurement/Obligation Authority							284.035

Description:

FY22 includes \$120M of congressionally added advance procurement for DDG 51 class ships.

FY23 includes \$77.3M of congressionally added advance procurement for an additional DDG 51 class ship.

FY23 - FY24 AP is required for shipbuilder and AEGIS Weapon System (AWS) Economic Order Quantity procurements for material items to achieve savings for the FY23-FY27 MYP ships.

*Note: "When Required" is the number of months required before ship delivery.

Footnotes:

⁽⁶⁾ The Commercial Broadband Satellite Program (CBSP) provides SATCOM services, monitors the integrity of the end-to-end system, enables bandwidth management to optimize the use of leased SATCOM capabilities, and accounts for security and information assurance requirements in support of naval operations. CBSP procurements for FY25 - FY27 ships are required in FY24 to maintain configuration across the FY23-FY27 Multi-year Procurement (MYP).

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships							P-1 Line Item Number / Title: 2127 / Littoral Combat Ship (LCS)					
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 (<i>Units in Each</i>)	33	-	-	-	-	-	-	-	-	-	-	33
Gross/Weapon System Cost (<i>\$ in Millions</i>)	16,865.635	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	16,865.635
Less PY Advance Procurement (<i>\$ in Millions</i>)	158.893	-	-	-	-	-	-	-	-	-	-	158.893
Less Cost To Complete (<i>\$ in Millions</i>)	524.654	-	-	-	-	-	-	-	-	-	-	524.654
Net Procurement (P-1) (<i>\$ in Millions</i>)	16,182.088	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	16,182.088
Full Funding TOA (<i>\$ in Millions</i>)	16,182.088	-	-	-	-	-	-	-	-	-	-	16,182.088
Plus CY Advance Procurement (<i>\$ in Millions</i>)	158.893	-	-	-	-	-	-	-	-	-	-	158.893
Plus Cost To Complete (<i>\$ in Millions</i>)	388.993	44.860	67.801	23.000	-	23.000	-	-	-	-	-	524.654
Total Obligation Authority (<i>\$ in Millions</i>)	16,729.974	44.860	67.801	23.000	0.000	23.000	0.000	0.000	0.000	0.000	-	16,865.635
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	1,205.313	107.263	137.671	99.967	-	99.967	47.241	1.901	-	-	-	1,599.356
Total (<i>\$ in Millions</i>)	17,935.287	152.123	205.472	122.967	-	122.967	47.241	1.901	-	-	-	18,464.991
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	511.080	-	-	-	-	-	-	-	-	-	-	511.080

Description:
Provides for the design, construction, integration, and testing of the Littoral Combat Ship (LCS) including ordnance, government furnished equipment (GFE), plans and change order costs.

LCS deploys focused-mission packages to execute surface warfare (SUW) and mine countermeasures (MCM) operations. LCS also possesses inherent capabilities, regardless of the mission package installed, including intelligence, surveillance, and reconnaissance (ISR), anti-terrorism/force protection (AT/FP), air warfare self-defense, joint littoral mobility, and logistic support for movement of personnel and supplies. LCS SUW ships will also include maritime interdiction/interception operations (MIO). LCS MCM ships will incorporate unmanned vehicles to conduct mine hunting and mine sweeping missions. This relatively small, shallow-draft, high-speed surface combatant complements the U.S. Navy's Surface Fleet by operating in environments where it is impossible or undesirable to employ larger deeper-draft, multi-mission ships. LCS can deploy independently to overseas littoral regions or remain on station for extended periods of time either with a battle group or through a forward-basing arrangement. LCS will operate with Carrier Strike Groups, Surface Action Groups, or independently as dictated by the mission and environment. Additionally, LCS can operate cooperatively with the U.S. Coast Guard and Allies.

Note:
The Department is requesting \$9.4 million in FY 2023 funds to reflect revised economic assumptions in accordance with the General Provision Section 8121 of the Department of Defense Appropriations Act, 2023.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy					Date: March 2023																																																																																																																																				
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships			P-1 Line Item Number / Title: 2127 / Littoral Combat Ship (LCS)																																																																																																																																						
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<div>Characteristics:</div> <table><tr><td>Length Overall</td><td>LM</td><td colspan="2">AUSTAL</td><td colspan="3"></td></tr><tr><td>Beam</td><td>115.3m</td><td colspan="2">127.6m</td><td colspan="3"></td></tr><tr><td>Displacement</td><td>17.5m</td><td colspan="2">31.6m</td><td colspan="3"></td></tr><tr><td>Draft</td><td>3089 mt</td><td colspan="2">2842 mt</td><td colspan="3"></td></tr><tr><td></td><td>4.3m</td><td colspan="2">4.4m</td><td colspan="3"></td></tr></table> <div>Production Status:</div> <table><tr><td></td><td>LCS 27</td><td>LCS 29</td><td>LCS 34</td><td>LCS 36</td><td>LCS 38</td><td>LCS 31</td></tr><tr><td>Contract Award Date</td><td>Oct 2017</td><td>Sep 2018</td><td>Sep 2018</td><td>Dec 2018</td><td>Dec 2018</td><td>Jan 2019</td></tr><tr><td>Months to Completion</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td> a) Award to Delivery</td><td>70 months</td><td>68 months</td><td>55 months</td><td>61 months</td><td>72 months</td><td>66 months</td></tr><tr><td> b) Construction Start to Delivery</td><td>57 months</td><td>59 months</td><td>34 months</td><td>36 months</td><td>41 months</td><td>49 months</td></tr><tr><td>Delivery Date</td><td>Aug 2023</td><td>May 2024</td><td>Apr 2023</td><td>Jan 2024</td><td>Dec 2024</td><td>Jul 2024</td></tr><tr><td>Completion Of Fitting Out</td><td>Mar 2024</td><td>Dec 2024</td><td>Jan 2024</td><td>Oct 2024</td><td>Sep 2025</td><td>Mar 2025</td></tr><tr><td>Obligation Work Limit Date</td><td>Feb 2025</td><td>Nov 2025</td><td>Dec 2024</td><td>Sep 2025</td><td>Aug 2026</td><td>Feb 2026</td></tr></table> <div>Design Schedule</div> <table><tr><td></td><td>Start / Issue</td><td>Complete / Response</td><td>Reissue</td><td>Reissue Complete / Response</td></tr><tr><td>Issue Date for TLR</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Issue Date for TLS</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Preliminary Design</td><td>Jul 2003</td><td>Dec 2003</td><td></td><td></td></tr><tr><td>Contract Design</td><td>May 2004</td><td>Dec 2004</td><td></td><td></td></tr><tr><td>Detail Design</td><td>Dec 2004</td><td>Jun 2007</td><td></td><td></td></tr><tr><td>Request for Proposals</td><td>N/A</td><td>Jan 2010</td><td></td><td></td></tr><tr><td>Design Agent</td><td colspan="4">LOCKHEED MARTIN - AUSTAL</td></tr></table> <div>Classification of Cost Estimate: CLASS C</div>							Length Overall	LM	AUSTAL					Beam	115.3m	127.6m					Displacement	17.5m	31.6m					Draft	3089 mt	2842 mt						4.3m	4.4m						LCS 27	LCS 29	LCS 34	LCS 36	LCS 38	LCS 31	Contract Award Date	Oct 2017	Sep 2018	Sep 2018	Dec 2018	Dec 2018	Jan 2019	Months to Completion							a) Award to Delivery	70 months	68 months	55 months	61 months	72 months	66 months	b) Construction Start to Delivery	57 months	59 months	34 months	36 months	41 months	49 months	Delivery Date	Aug 2023	May 2024	Apr 2023	Jan 2024	Dec 2024	Jul 2024	Completion Of Fitting Out	Mar 2024	Dec 2024	Jan 2024	Oct 2024	Sep 2025	Mar 2025	Obligation Work Limit Date	Feb 2025	Nov 2025	Dec 2024	Sep 2025	Aug 2026	Feb 2026		Start / Issue	Complete / Response	Reissue	Reissue Complete / Response	Issue Date for TLR	N/A	N/A			Issue Date for TLS	N/A	N/A			Preliminary Design	Jul 2003	Dec 2003			Contract Design	May 2004	Dec 2004			Detail Design	Dec 2004	Jun 2007			Request for Proposals	N/A	Jan 2010			Design Agent	LOCKHEED MARTIN - AUSTAL			
Length Overall	LM	AUSTAL																																																																																																																																							
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Issue Date for TLR	N/A	N/A																																																																																																																																							
Issue Date for TLS	N/A	N/A																																																																																																																																							
Preliminary Design	Jul 2003	Dec 2003																																																																																																																																							
Contract Design	May 2004	Dec 2004																																																																																																																																							
Detail Design	Dec 2004	Jun 2007																																																																																																																																							
Request for Proposals	N/A	Jan 2010																																																																																																																																							
Design Agent	LOCKHEED MARTIN - AUSTAL																																																																																																																																								

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2127 / Littoral Combat Ship (LCS)			
Cost Categories	FY 2017		FY 2018		FY 2019	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	3	12.467	3	12.688	3	0.100
Basic Construction/Conversion		1,355.877		1,352.630		1,357.988
Change Orders		25.396		30.687		36.855
Electronics		50.315		51.775		48.399
Hull, Mechanical, and Electrical (HM&E)		13.166		13.247		12.899
Ordnance		24.201		25.880		27.514
Other Cost		131.300		89.602		117.472
Total Ship Estimate		1,612.722		1,576.509		1,601.227
Less Cost to Complete FY 2022		20.000		-		-
Less Cost to Complete FY 2023		29.030		9.538		6.983
Less Cost to Complete FY 2024		-		-		23.000
Net P-1 Funding		1,563.692		1,566.971		1,571.244

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2127 / Littoral Combat Ship (LCS)		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
LCS 27	LOCKHEED MARTIN	2017	Oct 2017	Nov 2018	Aug 2023
LCS 29	LOCKHEED MARTIN	2018	Sep 2018	Jun 2019	May 2024
LCS 34	AUSTAL	2018	Sep 2018	Jun 2020	Apr 2023
LCS 36	AUSTAL	2019	Dec 2018	Jan 2021	Jan 2024
LCS 38	AUSTAL	2019	Dec 2018	Jul 2021	Dec 2024
LCS 31	LOCKHEED MARTIN	2019	Jan 2019	Jun 2020	Jul 2024

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships

P-1 Line Item Number / Title:
2128 / FFG-Frigate

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)	2	1	1	2	-	2	1	2	1	2	8	20
Gross/Weapon System Cost (\$ in Millions)	2,334.300	1,090.900	1,141.224	2,173.698	0.000	2,173.698	1,037.042	1,932.900	1,041.357	2,057.744	8,612.597	21,421.762
Less PY Advance Procurement (\$ in Millions)	-	-	6.000	-	-	-	-	-	-	-	-	6.000
Net Procurement (P-1) (\$ in Millions)	2,334.300	1,090.900	1,135.224	2,173.698	0.000	2,173.698	1,037.042	1,932.900	1,041.357	2,057.744	8,612.597	21,415.762
Plus CY Advance Procurement (\$ in Millions)	6.000	-	-	-	-	-	-	-	-	-	-	6.000
Total Obligation Authority (\$ in Millions)	2,340.300	1,090.900	1,135.224	2,173.698	0.000	2,173.698	1,037.042	1,932.900	1,041.357	2,057.744	8,612.597	21,421.762
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (\$ in Millions)	-	-	-	-	-	-	34.152	39.000	80.002	90.400	237.856	481.410
Total (\$ in Millions)	2,340.300	1,090.900	1,135.224	2,173.698	-	2,173.698	1,071.194	1,971.900	1,121.359	2,148.144	8,850.453	21,903.172
Gross/Weapon System Unit Cost (\$ in Millions)	1,167.150	1,090.900	1,141.224	1,086.849	-	1,086.849	1,037.042	966.450	1,041.357	1,028.872	1,076.575	1,071.088

Description:

The Guided Missile Frigate (FFG 62 Class) is a more lethal and survivable multi-mission small surface combatant. With the FFG 62 Class, the Navy will maximize the small surface combatant capabilities in the Anti-Surface Warfare (SUW), Anti-Submarine Warfare (ASW), Electronic Warfare/Information Operations (EW/IO), Air Warfare (AW) mission areas, and survivability while keeping the ship affordable and as a part of a "high-low" mix of surface ships. The FFG 62 Class Capability Development Document was JROC approved in Feb 2019 and completed Milestone B, an informed Independent Cost Estimate, and award of the Detail Design & Construction contract in April 2020.

Note:

The Department is requesting \$309.6 million in FY 2023 funds to reflect revised economic assumptions in accordance with the General Provision Section 8121 of the Department of Defense Appropriations Act, 2023.

Characteristics:

-

Length Overall496 ft

Beam65 ft

Displacement7406 tons

Draft18 ft

Production Status:

FFG 62⁽¹⁾

FFG 63

FFG 64

FFG 65⁽²⁾

FFG 66

FFG 67

Contract Award Date

Apr 2020

May 2021

Jun 2022

Apr 2023

Apr 2024

Apr 2024

Months to Completion

a) Award to Delivery

77 months

76 months

74 months

66 months

71 months

64 months

b) Construction Start to Delivery

49 months

53 months

64 months

60 months

67 months

57 months

Delivery Date

Sep 2026

Sep 2027

Aug 2028

Oct 2028

Mar 2030

Aug 2029

Completion Of Fitting Out

Mar 2027

Mar 2028

Dec 2028

Jan 2029

Jun 2030

Nov 2029

Obligation Work Limit Date

Apr 2028

Feb 2029

Nov 2029

Dec 2029

May 2031

Oct 2030

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships		P-1 Line Item Number / Title: 2128 / FFG-Frigate		
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				
<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>
Issue Date for TLR	Feb 2017	Oct 2017		
Issue Date for TLS	N/A	N/A		
Preliminary Design	N/A	N/A		
Contract Design	Feb 2018	May 2019		
Detail Design	Apr 2020	N/A		
Request for Proposals	Jun 2019	Sep 2019		
Design Agent				
<u>Classification of Cost Estimate:</u> Class C Estimate				
Footnotes: (1) FFG 62 - FFG 64 reflect contract milestone dates based on ship production progress. (2) FFG 65 and follow reflect notional dates.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy							Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1					P-1 Line Item Number / Title: 2128 / FFG-Frigate					
Cost Categories ^(†) indicates the presence of a P-8a	FY 2020		FY 2021		FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	1	206.706	1	38.744	1	131.461	1	145.257	2	145.049
Basic Construction/Conversion		651.080		598.880		587.122		628.897		1,113.990
Change Orders		31.650		24.679		23.021		21.617		40.669
Electronics ^(†)		266.830		264.281		230.783		218.594		644.504
Hull, Mechanical, and Electrical (HM&E) ^(†)		26.930		22.531		17.389		18.836		59.296
Ordnance ^(†)		49.981		55.445		52.274		53.921		121.197
Other Cost		48.000		48.563		48.850		54.102		48.993
Total Ship Estimate		1,281.177		1,053.123		1,090.900		1,141.224		2,173.698
Less Advance Procurement FY 2020		-		-		-		6.000		-
Net P-1 Funding		1,281.177		1,053.123		1,090.900		1,135.224		2,173.698

Remarks:
Procurement and outfitting of FFG LBES funded via Plans; FY23 \$105.3M, FY24 \$111.8M, FY25 \$13.8M.

FY24 Electronics, HME, and Ordnance budget increases above inflation due to Program Office effort to properly price GFE systems to account for current economic inflationary impacts to acquisition.

FY23 Other Cost includes \$6M of FY20 advance procurement funds to support engineering efforts for the Land Base Engineering Site.

FY23 Basic increase of \$50M due to Frigate industrial base and workforce development.

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy	Date: March 2023
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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1	P-1 Line Item Number / Title: 2128 / FFG-Frigate
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Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
FFG 62 ⁽¹⁾	Fincantieri Marinette Marine	2020	Apr 2020	Aug 2022	Sep 2026
FFG 63	Fincantieri Marinette Marine	2021	May 2021	Apr 2023	Sep 2027
FFG 64	Fincantieri Marinette Marine	2022	Jun 2022	Apr 2023	Aug 2028
FFG 65 ⁽²⁾	Fincantieri Marinette Marine	2023	Apr 2023	Oct 2023	Oct 2028
FFG 66	Fincantieri Marinette Marine	2024	Apr 2024	Aug 2024	Mar 2030
FFG 67	Fincantieri Marinette Marine	2024	Apr 2024	Nov 2024	Aug 2029
FFG 68	Fincantieri Marinette Marine	2025	Apr 2025	Aug 2025	Feb 2031
FFG 69	Fincantieri Marinette Marine	2026	Apr 2026	Aug 2026	Jul 2031
FFG 70	Fincantieri Marinette Marine	2026	Apr 2026	Feb 2027	Jan 2032
FFG 71	Fincantieri Marinette Marine	2027	Apr 2027	Nov 2027	Jun 2032
FFG 72	TBD	2028	Apr 2028	Aug 2028	Jul 2033
FFG 73	TBD	2028	Apr 2028	Feb 2029	Jan 2034

Footnotes:

⁽¹⁾ FFG 62 - FFG 64 reflect contract milestone dates based on ship production progress.

⁽²⁾ FFG 65 and follow reflect notional dates.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2128 / FFG-Frigate			
Electronics	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items						
Enterprise Air Surveillance Radar (EASR)	1	55.307	1	30.826	2	128.651
AEGIS Weapon System (AWS)	1	36.965	1	37.705	2	96.948
Anti-Submarine Warfare (ASW) Combat Suite	1	33.221	1	33.886	2	59.231
Surface Electronic Warfare Improvement Program (SEWIP) BLK II (SLQ-32(V)6)	1	12.520	1	12.770	2	26.340
Tactical COMINT System- Spectral	1	13.480	1	13.750	2	41.576
Cooperative Engagement Capability (CEC)	1	6.512	1	6.642	2	15.492
Identification Friend or Foe (IFF) UPX-29	1	5.715	1	5.829	2	12.011
External Communication Suite	1	10.193	1	11.900	2	18.045
Navy Advanced Extremely High Frequency (AEHF) Multiband Terminal (NMT)(AN/WSC-9(V)1)	1	6.207	1	8.411	2	31.844
Consolidated Afloat Network Enterprise System (CANES)	1	6.771	1	8.706	2	19.720
Network Tactical Common Data Link (NTCDL) Variant B	1	6.094	1	9.616	2	25.134
Inertial Navigation System (INS) AN/WSN-7(V)1	1	5.824	1	5.940	2	11.575
Situation Awareness EO/IR	1	3.753	1	3.828	2	9.720
NIXIE AN/SLQ-25E	1	2.552	1	2.603	2	8.721
Afloat Navigation Cyber Hardening, Observation and Response (ANCHOR)	1	1.855	1	1.892	2	12.477
Platform Boundary Defense (PBD)	1	3.745	1	3.820	2	24.193
P-35 Items Subtotal		210.714		198.124		541.678
Major Items						
Next Generation Surface Search Radar (NGSSR)	1	3.047	1	3.108	2	13.513
OA-9277A	1	1.672	1	1.704	1	4.582
Moriah Wind System (MWS) (AN/SMQ-13)	1	1.235	1	1.260	2	1.988
Tactical Variant Switch (TVS) (AN/USQ-155(V))	1	1.772	1	1.807	2	4.760
SPQ-15	1	0.739	1	0.754	2	4.482
Major Items Subtotal		8.465		8.633		29.325
Other Cost Elements						
Other Electronics	1	11.604	1	11.837	2	73.501
Other Cost Elements Subtotal		11.604		11.837		73.501
Total Electronics		230.783		218.594		644.504
Remarks:						

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1		P-1 Line Item Number / Title: 2128 / FFG-Frigate
Other Electronics include C4I System Innovation Facility (C-SIF) / Technical Integration Facility (TIF), Advanced Training Domain (ATD), Navy Electronic Chart Display Information System (ECDIS), Global Positioning System (GPS) Based Positioning Navigation and Timing Service (GPNTS), Antennas, and various other systems.		
Change in Electronics-OTHER is due to the breakout of ANCHOR, Platform Boundary Defense (PBD), and SPQ-15 from OTHER to P-8/P-35. Increase in FY24 over FY23 is due to adding additional funding to address inflation.		

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2128 / FFG-Frigate			
Hull, Mechanical, and Electrical (HM&E)	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items						
Aircraft Ship Integrated Securing and Traversing System (ASIST)	1	6.071	1	7.291	2	17.349
Internal Communication (IC) Voice	1	3.078	1	3.140	2	7.168
P-35 Items Subtotal		9.149		10.431		24.517
Major Items						
Advanced Flight Deck Lighting System (AFDLS)	1	2.220	1	2.264	2	4.423
Unclassified Video System (UVS)	1	1.360	1	1.387	2	4.853
Interior Wireless Communication System (IWCS)	1	1.402	1	1.430	2	5.761
HM&E Situational Awareness, Boundary Enforcement and Response (SABER)	1	0.516	1	0.526	2	3.545
Ship Control System-Government (SCS GOV)	1	0.803	1	0.819	1	4.425
Major Items Subtotal		6.301		6.426		23.007
Other Cost Elements						
Other HM&E	1	1.939	1	1.979	2	11.772
Other Cost Elements Subtotal		1.939		1.979		11.772
Total Hull, Mechanical, and Electrical (HM&E)		17.389		18.836		59.296

Remarks:
Other HM&E includes 7M Rigid Hull Inflatable Boat (RHIB), Horizon Reference Set (HRS), Enhanced Maritime Biological Detection (EMBD), Plastic Shredder, and other systems.

Change in HME-OTHER is due to the breakout of Situational Awareness, Boundary Enforcement and Response (SABER) and Ship Control System-Government (SCS Gov) from OTHER to P-8. Increase in FY24 over FY23 is due to adding additional funding to address inflation.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2128 / FFG-Frigate			
Ordnance	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items						
MK 41 Vertical Launch System (VLS)- 32 Cell	1	22.700	1	23.154	2	53.315
MK 48 Gun Weapon System (GWS)	1	12.785	1	13.041	2	30.918
Rolling Airframe Missile (RAM) Guided Missile Launching System- 21 Cell	1	13.205	1	13.469	2	27.115
P-35 Items Subtotal		48.690		49.664		111.348
Major Items						
MK 53 Decoy Launching System (DLS) (Nulka)- 4 Launcher	1	1.402	1	1.430	2	3.098
Major Items Subtotal		1.402		1.430		3.098
Other Cost Elements						
Other Ordnance	1	2.182	1	2.827	2	6.751
Other Cost Elements Subtotal		2.182		2.827		6.751
Total Ordnance		52.274		53.921		121.197

Remarks:
Other Ordnance includes Over the Horizon (OTH) Missile Launcher, Portable Ordnance Handling Equipment (POHE) and Machine Gun Mounts.

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: Enterprise Air Surveillance Radar (EASR)					PARM Code: PEO IWS 2A																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	42.148	1	17.404	2	103.628																																																								
System Engineering		2.375		2.423		4.517																																																								
Technical Engineering Services		2.168		2.211		4.122																																																								
Other Costs		8.616		8.788		16.384																																																								
Total	1	55.307	1	30.826	2	128.651																																																								
<p>Description: Enterprise Air Surveillance Radar (EASR) is the next generation S-band air search radar with 3-D search capability supporting Air Warfare (AW) for self- and local area defense; Surface Warfare (SUW) for Fast Attack Craft (FAC), Fast Inshore Attack Craft (FIAC); Asymmetric / Force Protection; Electromagnetic Maneuver Warfare. The EASR consists of arrays, below deck gear support equipment computer program for radar processing and radar control.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Raytheon</td><td>SS/CR</td><td>May 2022</td><td>Option</td><td>1</td><td>42.148</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Raytheon</td><td>SS/CR</td><td>TBD</td><td>New</td><td>1</td><td>17.404</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Raytheon</td><td>SS/CR</td><td>TBD</td><td>Option</td><td>2</td><td>51.814</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>30</td><td>30</td><td>Aug 2023</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>32</td><td>30</td><td>Aug 2023</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>32</td><td>30</td><td>Jun 2024</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: The FFG 62 Class will integrate EASR into the AEGIS Combat System FFG 62 Baseline.</p> <p>LRIP EASR contract ends in FY22. FY23 will be first procurement under Full Rate Production contract.</p> <p>The FY23 total expected EASR cost is \$73.707M. Navy will need an additional \$42.881M in FY23 to award the EASR contract and fund the total EASR effort. The additional funds are required due to the FY22 congressional advance procurement reduction of \$69.1M.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Raytheon	SS/CR	May 2022	Option	1	42.148	FY 2023	FFG 65	Raytheon	SS/CR	TBD	New	1	17.404	FY 2024	FFG 66	Raytheon	SS/CR	TBD	Option	2	51.814	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	30	30	Aug 2023	FY 2023	FFG 65	Oct 2028	32	30	Aug 2023	FY 2024	FFG 66	Aug 2029	32	30	Jun 2024
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	Raytheon	SS/CR	May 2022	Option	1	42.148																																																							
FY 2023	FFG 65	Raytheon	SS/CR	TBD	New	1	17.404																																																							
FY 2024	FFG 66	Raytheon	SS/CR	TBD	Option	2	51.814																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	FFG 64	Aug 2028	30	30	Aug 2023																																																									
FY 2023	FFG 65	Oct 2028	32	30	Aug 2023																																																									
FY 2024	FFG 66	Aug 2029	32	30	Jun 2024																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																											
Equipment Item: AEGIS Weapon System (AWS)					PARM Code: PEO IWS 8.0																																																										
P-35 Category	FY 2022		FY 2023		FY 2024																																																										
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																									
Major Hardware	1	14.481	1	14.771	2	37.979																																																									
System Engineering		0.690		0.704		1.810																																																									
Technical Engineering Services		1.143		1.166		2.998																																																									
Other Costs		20.651		21.064		54.161																																																									
Total	1	36.965	1	37.705	2	96.948																																																									
<p>Description:</p> <p>The AEGIS Weapon System (AWS) is an integrated combat management system that provides doctrine, management, control, and display functionality for FFG Combat System (FCS) missions as well as command and control functionality for all warfare areas. The AWS comprises: Command and Decision (C&D) System, Combat System Computing Infrastructure (CSCI), Shipboard Gridlock System/Automatic Correlation (SGS/AC), AEGIS Display System (ADS), Weapons Control System (WCS), Operational Readiness Training System (ORTS), Mission Planner (MP), Vehicle Control Domain (VCD), and resource management for the Enterprise Air Surveillance Radar.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Various</td><td>C/FFP</td><td>Various</td><td>Various</td><td>1</td><td>14.481</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Various</td><td>C/FFP</td><td>Various</td><td>Various</td><td>1</td><td>14.771</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Various</td><td>C/FFP</td><td>Various</td><td>Various</td><td>2</td><td>18.990</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>34</td><td>24</td><td>Oct 2023</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>32</td><td>24</td><td>Feb 2024</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>31</td><td>24</td><td>Jan 2025</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>AWS was procured under the competitive combat system contract run by IWS 1.0 with award in FY 2021.</p> <p>Remarks:</p> <p>FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Various	C/FFP	Various	Various	1	14.481	FY 2023	FFG 65	Various	C/FFP	Various	Various	1	14.771	FY 2024	FFG 66	Various	C/FFP	Various	Various	2	18.990	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	34	24	Oct 2023	FY 2023	FFG 65	Oct 2028	32	24	Feb 2024	FY 2024	FFG 66	Aug 2029	31	24	Jan 2025
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																								
FY 2022	FFG 64	Various	C/FFP	Various	Various	1	14.481																																																								
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: Anti-Submarine Warfare (ASW) Combat Suite					PARM Code: PEO IWS 5.0																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	22.565	1	23.016	2	40.231																																																								
System Engineering		3.731		3.805		6.651																																																								
Technical Engineering Services		2.379		2.427		4.242																																																								
Other Costs		4.546		4.638		8.107																																																								
Total	1	33.221	1	33.886	2	59.231																																																								
<p>Description:</p> <p>The Anti-Submarine Warfare Combat Suite provides surface warships with an integrated undersea/anti-submarine warfare detection, localization, classification, and targeting ability. It includes AN/SQQ-89 (V)16, Undersea Warfare Decision Support System (USW-DSS), Multi Function Towed Array (MFTA), expendable bathythermograph (XBT) launcher LM-48, and the fathometer. Since the FY 2023 submission, Combined Active and Passive Towed Array Sonar (CAPTAS) replaced Variable Depth Sonar as the planned sensor.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Lockheed Martin</td><td>C/CR</td><td>TBD</td><td>Option</td><td>1</td><td>22.565</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Lockheed Martin</td><td>C/CR</td><td>TBD</td><td>Option</td><td>1</td><td>23.016</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Lockheed Martin</td><td>C/CR</td><td>TBD</td><td>Option</td><td>2</td><td>20.116</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>36</td><td>24</td><td>Aug 2023</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>32</td><td>24</td><td>Feb 2024</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>26</td><td>24</td><td>Jun 2025</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Lockheed Martin	C/CR	TBD	Option	1	22.565	FY 2023	FFG 65	Lockheed Martin	C/CR	TBD	Option	1	23.016	FY 2024	FFG 66	Lockheed Martin	C/CR	TBD	Option	2	20.116	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	36	24	Aug 2023	FY 2023	FFG 65	Oct 2028	32	24	Feb 2024	FY 2024	FFG 66	Aug 2029	26	24	Jun 2025
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	Lockheed Martin	C/CR	TBD	Option	1	22.565																																																							
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																											
Equipment Item: Surface Electronic Warfare Improvement Program (SEWIP) BLK II (SLQ-32(V)6)					PARM Code: PEO IWS 2E																																																										
P-35 Category	FY 2022		FY 2023		FY 2024																																																										
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																									
Major Hardware	1	10.977	1	11.196	2	23.093																																																									
System Engineering		0.389		0.397		0.819																																																									
Technical Engineering Services		0.114		0.116		0.240																																																									
Other Costs		1.040		1.061		2.188																																																									
Total	1	12.520	1	12.770	2	26.340																																																									
<p>Description: The AN/SLQ-32 SEWIP Block II is a scalable Electronic Warfare enterprise suite that interfaces to the AWS. It provides enhanced shipboard Electronic Warfare (EW) for early detection, analysis, threat warning and soft kill protection from anti-ship missiles.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Lockheed Martin</td><td>C/CR</td><td>May 2022</td><td>Option</td><td>1</td><td>10.977</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Lockheed Martin</td><td>C/CR</td><td>TBD</td><td>Option</td><td>1</td><td>11.196</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Lockheed Martin</td><td>C/CR</td><td>TBD</td><td>Option</td><td>2</td><td>11.547</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>36</td><td>29</td><td>Mar 2023</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>32</td><td>29</td><td>Sep 2023</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>31</td><td>29</td><td>Aug 2024</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Lockheed Martin	C/CR	May 2022	Option	1	10.977	FY 2023	FFG 65	Lockheed Martin	C/CR	TBD	Option	1	11.196	FY 2024	FFG 66	Lockheed Martin	C/CR	TBD	Option	2	11.547	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	36	29	Mar 2023	FY 2023	FFG 65	Oct 2028	32	29	Sep 2023	FY 2024	FFG 66	Aug 2029	31	29	Aug 2024
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																								
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: Tactical COMINT System- Spectral					PARM Code: PMW 120																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	12.363	1	12.611	2	38.131																																																								
Technical Engineering Services		0.262		0.267		0.808																																																								
Other Costs		0.495		0.505		1.527																																																								
Systems Engineering		0.360		0.367		1.110																																																								
Total	1	13.480	1	13.750	2	41.576																																																								
<p>Description:</p> <p>Spectral is the next generation information warfare weapons system, enhancing Ship Signal Exploitation System (SSES) capabilities that detects, classifies, and tracks SOI (Signals of Interest) used in the Tasking, Collection, Processing, Exploitation and Dissemination (TCPED) process. Spectral is scalable, mission configurable, modular, and remotable, rapidly responding to new threats and/or capabilities. A integrated capability enables data sharing with other systems to support Electromagnetic Maneuver Warfare (EMW/Integrated Fires (IF)).</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Lockheed Martin</td><td>C/CR</td><td>TBD</td><td>Option</td><td>1</td><td>12.363</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Lockheed Martin</td><td>C/CR</td><td>TBD</td><td>Option</td><td>1</td><td>12.611</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Lockheed Martin</td><td>C/CR</td><td>TBD</td><td>Option</td><td>2</td><td>19.066</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>17</td><td>21</td><td>Jun 2025</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>14</td><td>21</td><td>Nov 2025</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>14</td><td>21</td><td>Sep 2026</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Lockheed Martin	C/CR	TBD	Option	1	12.363	FY 2023	FFG 65	Lockheed Martin	C/CR	TBD	Option	1	12.611	FY 2024	FFG 66	Lockheed Martin	C/CR	TBD	Option	2	19.066	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	17	21	Jun 2025	FY 2023	FFG 65	Oct 2028	14	21	Nov 2025	FY 2024	FFG 66	Aug 2029	14	21	Sep 2026
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: Cooperative Engagement Capability (CEC)					PARM Code: PEO IWS 6.0																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	4.680	1	4.774	2	11.134																																																								
System Engineering		0.401		0.409		0.954																																																								
Technical Engineering Services		0.536		0.546		1.274																																																								
Other Costs		0.895		0.913		2.130																																																								
Total	1	6.512	1	6.642	2	15.492																																																								
<p>Description:</p> <p>The AN/USG-2B Cooperative Engagement Capability (CEC) system provides real time integration of fire control quality sensor data into a single composite data source, which can be used by multiple CEC ships and airborne units for direct and remote missile engagements. CEC significantly improves battle force Air Warfare (AW) capability by coordinating all force AW sensors into a single real time, fire control quality composite track picture. FFG 62 Class technical baseline for CEC was reverted to legacy phased array antenna as schedule risk mitigation, incurring additional costs in FY21 for engineering and integration.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>DRS Technologies & Raytheon</td><td>C/CR</td><td>Various</td><td>Option</td><td>1</td><td>4.680</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>DRS Technologies & Raytheon</td><td>C/CR</td><td>Various</td><td>Option</td><td>1</td><td>4.774</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>DRS Technologies & Raytheon</td><td>C/CR</td><td>Various</td><td>Option</td><td>2</td><td>5.567</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>36</td><td>24</td><td>Aug 2023</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>32</td><td>24</td><td>Feb 2024</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>31</td><td>24</td><td>Jan 2025</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	DRS Technologies & Raytheon	C/CR	Various	Option	1	4.680	FY 2023	FFG 65	DRS Technologies & Raytheon	C/CR	Various	Option	1	4.774	FY 2024	FFG 66	DRS Technologies & Raytheon	C/CR	Various	Option	2	5.567	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	36	24	Aug 2023	FY 2023	FFG 65	Oct 2028	32	24	Feb 2024	FY 2024	FFG 66	Aug 2029	31	24	Jan 2025
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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: Identification Friend or Foe (IFF) UPX-29						PARM Code: PMA 213																																																								
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	5.280	1	5.386	2	11.098																																																								
System Engineering		0.217		0.221		0.455																																																								
Technical Engineering Services		0.168		0.171		0.352																																																								
Other Costs		0.050		0.051		0.106																																																								
Total	1	5.715	1	5.829	2	12.011																																																								
<p>Description: The AN/UPX-29(V) provides a centralized identification system that operates independently to transmit interrogations, detect transponder replies, and process the resulting information for use by a ship's operators and combat weapons system computers. The system provides Modes 1, 2, 3A, C and provides secure, positive ID of Mode 4, Mode S and Mode 5 targets.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Various</td><td>Various</td><td>TBD</td><td>Various</td><td>1</td><td>5.280</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Various</td><td>Various</td><td>TBD</td><td>Various</td><td>1</td><td>5.386</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Various</td><td>Various</td><td>TBD</td><td>Various</td><td>2</td><td>5.549</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>36</td><td>24</td><td>Aug 2023</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>32</td><td>24</td><td>Feb 2024</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>31</td><td>24</td><td>Jan 2025</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Various	Various	TBD	Various	1	5.280	FY 2023	FFG 65	Various	Various	TBD	Various	1	5.386	FY 2024	FFG 66	Various	Various	TBD	Various	2	5.549	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	36	24	Aug 2023	FY 2023	FFG 65	Oct 2028	32	24	Feb 2024	FY 2024	FFG 66	Aug 2029	31	24	Jan 2025
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	Various	Various	TBD	Various	1	5.280																																																							
FY 2023	FFG 65	Various	Various	TBD	Various	1	5.386																																																							
FY 2024	FFG 66	Various	Various	TBD	Various	2	5.549																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	FFG 64	Aug 2028	36	24	Aug 2023																																																									
FY 2023	FFG 65	Oct 2028	32	24	Feb 2024																																																									
FY 2024	FFG 66	Aug 2029	31	24	Jan 2025																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: External Communication Suite					PARM Code: PMW 760																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	9.113	1	10.798	2	16.377																																																								
System Engineering		0.231		0.236		0.357																																																								
Technical Engineering Services		0.511		0.521		0.790																																																								
Other Costs		0.338		0.345		0.521																																																								
Total	1	10.193	1	11.900	2	18.045																																																								
<p>Description: External Communication Suite (EXCOMM) is a software programmable tactical radio (with embedded Information Security [INFOSEC]) that provides interoperable Line of Sight/Beyond Line of Sight (LOS/BLOS) C4I capabilities to the fleet. For FY22, the OA-9227A antenna is now included in the baseline EXCOMM DMR HFDAG system.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>General Dynamics</td><td>C/FFP</td><td>Mar 2022</td><td>Option</td><td>1</td><td>9.113</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>General Dynamics</td><td>C/FFP</td><td>TBD</td><td>Option</td><td>1</td><td>10.798</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>General Dynamics</td><td>C/FFP</td><td>TBD</td><td>Option</td><td>2</td><td>8.188</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>19</td><td>24</td><td>Jan 2025</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>14</td><td>24</td><td>Aug 2025</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>14</td><td>24</td><td>Jun 2026</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	General Dynamics	C/FFP	Mar 2022	Option	1	9.113	FY 2023	FFG 65	General Dynamics	C/FFP	TBD	Option	1	10.798	FY 2024	FFG 66	General Dynamics	C/FFP	TBD	Option	2	8.188	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	19	24	Jan 2025	FY 2023	FFG 65	Oct 2028	14	24	Aug 2025	FY 2024	FFG 66	Aug 2029	14	24	Jun 2026
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	General Dynamics	C/FFP	Mar 2022	Option	1	9.113																																																							
FY 2023	FFG 65	General Dynamics	C/FFP	TBD	Option	1	10.798																																																							
FY 2024	FFG 66	General Dynamics	C/FFP	TBD	Option	2	8.188																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	FFG 64	Aug 2028	19	24	Jan 2025																																																									
FY 2023	FFG 65	Oct 2028	14	24	Aug 2025																																																									
FY 2024	FFG 66	Aug 2029	14	24	Jun 2026																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: Navy Advanced Extremely High Frequency (AEHF) Multiband Terminal (NMT)(AN/WSC-9(V)1))					PARM Code: PMW 170																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	5.522	1	7.712	2	29.197																																																								
System Engineering		0.053		0.054		0.204																																																								
Technical Engineering Services		0.240		0.245		0.929																																																								
Other Costs		0.392		0.400		1.514																																																								
Total	1	6.207	1	8.411	2	31.844																																																								
<p>Description: The Navy Multiband Terminal (NMT) is the Navy's next generation ground terminal for military protected and wideband satellite communications, providing voice, video and data communications. NMT supports protected strategic/tactical warfare communications down to housekeeping and humanitarian (quality of life) communications for the Sailor and maintains backwards compatibility with legacy waveforms and systems while ensuring access to new and future MILSATCOM capabilities (Advanced Extremely High Frequency [AEHF], Wideband Global Satellite [WGS], and Enhanced Polar Satellite [EPS]).</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Raytheon</td><td>C/FFP</td><td>Dec 2022</td><td>Option</td><td>1</td><td>5.522</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Raytheon</td><td>C/FFP</td><td>TBD</td><td>Option</td><td>1</td><td>7.712</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Raytheon</td><td>C/FFP</td><td>TBD</td><td>Option</td><td>2</td><td>14.599</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>19</td><td>24</td><td>Jan 2025</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>14</td><td>24</td><td>Aug 2025</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>14</td><td>24</td><td>Jun 2026</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Raytheon	C/FFP	Dec 2022	Option	1	5.522	FY 2023	FFG 65	Raytheon	C/FFP	TBD	Option	1	7.712	FY 2024	FFG 66	Raytheon	C/FFP	TBD	Option	2	14.599	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	19	24	Jan 2025	FY 2023	FFG 65	Oct 2028	14	24	Aug 2025	FY 2024	FFG 66	Aug 2029	14	24	Jun 2026
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	Raytheon	C/FFP	Dec 2022	Option	1	5.522																																																							
FY 2023	FFG 65	Raytheon	C/FFP	TBD	Option	1	7.712																																																							
FY 2024	FFG 66	Raytheon	C/FFP	TBD	Option	2	14.599																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	FFG 64	Aug 2028	19	24	Jan 2025																																																									
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																											
Equipment Item: Consolidated Afloat Network Enterprise System (CANES)					PARM Code: PMW 160																																																										
P-35 Category	FY 2022		FY 2023		FY 2024																																																										
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																									
Major Hardware	1	4.338	1	6.225	2	14.100																																																									
System Engineering		2.049		2.090		4.734																																																									
Technical Engineering Services		0.264		0.269		0.610																																																									
Other Costs		0.120		0.122		0.276																																																									
Total	1	6.771	1	8.706	2	19.720																																																									
<p>Description: CANES is a single, highly scalable network, computing, and services infrastructure supporting mission area application hosting and service delivery across a diverse set of Communities of Interest (COIs). It provides Navy tactical/non-tactical information environment and infrastructure necessary to enable hosting, extended services reach back & reach forward and relay functions.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Various</td><td>Various</td><td>Various</td><td>Various</td><td>1</td><td>4.338</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Various</td><td>Various</td><td>Various</td><td>Various</td><td>1</td><td>6.225</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Various</td><td>Various</td><td>Various</td><td>Various</td><td>2</td><td>7.050</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>14</td><td>17</td><td>Jan 2026</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>11</td><td>17</td><td>Jun 2026</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>11</td><td>17</td><td>Apr 2027</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Various	Various	Various	Various	1	4.338	FY 2023	FFG 65	Various	Various	Various	Various	1	6.225	FY 2024	FFG 66	Various	Various	Various	Various	2	7.050	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	14	17	Jan 2026	FY 2023	FFG 65	Oct 2028	11	17	Jun 2026	FY 2024	FFG 66	Aug 2029	11	17	Apr 2027
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																								
FY 2022	FFG 64	Various	Various	Various	Various	1	4.338																																																								
FY 2023	FFG 65	Various	Various	Various	Various	1	6.225																																																								
FY 2024	FFG 66	Various	Various	Various	Various	2	7.050																																																								
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																										
FY 2022	FFG 64	Aug 2028	14	17	Jan 2026																																																										
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: Network Tactical Common Data Link (NTCDL) Variant B					PARM Code: PMW 170																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	5.421	1	8.930	2	23.341																																																								
System Engineering		0.228		0.233		0.609																																																								
Technical Engineering Services		0.172		0.175		0.457																																																								
Other Costs		0.273		0.278		0.727																																																								
Total	1	6.094	1	9.616	2	25.134																																																								
<p>Description:</p> <p>NTCDL provides the ability to transmit/receive real-time ISR data simultaneously from multiple sources (air, surface, subsurface, 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 CDL equipped aircraft (e.g., F/A-18, P-3, and MH-60R) in addition to next-generation manned and unmanned platforms (e.g., Fire Scout). The NTCDL Variant planned for the FFG 62 Class is comprised of 4 Transmit and 4 Receive Phased Array Antennas (PAAs).</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>BAE Systems</td><td>C/FFP</td><td>Mar 2022</td><td>Option</td><td>1</td><td>5.421</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>BAE Systems</td><td>C/FFP</td><td>TBD</td><td>Option</td><td>1</td><td>8.930</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>BAE Systems</td><td>C/FFP</td><td>TBD</td><td>Option</td><td>2</td><td>11.671</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>13</td><td>12</td><td>Jul 2026</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>10</td><td>12</td><td>Dec 2026</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>10</td><td>12</td><td>Oct 2027</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	BAE Systems	C/FFP	Mar 2022	Option	1	5.421	FY 2023	FFG 65	BAE Systems	C/FFP	TBD	Option	1	8.930	FY 2024	FFG 66	BAE Systems	C/FFP	TBD	Option	2	11.671	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	13	12	Jul 2026	FY 2023	FFG 65	Oct 2028	10	12	Dec 2026	FY 2024	FFG 66	Aug 2029	10	12	Oct 2027
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	BAE Systems	C/FFP	Mar 2022	Option	1	5.421																																																							
FY 2023	FFG 65	BAE Systems	C/FFP	TBD	Option	1	8.930																																																							
FY 2024	FFG 66	BAE Systems	C/FFP	TBD	Option	2	11.671																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	FFG 64	Aug 2028	13	12	Jul 2026																																																									
FY 2023	FFG 65	Oct 2028	10	12	Dec 2026																																																									
FY 2024	FFG 66	Aug 2029	10	12	Oct 2027																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate			
Equipment Item: Inertial Navigation System (INS) AN/WSN-7(V)1						PARM Code: PEO IWS 6.0	
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	1	5.035	1	5.136	2	10.007	
System Engineering		0.120		0.122		0.238	
Technical Engineering Services		0.430		0.438		0.854	
Other Costs		0.239		0.244		0.476	
Total	1	5.824	1	5.940	2	11.575	
Description: The AN/WSN-7 Ring Laser Gyro Navigation (RLGN) System calculates and disseminates own ship's position, velocity and attitude (heading, roll and pitch) data outputs. The AN/WSN-7 RLGN System provides real time navigation data to use by Navigation & combat systems.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	FFG 64	Sperry Marine	C/FFP	TBD	Option	1	5.035
FY 2023	FFG 65	Sperry Marine	C/FFP	TBD	Option	1	5.136
FY 2024	FFG 66	Sperry Marine	C/FFP	TBD	Option	2	5.004
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	FFG 64	Aug 2028	36	17	Mar 2024		
FY 2023	FFG 65	Oct 2028	36	17	May 2024		
FY 2024	FFG 66	Aug 2029	36	17	Mar 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: Situation Awareness EO/IR					PARM Code: PEO IWS 2E																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	2.857	1	2.914	2	7.400																																																								
System Engineering		0.383		0.391		0.993																																																								
Technical Engineering Services		0.085		0.086		0.218																																																								
Other Costs		0.428		0.437		1.109																																																								
Total	1	3.753	1	3.828	2	9.720																																																								
<p>Description: Situation Awareness Electro-Optical/Infrared (EO/IR) system provides the capability to classify, identify and assist in determining intent of conventional, asymmetrical and advanced contacts/threats. EO/IR improves Situational Awareness (SA) and supports Anti-terrorism/Force Protection (AT/FP), Intelligence, Surveillance and Reconnaissance (ISR), Navigation (NAV), Intelligence (INTEL), Anti-Surface Warfare (SUW), Air Warfare (AW) and Anti-Ship Missile Defense (ASMD) missions while providing Long Range HD Visible/Infra-Red and Laser Range Finding sensors and capability for controlling, displaying and recording sensor imagery</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Ball Aerospace & Technologies</td><td>TBD</td><td>TBD</td><td>Option</td><td>1</td><td>2.857</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Ball Aerospace & Technologies</td><td>TBD</td><td>TBD</td><td>Option</td><td>1</td><td>2.914</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Ball Aerospace & Technologies</td><td>TBD</td><td>TBD</td><td>Option</td><td>2</td><td>3.700</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>36</td><td>15</td><td>May 2024</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>36</td><td>15</td><td>Jul 2024</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>36</td><td>15</td><td>May 2025</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Ball Aerospace & Technologies	TBD	TBD	Option	1	2.857	FY 2023	FFG 65	Ball Aerospace & Technologies	TBD	TBD	Option	1	2.914	FY 2024	FFG 66	Ball Aerospace & Technologies	TBD	TBD	Option	2	3.700	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	36	15	May 2024	FY 2023	FFG 65	Oct 2028	36	15	Jul 2024	FY 2024	FFG 66	Aug 2029	36	15	May 2025
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	Ball Aerospace & Technologies	TBD	TBD	Option	1	2.857																																																							
FY 2023	FFG 65	Ball Aerospace & Technologies	TBD	TBD	Option	1	2.914																																																							
FY 2024	FFG 66	Ball Aerospace & Technologies	TBD	TBD	Option	2	3.700																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	FFG 64	Aug 2028	36	15	May 2024																																																									
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FY 2024	FFG 66	Aug 2029	36	15	May 2025																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate			
Equipment Item: NIXIE AN/SLQ-25E						PARM Code: PMS 415	
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	1	2.014	1	2.054	2	6.881	
System Engineering		0.059		0.060		0.200	
Technical Engineering Services		0.239		0.244		0.818	
Other Costs		0.240		0.245		0.822	
Total	1	2.552	1	2.603	2	8.721	
Description: The Torpedo Countermeasures Transmitting Set AN/SLQ-25E (NIXIE) is a passive, electro-acoustic decoy system used to provide deceptive countermeasures against acoustic homing torpedoes.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	FFG 64	Ultra Electronics Ocean Systems	C/CR	TBD	Option	1	2.014
FY 2023	FFG 65	Ultra Electronics Ocean Systems	C/CR	TBD	Option	1	2.054
FY 2024	FFG 66	Ultra Electronics Ocean Systems	C/CR	TBD	Option	2	3.441
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	FFG 64	Aug 2028	36	18	Feb 2024		
FY 2023	FFG 65	Oct 2028	36	18	Apr 2024		
FY 2024	FFG 66	Aug 2029	36	18	Feb 2025		
Competition/Second Source Initiatives: N/A							
Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy					Date: March 2023																																																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1			P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																											
Equipment Item: Afloat Navigation Cyber Hardening, Observation and Response (ANCHOR)					PARM Code: IWS 6																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	1.441	1	1.470	2	9.694																																																								
System Engineering		0.100		0.102		0.675																																																								
Technical Engineering Services		0.014		0.014		0.091																																																								
Other Costs		0.300		0.306		2.017																																																								
Total	1	1.855	1	1.892	2	12.477																																																								
<p>Description: Afloat Navigation Cyber Hardening, Observation and Response (ANCHOR). ANCHOR is an integrated system of functional capabilities required to provide cyber defense and consists of a collection of software and hardware components. The system provides advanced security capabilities to identify and mitigate cybersecurity risks and improve the cybersecurity posture of the Navy through real time protection, detection and reaction.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>DRS</td><td>C/FFP</td><td>TBD</td><td>Option</td><td>1</td><td>1.441</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>TBD</td><td>TBD</td><td>TBD</td><td></td><td>1</td><td>1.470</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>TBD</td><td>TBD</td><td>TBD</td><td></td><td>2</td><td>4.847</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>34</td><td>21</td><td>Jan 2024</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>32</td><td>21</td><td>May 2024</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>31</td><td>21</td><td>Apr 2025</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	DRS	C/FFP	TBD	Option	1	1.441	FY 2023	FFG 65	TBD	TBD	TBD		1	1.470	FY 2024	FFG 66	TBD	TBD	TBD		2	4.847	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	34	21	Jan 2024	FY 2023	FFG 65	Oct 2028	32	21	May 2024	FY 2024	FFG 66	Aug 2029	31	21	Apr 2025
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
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FY 2023	FFG 65	TBD	TBD	TBD		1	1.470																																																							
FY 2024	FFG 66	TBD	TBD	TBD		2	4.847																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
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FY 2023	FFG 65	Oct 2028	32	21	May 2024																																																									
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: Platform Boundary Defense (PBD)					PARM Code: PMW 130																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	0.560	1	0.577	2	3.758																																																								
System Engineering		2.244		2.273		15.005																																																								
Technical Engineering Services		0.533		0.549		3.098																																																								
Other Costs		0.408		0.421		2.332																																																								
Total	1	3.745	1	3.820	2	24.193																																																								
<p>Description:</p> <p>The first of its kind, the Platform Boundary Defense (PBD) System will serve as a catalyst for ensuring Naval Afloat Networks are both Cyber Secure and Cyber Resilient, and that they meet both the DFIA Guidance and IATA Standards. As part of its capability portfolio, the PBD system will bring a Platform-wide Firewall, Intrusion Detection System (IDS), Cyber Condition Monitor and Management system, Security Incident and Event Management (SIEM) system, as well as a dedicated, physically separated, Management Network.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>SSC LANT</td><td>TBD</td><td>TBD</td><td>Various</td><td>1</td><td>0.560</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>SSC LANT</td><td>TBD</td><td>TBD</td><td>Various</td><td>1</td><td>0.577</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>SSC LANT</td><td>TBD</td><td>TBD</td><td>Various</td><td>2</td><td>1.879</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>14</td><td>7</td><td>Nov 2026</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>11</td><td>7</td><td>Apr 2027</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>11</td><td>7</td><td>Feb 2028</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	SSC LANT	TBD	TBD	Various	1	0.560	FY 2023	FFG 65	SSC LANT	TBD	TBD	Various	1	0.577	FY 2024	FFG 66	SSC LANT	TBD	TBD	Various	2	1.879	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	14	7	Nov 2026	FY 2023	FFG 65	Oct 2028	11	7	Apr 2027	FY 2024	FFG 66	Aug 2029	11	7	Feb 2028
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	SSC LANT	TBD	TBD	Various	1	0.560																																																							
FY 2023	FFG 65	SSC LANT	TBD	TBD	Various	1	0.577																																																							
FY 2024	FFG 66	SSC LANT	TBD	TBD	Various	2	1.879																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	FFG 64	Aug 2028	14	7	Nov 2026																																																									
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FY 2024	FFG 66	Aug 2029	11	7	Feb 2028																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate			
Equipment Item: Aircraft Ship Integrated Securing and Traversing System (ASIST)					PARM Code: PMA 251		
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	1	5.093	1	6.294	2	15.399	
System Engineering		0.548		0.559		1.093	
Technical Engineering Services		0.361		0.368		0.720	
Other Costs		0.069		0.070		0.137	
Total	1	6.071	1	7.291	2	17.349	
Description: Aircraft Ship Integrated Secure and Traverse (ASIST) provides safe recovery, securing, straightening, traversing, stowing, and launching of MH-60R and MQ-8C.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	FFG 64	Indal Technologies	C/FFP	TBD	Option	1	5.093
FY 2023	FFG 65	Indal Technologies	C/FFP	TBD	Option	1	6.294
FY 2024	FFG 66	Indal Technologies	C/FFP	TBD	Option	2	7.700
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	FFG 64	Aug 2028	29	24	Mar 2024		
FY 2023	FFG 65	Oct 2028	29	24	May 2024		
FY 2024	FFG 66	Aug 2029	29	24	Mar 2025		
Competition/Second Source Initiatives: N/A							
Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate			
Equipment Item: Internal Communication (IC) Voice					PARM Code: PEO SHIPS AM		
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	1	1.793	1	1.829	2	4.175	
System Engineering		0.174		0.177		0.404	
Technical Engineering Services		0.622		0.635		1.450	
Other Costs		0.489		0.499		1.139	
Total	1	3.078	1	3.140	2	7.168	
Description: IC Voice provides shipboard internal communication consisting of the announcing system, telephones, and wireless radios.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	FFG 64	TBD	TBD	TBD	Option	1	1.793
FY 2023	FFG 65	TBD	TBD	TBD	Option	1	1.829
FY 2024	FFG 66	TBD	TBD	TBD	Option	2	2.088
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	FFG 64	Aug 2028	36	20	Dec 2023		
FY 2023	FFG 65	Oct 2028	36	20	Feb 2024		
FY 2024	FFG 66	Aug 2029	36	20	Dec 2024		
Competition/Second Source Initiatives: N/A							
Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: MK 41 Vertical Launch System (VLS)- 32 Cell					PARM Code: PEO IWS 3L																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
	Major Hardware	121.849	122.286	251.295																																																										
	System Engineering	0.527	0.538	1.253																																																										
	Other Costs	0.324	0.330	0.767																																																										
Total	122.700	123.154	253.315																																																											
<p>Description:</p> <p>The MK 41 Vertical Launch System (VLS) is a Modular, Below Deck Missile Launcher supporting Multiple Warfighting Mission Areas to include AW/ASW/BMD/Land Attack/Strike. It will be a 32 cell launching system that will support FFG(X) warfare and AW requirement for self defense. VLS costs have increased as the system is currently being procured under a Unilateral Contract Agreement until contract negotiations are completed.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Lockheed Martin</td><td>C/FFP</td><td>Various</td><td>Various</td><td>1</td><td>21.849</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Lockheed Martin</td><td>C/FFP</td><td>Various</td><td>Various</td><td>1</td><td>22.286</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Lockheed Martin</td><td>C/FFP</td><td>Various</td><td>Various</td><td>2</td><td>25.648</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>36</td><td>24</td><td>Aug 2023</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>36</td><td>24</td><td>Oct 2023</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>36</td><td>24</td><td>Aug 2024</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Lockheed Martin	C/FFP	Various	Various	1	21.849	FY 2023	FFG 65	Lockheed Martin	C/FFP	Various	Various	1	22.286	FY 2024	FFG 66	Lockheed Martin	C/FFP	Various	Various	2	25.648	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	36	24	Aug 2023	FY 2023	FFG 65	Oct 2028	36	24	Oct 2023	FY 2024	FFG 66	Aug 2029	36	24	Aug 2024
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	Lockheed Martin	C/FFP	Various	Various	1	21.849																																																							
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate																																																										
Equipment Item: MK 48 Gun Weapon System (GWS)					PARM Code: PEO IWS 3C																																																									
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	1	10.975	1	11.194	2	26.501																																																								
System Engineering		0.752		0.767		1.835																																																								
Technical Engineering Services		0.253		0.258		0.617																																																								
Other Costs		0.805		0.822		1.965																																																								
Total	1	12.785	1	13.041	2	30.918																																																								
<p>Description:</p> <p>The MK 48 MOD 2 Gun Weapon System (GWS) is fully integrated with MK 160 MOD 18 Gun Computer System w/ MK 20 MOD 1 Electro Optical Sight System and MK 110 MOD 0 57mm gun. The MK 160 Gun Fire Control System (GFCS) is the standard USN gun fire control system; the MK 20 Electro-Optical Sensor System (EOSS) is the standard gun optical sight used for gun engagements; and the MK 110 is an automated 57mm gun system used for surface and air engagements of hostile targets.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Various</td><td>C/FFP</td><td>Various</td><td>Various</td><td>1</td><td>10.975</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Various</td><td>C/FFP</td><td>Various</td><td>Various</td><td>1</td><td>11.194</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Various</td><td>C/FFP</td><td>Various</td><td>Various</td><td>2</td><td>13.251</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>FFG 64</td><td>Aug 2028</td><td>36</td><td>24</td><td>Aug 2023</td></tr><tr><td>FY 2023</td><td>FFG 65</td><td>Oct 2028</td><td>36</td><td>24</td><td>Oct 2023</td></tr><tr><td>FY 2024</td><td>FFG 66</td><td>Aug 2029</td><td>36</td><td>24</td><td>Aug 2024</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: FY24 cost increase above inflation due to properly pricing GFE systems to align with current requirement.</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	FFG 64	Various	C/FFP	Various	Various	1	10.975	FY 2023	FFG 65	Various	C/FFP	Various	Various	1	11.194	FY 2024	FFG 66	Various	C/FFP	Various	Various	2	13.251	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	FFG 64	Aug 2028	36	24	Aug 2023	FY 2023	FFG 65	Oct 2028	36	24	Oct 2023	FY 2024	FFG 66	Aug 2029	36	24	Aug 2024
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	FFG 64	Various	C/FFP	Various	Various	1	10.975																																																							
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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1				P-1 Line Item Number / Title: 2128 / FFG-Frigate			
Equipment Item: Rolling Airframe Missile (RAM) Guided Missile Launching System- 21 Cell						PARM Code: PEO IWS 11	
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	1	11.108	1	11.330	2	22.772	
System Engineering		0.816		0.832		1.689	
Technical Engineering Services		0.307		0.314		0.638	
Other Costs		0.974		0.993		2.016	
Total	1	13.205	1	13.469	2	27.115	
Description: The Rolling Airframe Missile (RAM) Guided Missile Weapon System (GMWS) is a lightweight, fast reaction, high-firepower, passive, dual-mode (IR and RF) system. The RAM GMWS is a point defense weapon system, designed to engage and destroy incoming Anti-Ship Cruise Missiles (ASCM), helicopters, and fixed wing aircraft, and to engage and intercept surface craft. FFG 62 Class uses the 21-cell variant.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	FFG 64	Raytheon	SS/FFP	Dec 2021	Option	1	11.108
FY 2023	FFG 65	Raytheon	SS/FFP	TBD	Option	1	11.330
FY 2024	FFG 66	Raytheon	SS/FFP	TBD	Option	2	11.386
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	FFG 64	Aug 2028	36	30	Feb 2023		
FY 2023	FFG 65	Oct 2028	32	30	Aug 2023		
FY 2024	FFG 66	Aug 2029	31	30	Jul 2024		
Competition/Second Source Initiatives: N/A							

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships							P-1 Line Item Number / Title: 3010 / LPD Flight II					
ID Code (A=Service Ready, B=Not Service Ready): A				Program Elements for Code B Items: N/A				Other Related Program Elements: 0604454N				
Line Item MDAP/MAIS Code: 542												
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 (<i>Units in Each</i>)	2	-	1	-	-	-	-	-	-	-	-	3
Gross/Weapon System Cost (<i>\$ in Millions</i>)	3,815.637	0.000	1,924.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	251.000	5,990.637
Less PY Advance Procurement (<i>\$ in Millions</i>)	261.100	-	251.000	-	-	-	-	-	-	-	251.000	763.100
Less Cost To Complete (<i>\$ in Millions</i>)	44.000	-	-	-	-	-	-	-	-	-	-	44.000
Less Subsequent Year Full Funding (<i>\$ in Millions</i>)	60.636	-	-	-	-	-	-	-	-	-	-	60.636
Less Prior Year Full Funding (<i>\$ in Millions</i>)	524.100	-	-	-	-	-	-	-	-	-	-	524.100
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,925.801	0.000	1,673.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	4,598.801
Plus Subsequent Year Full Funding (<i>\$ in Millions</i>)	-	60.636	-	-	-	-	-	-	-	-	-	60.636
Plus Prior Year FF (<i>\$ in Millions</i>)	524.100	-	-	-	-	-	-	-	-	-	-	524.100
Full Funding TOA (<i>\$ in Millions</i>)	3,449.901	60.636	1,673.000	-	-	-	-	-	-	-	-	5,183.537
Plus CY Advance Procurement (<i>\$ in Millions</i>)	263.100	250.000	250.000	-	-	-	-	-	-	-	-	763.100
Plus Cost To Complete (<i>\$ in Millions</i>)	-	-	-	-	-	-	22.200	20.000	1.800	-	-	44.000
Total Obligation Authority (<i>\$ in Millions</i>)	3,713.001	310.636	1,923.000	0.000	0.000	0.000	22.200	20.000	1.800	0.000	-	5,990.637
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	-	-	11.888	8.480	-	8.480	49.386	58.752	56.970	67.630	248.422	501.528
Total (<i>\$ in Millions</i>)	3,713.001	310.636	1,934.888	8.480	-	8.480	71.586	78.752	58.770	67.630	248.422	6,492.165
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	1,907.819	-	1,924.000	-	-	-	-	-	-	-	-	1,996.879

Description:

The LPD 17 Flight II is expected to functionally replace LSD-41 Class ships and LSD-49 Class ships for embark, transport, control, insert, sustainment, and extract of Marine Air-Ground Task Force elements and supporting forces by helicopters, landing craft, and amphibious vehicles.

Per signed Acquisition Decision Memorandum, LPD 17 Flight II will meet the Capabilities Development Document for LX(R) and shall subsume all previous LX(R) efforts. Name change endorsed in JROCM 093-21, from "Amphibious Ship Replacement LX(R)" to "LPD 17 San Antonio Class Amphibious Transport Dock FLT II." LPD 30 is the first ship of LPD 17 Flight II.

Note:
FY23 Appropriation Act provided a congressional add of \$250M for LPD 33 advance procurement funding.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy				Date: March 2023																																																							
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships			P-1 Line Item Number / Title: 3010 / LPD Flight II																																																								
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Design Schedule	Start / Issue	Complete / Response	Reissue		Reissue Complete / Response																																																						
Issue Date for TLR	N/A	N/A																																																									
Issue Date for TLS	N/A	N/A																																																									
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Design Agent	Huntington Ingalls Industries																																																										
Classification of Cost Estimate: CLASS C																																																											
Footnotes: ⁽¹⁾ Note: LPD 30 & 31 have experienced COVID-related schedule impacts, which has resulted in ship milestone date changes. LPD 32 delivery date shifted to reflect negotiated timeline.																																																											

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 03 / 1P-1 Line Item Number / Title:
3010 / LPD Flight II

Cost Categories (^(†) indicates the presence of a P-8a)	FY 2018		FY 2021		FY 2023	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	1		1		1	
Basic Construction/Conversion		1,503.891		1,530.981		1,560.000
Change Orders		31.985		35.000		10.000
Electronics (^(†))		211.048		256.795		230.639
Hull, Mechanical, and Electrical (HM&E) (^(†))		16.400		23.022		18.655
Ordnance (^(†))		83.876		102.838		97.032
Other Cost		9.000		10.801		7.674
Total Ship Estimate		1,856.200		1,959.437		1,924.000
Less Advance Procurement FY 2016		14.000		-		-
Less Advance Procurement FY 2019		-		247.100		-
Less Advance Procurement FY 2021		-		-		1.000
Less Advance Procurement FY 2022		-		-		250.000
Less Subsequent Full Funding FY 2022		-		60.636		-
Less Cost to Complete FY 2025		22.200		-		-
Less Cost to Complete FY 2026		20.000		-		-
Less Cost to Complete FY 2027		-		1.800		-
Less Prior Year Full Funding FY 2020		-		524.100		-
Net P-1 Funding		1,800.000		1,125.801		1,673.000

Remarks:

Basic:

1. Navy added \$27.6M of additional cost to complete funding to LPD 30 to support COVID-related schedule delays.
2. Realigned \$18M from Electronics to Basic to support negotiated priced option for LPD 32 Detail Design & Construction (DD&C) award.

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 03 / 1

P-1 Line Item Number / Title:
3010 / LPD Flight II

Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
LPD FLT II 30 ⁽¹⁾	HUNTINGTON INGALLS INDUSTRIES	2018	Mar 2019	Mar 2020	May 2026
LPD FLT II 31	HUNTINGTON INGALLS INDUSTRIES	2021	Apr 2020	Sep 2022	Mar 2028
LPD FLT II 32	HUNTINGTON INGALLS INDUSTRIES	2023	Jun 2023	Jul 2024	Sep 2029

Footnotes:
⁽¹⁾ Note: LPD 30 & 31 have experienced COVID-related schedule impacts, which has resulted in ship milestone date changes. LPD 32 delivery date shifted to reflect negotiated timeline.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3010 / LPD Flight II		
Electronics	FY 2021		FY 2023	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
Mission Systems	1	45.566	1	47.861
C4ISR	1	91.682	1	92.855
Ship Self Defense System (SSDS)	1	23.685	1	24.878
Cooperative Engagement Capability (CEC)	1	11.516	1	12.096
Interrogator System IFF (Identification Friend or Foe)	1	6.277	1	6.593
AN/SLQ-32(V)6 Surface Electronic Warfare Improvement Program (SEWIP)	1	13.553	1	14.236
P-35 Items Subtotal		192.279		198.519
Major Items				
Advanced Training Domain (ATD)	1	1.328	1	1.395
AN/WSN-7(RLGN)	1	4.120	1	4.328
Nulka Decoy Launching System (DLS)	1	1.506	1	1.582
Amphibious Assault Direction System (AADS)	1	1.102	1	1.158
RADIAC	1	0.109	1	0.114
AN/UQN-10	1	0.216	1	0.227
DHYSL	1	0.396	1	0.416
Electronic Charting Display and Information Systems-Navy (ECDIS-N)	1	1.859	1	1.953
Major Items Subtotal		10.636		11.173
Other Cost Elements				
Miscellaneous Electronics		49.492		16.338
IWS CSI		4.388		4.609
Other Cost Elements Subtotal		53.880		20.947
Total Electronics		256.795		230.639
Remarks:				
LPD FLT II updated GFE baseline reflects capability reconciliation across warfare systems and C4I systems.				
Torpedo counter measures transmitting set (Nixie) removed from LPD 31 and LPD 32. Both ships will be constructed with space and weight considerations to add system in the future. LPD 31 FY23 budget costs (\$4.601M) reallocated to support updated GFE costs estimates for C4ISR and EASR. LPD 32 FY 23 budget costs (\$4.832M) reallocated to support contract option value in BASIC.				
LPD 32 funds in Miscellaneous Electronics were realigned to Basic Construction in support of the DD&C negotiated priced option.				

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3010 / LPD Flight II		
Hull, Mechanical, and Electrical (HM&E)	FY 2021		FY 2023	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Major Items				
Boats (Rigid Inflatable Boat, 7 meter)	1	0.654	1	0.687
Forklift Trucks	7	2.196	7	2.307
Chemical Warfare Detectors	1	0.945	1	0.980
Military Payroll System	1	0.622	1	0.653
Motor Operated Pilot Valve (MOPV)	1	0.790	1	0.814
Oily Water Separator	1	0.312	1	0.328
Plastic Waste Processing EQP	1	0.758	1	0.796
Unclassified Video System (UVS)	1	2.541	1	2.668
Multi-Function Display and Lighting Mitigation		0.800		-
Voyage Data Recorder		1.000		-
Navy enterprise Remote Monitoring (eRM)		0.415		0.415
Major Items Subtotal		11.033		9.648
Other Cost Elements				
Miscellaneous HM&E		11.989		9.007
Other Cost Elements Subtotal		11.989		9.007
Total Hull, Mechanical, and Electrical (HM&E)		23.022		18.655

Remarks:
The following systems were previously reported in Miscellaneous HM&E and are now reported within Major Items for consistency; Enhanced Maritime Biological Detector (included in Chemical Warfare Detectors), Motor Operated Pilot Valve (MOPV), and Navy enterprise Remote Monitoring (Navy eRM) which replaced Integrated Condition Assessment System (ICAS).

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1			P-1 Line Item Number / Title: 3010 / LPD Flight II		
Ordnance	FY 2021		FY 2023		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
P-35 Items					
RAM BLOCK II	2	21.766	2	22.862	
MK 46 GUN	2	8.861	2	9.308	
AN/SPQ-9B Radar Set	1	6.974	1	7.325	
EASR	1	38.489	1	39.040	
P-35 Items Subtotal		76.090		78.535	
Major Items					
ASGSI/HOSS/MWS Fit Control & Inst Land Sys	1	3.451	1	3.625	
ORDNANCE HANDLING EQUIPMENT	1	0.449	1	0.472	
Next Generation Surface Search Radar (NGSSR)	1	2.927	1	3.074	
Major Items Subtotal		6.827		7.171	
Other Cost Elements					
MISCELLANEOUS ORDNANCE		19.921		11.326	
Other Cost Elements Subtotal		19.921		11.326	
Total Ordnance		102.838		97.032	

Remarks:
LPD 31 EASR increase reflects updated GFE cost estimates.

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: Mission Systems						PARM Code: N/A	
P-35 Category	FY 2021		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	43.406	1	45.592			
Other Costs		2.160		2.269			
Total	1	45.566	1	47.861			
Description: Description: Mission Systems is a microcomputer-based integration of shipboard control electronics; Engineering Control System (ECS), Ship Control System (SCS), Hull Mechanical & Electrical (HM&E) Network, Navigation Network. Mission systems and associated integration will be provided by Government supplied material and services							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	Various	SS/FFP	Jan 2022	Various	1	43.406
FY 2023	LPD FLT II 32	Various	SS/FFP	TBD	Various	1	45.592
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	37	24	Feb 2023		
FY 2023	LPD FLT II 32	Sep 2029	37	24	Aug 2024		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: C4ISR						PARM Code: N/A	
P-35 Category	FY 2021		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	49.998	1	50.016			
Spares		2.050		2.100			
Technical Engineering Services		7.441		7.527			
Ancillary Equipment		0.270		0.274			
Documentation and Systems Engineering		5.486		5.601			
Other Appropriate Costs		10.188		10.615			
Turnkey		16.249		16.722			
Total	1	91.682	1	92.855			
Description: C4ISR systems provide the link between the ship, the command hierarchy, and other units of the operating forces. The capability is provided by a turn-key Radio Communication System (line-of sight, beyond line of sight, and SATCOM), CANES, GPNTS, and associated AIT/SOVT services support provided at the shipbuilding location. LPD 31's C4ISR requirement increase reflects updated GFE costs estimates, specifically for configuration changes that initially field on LPD 31 and have additional NRE on that hull (CANES Hardware 2.0 and supporting Distributed Systems).							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	Various	Various	Various	Various	1	49.998
FY 2023	LPD FLT II 32	Various	Various	Various	Various	1	50.016
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	16	16	Jul 2025		
FY 2023	LPD FLT II 32	Sep 2029	16	16	Jan 2027		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: Ship Self Defense System (SSDS)						PARM Code: N/A	
P-35 Category	FY 2021		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	15.905	1	16.706			
Spares		1.465		1.539			
Technical Engineering Services		0.599		0.629			
Other Costs		2.931		3.079			
Documentation and Systems Engineering		2.785		2.925			
Total	1	23.685	1	24.878			
Description: Ship Self Defense System Mark 2 is microcomputer-based, self-defense coordination system that integrates and automates multiple sensors, self-defense weapons, and softkill systems to provide quick reaction combat capability against anti-ship cruise missile threats.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	DRS	C/FP	Various	New	1	15.905
FY 2023	LPD FLT II 32	TBD	TBD	TBD	New	1	16.706
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	17	13	Sep 2025		
FY 2023	LPD FLT II 32	Sep 2029	17	13	Mar 2027		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: Cooperative Engagement Capability (CEC)						PARM Code: N/A	
P-35 Category	FY 2021		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	8.677	1	9.114			
Technical Engineering Services		0.462		0.485			
Documentation and Systems Engineering		0.528		0.555			
Other Costs		1.849		1.942			
Total	1	11.516	1	12.096			
Description: Cooperative Engagement Capability (CEC) coordinates all anti-warfare sensors into single, real time, fire control quality composite track which improves battle force air defense. Production of Planar Array Antenna Assembly (PAAA) production has restarted.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	Raytheon	SS/FFP	Various	Various	1	8.677
FY 2023	LPD FLT II 32	Raytheon	SS/FFP	Various	Various	1	9.114
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	24	18	Sep 2024		
FY 2023	LPD FLT II 32	Sep 2029	24	18	Mar 2026		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: Interrogator System IFF (Identification Friend or Foe)						PARM Code: N/A	
P-35 Category	FY 2021		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	5.552	1	5.831			
Spares		0.155		0.163			
Technical Engineering Services		0.124		0.130			
Other Costs		0.288		0.303			
Documentation and Systems Engineering		0.158		0.166			
Total	1	6.277	1	6.593			
Description: The Transponder Set is an Automatic Identification and Monitoring System (AIMS) Identification Friend or Foe (IFF) system that receives interrogation signals from air, surface, and land IFF - equipped units and automatically replies with a coded response signal that provides ownship position and identification.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	Various	C/FP	Various	New	1	5.552
FY 2023	LPD FLT II 32	Various	C/FP	Various	New	1	5.831
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	6	30	Mar 2025		
FY 2023	LPD FLT II 32	Sep 2029	6	30	Sep 2026		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: AN/SLQ-32(V)6 Surface Electronic Warfare Improvement Program (SEWIP)						PARM Code: N/A	
P-35 Category	FY 2021		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	11.426	1	12.002			
Spares		0.405		0.425			
Technical Engineering Services		0.151		0.159			
Other Costs		0.680		0.714			
Documentation and Systems Engineering		0.891		0.936			
Total	1	13.553	1	14.236			
Description: The AN/SLQ-32(V)6 Surface Electronic Warfare Improvement Program (SEWIP) is a shipboard system that provides a full suite of Electronic Warfare capabilities designed to protect against anti-cruise ship missile threats.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	Lockheed	C/FFP	TBD	Various	1	11.426
FY 2023	LPD FLT II 32	Lockheed	C/FFP	TBD	Various	1	12.002
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	24	24	Mar 2024		
FY 2023	LPD FLT II 32	Sep 2029	24	24	Sep 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: RAM BLOCK II						PARM Code: N/A	
P-35 Category	FY 2021		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	2	19.033	2	19.991			
Spares		0.137		0.144			
Technical Engineering Services		0.320		0.336			
Other Costs		1.082		1.137			
Documentation and Systems Engineering		1.194		1.254			
Total	2	21.766	2	22.862			
Description: The Rolling Airframe Missile (RAM) Block 2 system is a short-range, fast-reaction, high-firepower, lightweight weapon designed to destroy incoming anti-ship cruise missiles.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	Raytheon	C/FFP	Aug 2022	Option	2	9.517
FY 2023	LPD FLT II 32	Raytheon	C/FFP	TBD	Option	2	9.996
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	22	24	May 2024		
FY 2023	LPD FLT II 32	Sep 2029	22	24	Nov 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: MK 46 GUN						PARM Code: N/A	
P-35 Category	FY 2021			FY 2023			
	Qty (Each)	Total Cost (\$ M)		Qty (Each)	Total Cost (\$ M)		
Major Hardware	2	8.628		2	9.063		
Technical Engineering Services		0.233			0.245		
Total	2	8.861		2	9.308		
Description: The MK 46 Gun is a remotely operated naval gun system using a high velocity cannon and second-generation thermal day-night sight for close-in ship's protection.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	General Dynamics Land Systems	C/FFP	Sep 2022	New	2	4.314
FY 2023	LPD FLT II 32	General Dynamics Land Systems	C/FFP	TBD	New	2	4.532
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	24	18	Sep 2024		
FY 2023	LPD FLT II 32	Sep 2029	24	18	Mar 2026		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: AN/SPQ-9B Radar Set						PARM Code: N/A	
P-35 Category	FY 2021		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	4.457	1	4.681			
Spares		0.412		0.433			
Technical Engineering Services		0.751		0.789			
Other Costs		0.823		0.864			
Documentation and Systems Engineering		0.531		0.558			
Total	1	6.974	1	7.325			
Description: The AN/SPQ-9B is a high resolution, X-band, narrow beam radar that provides both air and surface tracking information.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	DRS	C/FFP	Various	New	1	4.457
FY 2023	LPD FLT II 32	DRS	C/FFP	TBD	New	1	4.681
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	24	24	Mar 2024		
FY 2023	LPD FLT II 32	Sep 2029	24	24	Sep 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Equipment Item: EASR						PARM Code: N/A	
P-35 Category	FY 2021		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	1	24.361	1	25.589			
Spares		1.160		1.218			
Technical Engineering Services		3.458		3.632			
Other Costs		8.151		7.174			
Documentation and Systems Engineering		1.359		1.427			
Total	1	38.489	1	39.040			
Description: The AN/SPY-6(V)2 Enterprise Air Surveillance Radar (EASR) is the Air Search Radar. LPD 31's EASR other costs increase (\$1,321K) reflects updated GFE costs estimates to reflect EASR spares quantity and realized price increases.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2021	LPD FLT II 31	Raytheon	C/FPIF	May 2022	New	1	24.361
FY 2023	LPD FLT II 32	Raytheon	C/FPIF	Feb 2023	New	1	25.589
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2021	LPD FLT II 31	Mar 2028	18	27	Jun 2024		
FY 2023	LPD FLT II 32	Sep 2029	18	27	Dec 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy							Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II						
First System (2024) Award Date: June 2023		First System (2024) Completion Date: February 2029				Interval Between Systems: 0 Months				
Cost Elements		Production Leadtime (Months)	When Required* (Months)	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
LPD 32 Advance Procurement										
Basic Construction		-	-	240.000	-	0.000	-	-	-	-
Electronics		-	-	4.100	-	0.000	-	-	-	-
Ordnance		-	-	5.900	-	0.000	-	-	-	-
Total: LPD 32 Advance Procurement				250.000	-	-	-	-	-	-
LPD 33 Advance Procurement										
Basic Construction		-	-	-	250.000	0.000	-	-	-	-
Total: LPD 33 Advance Procurement				-	250.000	-	-	-	-	-
Total Advance Procurement/Obligation Authority				250.000	250.000	-	-	-	-	-

*Note: "When Required" is the number of months required before ship delivery.

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy					Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3010 / LPD Flight II			
Cost Elements	FY 2024						
	Production Leadtime (Months)	When Required* (Months)	Unit Cost (\$ M)	Contract Forecast Date	2024 Qty (Each)	For FY	Total Cost Request (\$ M)
LPD 32 Advance Procurement							
Basic Construction	-	-	-		-		0.000
Electronics	-	-	-		-		0.000
Ordnance	-	-	-		-		0.000
Total: LPD 32 Advance Procurement							-
LPD 33 Advance Procurement							
Basic Construction	-	-	-		-		0.000
Total: LPD 33 Advance Procurement							-
Total Advance Procurement/Obligation Authority							-
Description: Advance Procurement funding will be used to purchase Long Lead Time Material (LLTM) and maintain schedule.							
*Note: "When Required" is the number of months required before ship delivery.							

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships							P-1 Line Item Number / Title: 3036 / LPD-17					
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 (<i>Units in Each</i>)	13	-	-	-	-	-	-	-	-	-	-	13
Gross/Weapon System Cost (<i>\$ in Millions</i>)	21,413.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	21,413.011
Less PY Advance Procurement (<i>\$ in Millions</i>)	1,635.736	-	-	-	-	-	-	-	-	-	-	1,635.736
Less Cost To Complete (<i>\$ in Millions</i>)	2,169.127	-	-	-	-	-	-	-	-	-	-	2,169.127
Less Subsequent Year Full Funding (<i>\$ in Millions</i>)	869.394	-	-	-	-	-	-	-	-	-	-	869.394
Less Prior Year Full Funding (<i>\$ in Millions</i>)	1,000.000	-	-	-	-	-	-	-	-	-	-	1,000.000
Less Hurricane (<i>\$ in Millions</i>)	1,623.280	-	-	-	-	-	-	-	-	-	-	1,623.280
Less Transfer (<i>\$ in Millions</i>)	279.031	-	-	-	-	-	-	-	-	-	-	279.031
Net Procurement (P-1) (<i>\$ in Millions</i>)	13,836.443	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	13,836.443
Plus Subsequent Year Full Funding (<i>\$ in Millions</i>)	869.394	-	-	-	-	-	-	-	-	-	-	869.394
Plus Prior Year FF (<i>\$ in Millions</i>)	1,000.000	-	-	-	-	-	-	-	-	-	-	1,000.000
Full Funding TOA (<i>\$ in Millions</i>)	15,705.837	-	-	-	-	-	-	-	-	-	-	15,705.837
Plus CY Advance Procurement (<i>\$ in Millions</i>)	1,635.736	-	-	-	-	-	-	-	-	-	-	1,635.736
Plus Cost To Complete (<i>\$ in Millions</i>)	2,081.186	53.682	17.739	16.520	-	16.520	-	-	-	-	-	2,169.127
Plus Transfer (<i>\$ in Millions</i>)	279.031	-	-	-	-	-	-	-	-	-	-	279.031
Plus Hurricane (<i>\$ in Millions</i>)	1,623.280	-	-	-	-	-	-	-	-	-	-	1,623.280
Plus Hurricane Supplemental (OF & PD) (<i>\$ in Millions</i>)	25.970	-	-	-	-	-	-	-	-	-	-	25.970
Total Obligation Authority (<i>\$ in Millions</i>)	21,325.070	53.682	17.739	16.520	0.000	16.520	0.000	0.000	0.000	0.000	-	21,413.011
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	1,032.650	58.251	36.755	31.281	-	31.281	16.114	-	-	-	-	1,175.051
Total (<i>\$ in Millions</i>)	22,383.690	111.933	54.494	47.801	-	47.801	16.114	-	-	-	-	22,614.032
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	1,647.155	-	-	-	-	-	-	-	-	-	-	1,647.155
Description: Functional replacement for LKA 113, LPD 4, LSD 36, and LST 1179 classes of Amphibious Ships in embarking, transporting, and landing elements of a Marine landing force in an assault by helicopters, landing craft, amphibious vehicles, and by a combination of these methods to conduct primary amphibious warfare missions.												

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships		P-1 Line Item Number / Title: 3036 / LPD-17	
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			
<div>Characteristics:<div>-</div><div><div>Length Overall208.5 m684 ft</div><div>Beam31.9 m105 ft</div><div>Displacement25.3 lmt24.9 klt</div><div>Draft7.0 m23 ft</div></div></div> <div>Production Status:<div>LPD 29</div><div><div>Contract Award DateFeb 2018</div><div>Months to Completion</div><div><div>a) Award to Delivery71 months</div><div>b) Construction Start to Delivery66 months</div></div><div>Delivery DateJan 2024</div><div>Completion Of Fitting OutSep 2024</div><div>Obligation Work Limit DateAug 2025</div></div></div> <div><div>Design Schedule</div><div><div>Issue Date for TLRN/A</div><div>Issue Date for TLSN/A</div><div>Preliminary DesignJan 1993</div><div>Contract DesignDec 1993</div><div>Detail DesignDec 1996</div><div>Request for ProposalsN/A</div><div>Design Agent</div></div><div><div>Complete / Response</div><div><div>Sep 1988</div><div>N/A</div><div>Nov 1993</div><div>Mar 1996</div><div>Jul 2002</div><div>N/A</div></div></div><div><div>Reissue</div></div><div><div>Reissue Complete / Response</div></div></div> <div>Classification of Cost Estimate: CLASS C</div>			

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3036 / LPD-17	
Cost Categories	FY 2017		
	Qty (Each)	Total Cost (\$ M)	
Plan Costs	1		
Basic Construction/Conversion		1,465.241	
Change Orders		29.000	
Electronics		243.676	
Hull, Mechanical, and Electrical (HM&E)		21.494	
Ordnance		107.530	
Other Cost		7.000	
Total Ship Estimate		1,873.941	
Less Cost to Complete FY 2022		53.682	
Less Cost to Complete FY 2023		17.739	
Less Cost to Complete FY 2024		16.520	
Net P-1 Funding		1,786.000	

Remarks:
BASIC: The Department added \$16.520M of FY24 Completion of Prior Year Shipbuilding Programs funding to LPD 29 for economic price adjustments.

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1			P-1 Line Item Number / Title: 3036 / LPD-17		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
LPD 29	HUNTINGTON INGALLS INDUSTRIES	2017	Feb 2018	Jul 2018	Jan 2024

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships							P-1 Line Item Number / Title: 3039 / Expeditionary Sea Base (ESB)					
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 (<i>Units in Each</i>)	7	1	-	-	-	-	-	-	-	-	-	8
Gross/Weapon System Cost (<i>\$ in Millions</i>)	4,115.411	650.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	4,765.411
Less PY Advance Procurement (<i>\$ in Millions</i>)	179.700	73.000	-	-	-	-	-	-	-	-	-	252.700
Less Cost To Complete (<i>\$ in Millions</i>)	38.000	-	-	-	-	-	-	-	-	-	-	38.000
Less Subsequent Year Full Funding (<i>\$ in Millions</i>)	162.500	-	-	-	-	-	-	-	-	-	-	162.500
Net Procurement (P-1) (<i>\$ in Millions</i>)	3,735.211	577.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	4,312.211
Plus Subsequent Year Full Funding (<i>\$ in Millions</i>)	162.500	-	-	-	-	-	-	-	-	-	-	162.500
Full Funding TOA (<i>\$ in Millions</i>)	3,897.711	577.000	-	-	-	-	-	-	-	-	-	4,474.711
Plus CY Advance Procurement (<i>\$ in Millions</i>)	252.700	-	-	-	-	-	-	-	-	-	-	252.700
Plus Cost To Complete (<i>\$ in Millions</i>)	38.000	-	-	-	-	-	-	-	-	-	-	38.000
Total Obligation Authority (<i>\$ in Millions</i>)	4,188.411	577.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	4,765.411
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	139.656	15.449	23.830	8.595	-	8.595	4.777	18.700	7.372	-	-	218.379
Total (<i>\$ in Millions</i>)	4,328.067	592.449	23.830	8.595	-	8.595	4.777	18.700	7.372	-	-	4,983.790
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	587.916	650.000	-	-	-	-	-	-	-	-	-	595.676

Description:
The Expeditionary Mobile Base (ESB) (formerly MLP Afloat Forward Staging Base (AFSB)) will serve as a dedicated Naval Afloat Forward Staging Base, optimized to support naval assets in a variety of missions rather than independently modifying ships-of-opportunity as required to meet these roles. The ESB retains sealift capabilities inherent to the Class through cargo transportation and distribution, but provides enhanced aviation, berthing, small boat handling, and command and control capabilities to meet a broader mission set. The ESB provides the Combatant Commanders flexibility to respond to immediate threats and host task organized forces, including Airborne Mine Countermeasures and Special Forces to confront irregular challenges and counter-terrorism. This includes enhanced logistics and UNREP capability (receive only) and C4I capability to support future missions.

Note:
1) The amounts in the Prior Years column includes the NDSF MPF,F MLP BLI 00401 Procurement Costs for Expeditionary Transport Dock (ESD) 1, ESD 2, and ESB 3 as well as SCN BLI 3039 for the ESB 4, 5, 6, 7 and ESB 8 Advanced Procurement.

2) The Outfitting and Post Delivery amounts in the Prior Years column represent NDSF BLI 5000 for ESD 1, ESD 2, and ESB 3 as well as SCN BLI 5110 for the ESB 4 and ESB 5; and ESB 6 outfitting.

3) The Department is requesting \$107.4 million in FY 2023 funds to reflect revised economic assumptions in accordance with the General Provision Section 8121 of the Department of Defense Appropriations Act, 2023.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships		P-1 Line Item Number / Title: 3039 / Expeditionary Sea Base (ESB)		
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				
<div>Characteristics:Nominal Requirements</div> <div>Length Overall255M</div> <div>Beam50M</div> <div>Displacement28879 TONS</div> <div>Draft9.1M</div> <div>Production Status:ESB 7ESB 8</div> <div>Contract Award DateAug 2019Jul 2022</div> <div>Months to Completion</div> <div>a) Award to Delivery61 months47 months</div> <div>b) Construction Start to Delivery33 months34 months</div> <div>Delivery DateSep 2024Jun 2026</div> <div>Completion Of Fitting OutDec 2024Sep 2026</div> <div>Obligation Work Limit DateNov 2025Aug 2027</div> <div>Design ScheduleStart / IssueComplete / ResponseReissueReissue Complete / Response</div> <div>Issue Date for TLRN/AN/A</div> <div>Issue Date for TLSN/AN/A</div> <div>Preliminary DesignSep 2009Dec 2009</div> <div>Contract DesignDec 2009Aug 2010</div> <div>Detail DesignAug 2010Nov 2011</div> <div>Request for ProposalsN/AN/A</div> <div>Design Agent</div> <div>Classification of Cost Estimate: Budget Quality Class</div>				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3039 / Expeditionary Sea Base (ESB)		
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2019		FY 2022	
	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>
Plan Costs	1		1	
Basic Construction/Conversion		578.639		582.380
Change Orders		6.000		5.800
Electronics ^(†)		42.409		43.257
Hull, Mechanical, and Electrical (HM&E)		14.712		14.463
Other Cost		5.240		4.100
Total Ship Estimate		647.000		650.000
Less Advance Procurement FY 2021		-		73.000
Net P-1 Funding		647.000		577.000

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1			P-1 Line Item Number / Title: 3039 / Expeditionary Sea Base (ESB)		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
ESB 7	NASSCO	2019	Aug 2019	Dec 2021	Sep 2024
ESB 8	NASSCO	2022	Jul 2022	Aug 2023	Jun 2026

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3039 / Expeditionary Sea Base (ESB)	
Electronics	FY 2022		
	Qty (Each)	Total Cost (\$ M)	
P-35 Items			
C4ISR	1	26.769	
AVIATION ELECTRONICS	1	16.488	
P-35 Items Subtotal		43.257	
Total Electronics		43.257	

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3039 / Expeditionary Sea Base (ESB)			
Equipment Item: C4ISR						PARM Code: N/A	
P-35 Category				FY 2022			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	15.424		
Spares					1.937		
System Engineering					5.810		
Technical Engineering Services					1.107		
Other Costs					2.491		
Total				1	26.769		
<p>Description: C4ISR items consist of equipment which is in a containerized environment for secure storage and operation of ship's C2 equipment (Next Generation Wideband Communications, SMIS, (classified and unclassified networks). Additional cryptographic equipment above the equipment provided with SMIS, Military radios to provide VHF, UHF Line of Site, and UHF SATCOM, Commercial Broadband Satellite Program (CBSP) for wideband SATCOM to provide voice and data communications to the shore.</p> <p>A Navy network consisting of a rack of electronic boxes that will provide NIPRNET, SIPRNET and CENTRIX plus additional hardware and software to support Military Detachment functions, laptops and printers to outfit several added spaces supporting embarked units: briefing room, tactical operations center, planning room, intel room, training center and communication room. The infrastructure to support installation of a HF radio.</p>							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	ESB 8	Booz, Allen and Hamilton (BAH)	C/FFP	Various	Various	1	15.424
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	ESB 8	Mar 2026	19	12	Aug 2023		
<p>Competition/Second Source Initiatives: N/A</p>							
<p>Remarks: 1. BAH is prime contractor with several other contractors. NSWCC Panama City is the coordinating activity for the C4ISR system. 2. C4ISR: Cost for the ESB 5 and follow ships include the procurement, installation and testing of additional radios and antennas, satellite communication terminals, and network capabilities in support of the Special Operations Forces (SOF) capability.</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3039 / Expeditionary Sea Base (ESB)																															
Equipment Item: AVIATION ELECTRONICS						PARM Code: N/A																													
P-35 Category				FY 2022																															
				Qty (Each)	Total Cost (\$ M)																														
Major Hardware				1	13.173																														
Spares					0.542																														
System Engineering					0.343																														
Technical Engineering Services					1.140																														
Technical Data					0.132																														
Other Costs					1.158																														
Total				1	16.488																														
<p>Description:</p> <p>Aviation Electronics consists of a Moriah wind measuring system to support helicopter operations, a Tactical Air Navigation System (TACAN) to provide a navigation beacon for aircraft, Advanced Stabilized Glide Slope Indicator (ASGSI) and Visual Landing Aids (VLA).</p> <p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2022</td><td>ESB 8</td><td>Various</td><td>Various</td><td>Various</td><td>Various</td><td>1</td><td>13.173</td></tr></table> <p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2022</td><td>ESB 8</td><td>Mar 2026</td><td>17</td><td>14</td><td>Aug 2023</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p> <p>Remarks:</p> <p>1. Aviation Electronics: Aviation navigation and landing system electronics.</p> <p>2. Contract Data and Delivery Date information are estimated and provided based on planned execution.</p> <p>3. Cost for the ESB 5 and follow ships include the procurement, installation and test infrastructure of antennas and control systems for the Air Search Radar, Small Tactical Unmanned Aerial System (STUAS), MQ-8C Ground Control Station (GCS) and Fire Scout UAV system in support of the Special Operations Forces (SOF) capability.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	ESB 8	Various	Various	Various	Various	1	13.173	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	ESB 8	Mar 2026	17	14	Aug 2023
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2022	ESB 8	Various	Various	Various	Various	1	13.173																												
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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy								Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships						P-1 Line Item Number / Title: 3041 / LHA Replacement						
ID Code (A=Service Ready, B=Not Service Ready): A			Program Elements for Code B Items: N/A					Other Related Program Elements: 0604567N				
Line Item MDAP/MAIS Code: 333												
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 (<i>Units in Each</i>)	3	-	1	-	-	-	-	-	1	-	-	5
Gross/Weapon System Cost (<i>\$ in Millions</i>)	10,357.333	0.000	3,834.256	0.000	0.000	0.000	0.000	0.000	4,213.965	0.000	-	18,405.554
Less PY Advance Procurement (<i>\$ in Millions</i>)	1,148.123	-	350.000	-	-	-	-	-	734.918	-	-	2,233.041
Less Cost To Complete (<i>\$ in Millions</i>)	338.788	-	-	-	-	-	-	-	-	-	-	338.788
Less Subsequent Year Full Funding (<i>\$ in Millions</i>)	5,001.088	-	1,830.149	-	-	-	-	-	-	-	-	6,831.237
Less Prior Year Full Funding (<i>\$ in Millions</i>)	-	-	568.637	-	-	-	-	-	-	-	-	568.637
Less Hurricane (<i>\$ in Millions</i>)	202.000	-	-	-	-	-	-	-	-	-	-	202.000
Net Procurement (P-1) (<i>\$ in Millions</i>)	3,667.334	0.000	1,085.470	0.000	0.000	0.000	0.000	0.000	3,479.047	0.000	-	8,231.851
Plus Subsequent Year Full Funding (<i>\$ in Millions</i>)	5,001.088	-	-	1,830.149	-	1,830.149	-	-	-	-	-	6,831.237
Plus Prior Year FF (<i>\$ in Millions</i>)	500.000	68.637	-	-	-	-	-	-	-	-	-	568.637
Full Funding TOA (<i>\$ in Millions</i>)	9,168.422	68.637	1,085.470	1,830.149	-	1,830.149	-	-	3,479.047	-	-	15,631.725
Plus CY Advance Procurement (<i>\$ in Millions</i>)	1,498.123	-	289.000	-	-	-	78.518	367.400	-	-	-	2,233.041
Plus Cost To Complete (<i>\$ in Millions</i>)	247.788	-	19.300	-	-	-	71.700	-	-	-	-	338.788
Plus Hurricane (<i>\$ in Millions</i>)	202.000	-	-	-	-	-	-	-	-	-	-	202.000
Total Obligation Authority (<i>\$ in Millions</i>)	11,116.333	68.637	1,393.770	1,830.149	0.000	1,830.149	150.218	367.400	3,479.047	0.000	-	18,405.554
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	212.213	4.418	21.459	24.726	-	24.726	36.169	22.085	-	-	-	321.070
Total (<i>\$ in Millions</i>)	11,328.546	73.055	1,415.229	1,854.875	-	1,854.875	186.387	389.485	3,479.047	-	-	18,726.624
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	3,452.444	-	3,834.256	-	-	-	-	-	4,213.965	-	-	3,681.111
Description: The LHA(R) Program replaces the Tarawa Class (LHA 1) Amphibious Assault Class Ships and the retiring Wasp Class (LHD 1) Amphibious Assault Class Ships. The LHA(R) Class Program ensures that the Amphibious Fleet remains capable of Expeditionary Warfare well into the 21st Century and provides for an affordable and sustainable Amphibious Ship development program. The LHA(R) Class provides forward presence and power projection as an integral part of joint, interagency, and multinational maritime Expeditionary forces. The LHA(R) Class operates for sustained periods in transit to and operations in an Amphibious Objective Area to include the embarkation, deployment, and landing of a Marine Landing Force and supporting forces by helicopters and tilt rotors supported by Joint Strike Fighters (JSF) F-35B. LHA(R) Flight 0 is considered a transitional increment intended to increase the aviation capabilities of Amphibious Assault Class Ships. The LHA(R) Flight 1 design continues the incremental development of Amphibious Assault Class Ships by adding a well deck and increasing flight deck capacity by reducing the footprint of the island and adding a sponson. LHA(R) Flight 0 consisted of two ships - LHA 6 and LHA 7. LHA(R) Flight 1 is the second increment in the LHA 6 Class, with LHA 8 being the first ship of Flight 1. The Flight 1 ships maintain an aviation centric capability with the addition of a well deck that will accommodate two Landing Craft, Air Cushion (LCAC) vehicles. LHA 9 is the second LHA(R) Flight 1 ship and assumes a LHA 8 baseline design.												

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The 2023 Appropriations Act added \$289M Advance Procurement (AP) funds in support of the procurement of LHA 10 - a FY 2027 ship.																																																																																									
<table style="width:100%; border: none;"> <tr> <td style="width:15%;">Characteristics:</td> <td style="width:15%;">LHA 7</td> <td style="width:15%;">LHA 8</td> <td style="width:15%;">Systems:</td> <td style="width:15%;"></td> <td style="width:15%;">Ordnance</td> </tr> <tr> <td>Length Overall</td> <td>844ft</td> <td>844ft</td> <td>Electronics</td> <td></td> <td>-Enterprise Air Surveillance Radar (EASR)</td> </tr> <tr> <td>Beam</td> <td>106ft</td> <td>106ft</td> <td>-Command, Control, Communication, Computer Intelligence Surveillance and Reconnaissance (C4ISR)</td> <td></td> <td>-NATO Sea Sparrow Missile System (NSSMS) MK 57 Mod 14</td> </tr> <tr> <td>Displacement</td> <td>45,594 tons</td> <td>43,000 tons</td> <td>-MK 2 MOD 4E Ship Self Defense System (SSDS)</td> <td></td> <td>-MK31 Mod 3, Rolling Airframe Missile (RAM) (Tech Refresh)</td> </tr> <tr> <td>Draft</td> <td>29ft 1in</td> <td>27ft 8in</td> <td>-Integrated Voice Network (IVN)</td> <td></td> <td>-PHALANX Block 1B MK15 Mod 21 & 22, Close-in Weapon System (CIWS)</td> </tr> <tr> <td></td> <td></td> <td></td> <td>-AN/SLQ-32(V), Surface Warfare Improvement Program (SEWIP)</td> <td></td> <td>-Vertical/Stationary Take-Off Landing Optical Landing System (VSTOL OLS)</td> </tr> <tr> <td></td> <td></td> <td></td> <td>-AN/SPN-50 (V)1</td> <td></td> <td>-AN/SPQ-9B Radar Set</td> </tr> <tr> <td></td> <td></td> <td></td> <td>-Joint Precision Approach and Landing System (JPALS) (AN/USN-3(V)1, SSLS)</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>-Hierarchical Yet Dynamically Reprogrammable Architecture (HYDRA) AN/SRC-55</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>-AN/UPX-29(V), Identification Friend or Foe (IFF) MK12</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>-Ring Laser Gyro Navigator (RLGN) AN/WSN-7</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>-Amphibious Air Traffic Control Direct Altitude and Identity Readout (AATC-DAIR)</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>-Aircraft Control Approach Central AN/SPN-35C</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>-Aircraft Approach Control Transmitting Set (AACTS) AN/SPN-41B</td> <td></td> <td></td> </tr> </table>						Characteristics:	LHA 7	LHA 8	Systems:		Ordnance	Length Overall	844ft	844ft	Electronics		-Enterprise Air Surveillance Radar (EASR)	Beam	106ft	106ft	-Command, Control, Communication, Computer Intelligence Surveillance and Reconnaissance (C4ISR)		-NATO Sea Sparrow Missile System (NSSMS) MK 57 Mod 14	Displacement	45,594 tons	43,000 tons	-MK 2 MOD 4E Ship Self Defense System (SSDS)		-MK31 Mod 3, Rolling Airframe Missile (RAM) (Tech Refresh)	Draft	29ft 1in	27ft 8in	-Integrated Voice Network (IVN)		-PHALANX Block 1B MK15 Mod 21 & 22, Close-in Weapon System (CIWS)				-AN/SLQ-32(V), Surface Warfare Improvement Program (SEWIP)		-Vertical/Stationary Take-Off Landing Optical Landing System (VSTOL OLS)				-AN/SPN-50 (V)1		-AN/SPQ-9B Radar Set				-Joint Precision Approach and Landing System (JPALS) (AN/USN-3(V)1, SSLS)						-Hierarchical Yet Dynamically Reprogrammable Architecture (HYDRA) AN/SRC-55						-AN/UPX-29(V), Identification Friend or Foe (IFF) MK12						-Ring Laser Gyro Navigator (RLGN) AN/WSN-7						-Amphibious Air Traffic Control Direct Altitude and Identity Readout (AATC-DAIR)						-Aircraft Control Approach Central AN/SPN-35C						-Aircraft Approach Control Transmitting Set (AACTS) AN/SPN-41B		
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Issue Date for TLS	N/A	N/A																																																																																							
Preliminary Design	Nov 2011	Mar 2013																																																																																							
Contract Design	Mar 2013	Sep 2014																																																																																							

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships		P-1 Line Item Number / Title: 3041 / LHA Replacement		
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A		Other Related Program Elements: 0604567N	
Line Item MDAP/MAIS Code: 333				
<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>
Detail Design	Jun 2017	Mar 2019		
Request for Proposals	Jun 2015	Dec 2015		
Design Agent	Huntington Ingalls Inc.			
Classification of Cost Estimate: CLASS C				
 Justification: The FY 2024 request reflects the final increment of full funding for LHA 9. The Department added additional funds in FY 2024 to fully fund the basic construction contract for LHA 9.				
 Footnotes: (1) LHA 8 schedule has been updated to incorporate topside redesign efforts and Joint Strike Fighter (JSF) related modifications. (2) The delivery date for LHA 9 was negotiated as part of the DD&C award and included in-line incorporation of JSF-related changes that informed the originally estimated schedule.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3041 / LHA Replacement		
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2017		FY 2023	
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>
Plan Costs	1	329.093	1	125.000
Basic Construction/Conversion		2,831.910		3,011.000
Change Orders		108.490		70.183
Electronics ^(†)		314.754		328.010
Hull, Mechanical, and Electrical (HM&E) ^(†)		63.184		61.882
Ordnance ^(†)		158.708		168.742
Other Cost		95.178		69.439
Total Ship Estimate		3,901.317		3,834.256
Less Advance Procurement FY 2015		29.093		-
Less Advance Procurement FY 2016		476.038		-
Less Advance Procurement FY 2019		-		350.000
Less Subsequent Full Funding FY 2018		1,706.693		-
Less Subsequent Full Funding FY 2024		-		1,830.149
Less Cost to Complete FY 2023		19.300		-
Less Cost to Complete FY 2025		71.700		-
Less Prior Year Full Funding FY 2021		-		500.000
Less Prior Year Full Funding FY 2022		-		68.637
Net P-1 Funding		1,598.493		1,085.470
Remarks: LHA 9 is the second LHA(R) Flight 1 ship and leverages a LHA 8 baseline design. P-5c cost categories updated to reflect values at contract award for LHA 9.				

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1	P-1 Line Item Number / Title: 3041 / LHA Replacement	

Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
LHA 8 ⁽¹⁾	HII	2017	Jun 2017	Oct 2018	Oct 2025
LHA 9 ⁽²⁾	HII	2023	Oct 2022	Dec 2022	Sep 2029
LHA 10	HII	2027	Oct 2026	Dec 2026	Dec 2033

Footnotes:
⁽¹⁾ LHA 8 schedule has been updated to incorporate topside redesign efforts and Joint Strike Fighter (JSF) related modifications.
⁽²⁾ The delivery date for LHA 9 was negotiated as part of the DD&C award and included in-line incorporation of JSF-related changes that informed the originally estimated schedule.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3041 / LHA Replacement	
Electronics	FY 2023		
	Qty (Each)	Total Cost (\$ M)	
P-35 Items			
Command, Control, Communication, Computer Intelligence Surveillance and Reconnaissance (C4ISR)	1	169.701	
MK 2 MOD 4E Ship Self Defense System (SSDS)	1	28.308	
Integrated Voice Network (IVN)	1	10.218	
AN/SLQ-32(V), Surface Warfare Improvement Program (SEWIP)	1	14.904	
AN/SPN-50 (V)1	1	16.643	
Joint Precision Approach and Landing System (JPALS) (AN/USN-3(V)1, SSLS)	1	6.885	
Hierarchical Yet Dynamically Reprogrammable Architecture (HYDRA) AN/SRC-55	1	6.025	
AN/UPX-29(V), Identification Friend or Foe (IFF) MK12	1	7.802	
Ring Laser Gyro Navigator (RLGN) AN/WSN-7	1	5.516	
Amphibious Air Traffic Control Direct Altitude and Identity Readout (AATC-DAIR)	1	5.333	
Aircraft Control Approach Central AN/SPN-35C	1	6.273	
Aircraft Approach Control Transmitting Set (AACTS) AN/SPN-41B	1	4.617	
P-35 Items Subtotal		282.225	
Major Items			
AN/USG-2, Cooperative Engagement Transmission Processing Set (CETPS)	1	7.380	
USQ-82, Gigabit Ethernet Data Multiplex System (GEDMS)	1	6.851	
AN/SLQ-25C, Torpedo Countermeasures Transmitting Set (NIXIE)	2	5.993	
AN/USQ-T46(V), Battle Force Tactical Training (BFTT)	1	1.103	
Announcing Systems AN/SIA-127H	1	2.656	
SATCC	1	2.106	
Amphibious Assault Direction System (AADS)	1	1.448	
Digital Photo Lab	1	0.623	
MK 53 NULKA Decoy Launching System (DLS) Mod 3	1	1.264	
Print Shop	1	0.566	
30 TV	1	1.326	
Next Generation Navigational Radar	1	1.232	
Major Items Subtotal		32.548	
Other Cost Elements			
Miscellaneous Electronics		13.237	
Other Cost Elements Subtotal		13.237	
Total Electronics		328.010	

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3041 / LHA Replacement
<p>Remarks: For LHA(R) Flight 1 ships:</p> <p>- Enterprise Air Surveillance Radar (EASR) suite will be a modern, long-range, three-dimensional (3-D) radar used to search, detect and provide space-stabilized, three-coordinate (range, bearing, height) data for air intercept control and designation to a weapon system and Air Traffic Control (ATC) system. The LHA(R) Flight 1 configuration includes a rotating antenna array, below decks radar and cooling equipment. The EASR suite replaces the SPS 48/49 air-search radar systems. AN/SPS-48 air search radars have not been in production for several years. All existing AN/SPS-48 radars are installed on operational Fleet ships. Without the EASR suite, LHA(R) Flight 1 ships will not have an air-search radar for self-defense and airspace deconfliction.</p> <p>- AN/SPN-50 Shipboard Air Traffic Radar (SATR) system provides aircraft position, radar signal and radar data. Air traffic controllers use the data for aircraft sequencing and separation, airspace identification and containment, safety alerts, traffic advisories and landing guidance. AN/SPN-50 SATR replaces the AN/SPN 43C SATR. EASR and AN/SPN-50 are designed to be integrated systems whereas EASR and AN/SPN 43C are not as compatible.</p> <p>- The dual mast antenna configuration Cooperative Engagement Transmission Processing Set (CETPS) replaces the single mast CETPS. The CETPS dual mast antenna configuration improves the compatibility with AN/SPN-50 and allows the ship to maintain 360-degree data link coverage and full combat systems capability.</p>		

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3041 / LHA Replacement	
Hull, Mechanical, and Electrical (HM&E)		FY 2023	
		Qty (Each)	Total Cost (\$ M)
Major Items			
Equipment & Engineering			47.605
SUPSHIP Material/Services			4.813
Test & Instrumentation			9.464
Major Items Subtotal			61.882
Total Hull, Mechanical, and Electrical (HM&E)			61.882

Remarks:
FY 2023 HM&E: Due to the decreased duration of procurement between LHA 9 and LHA 10, the program anticipates cost savings and efficiencies across the hulls with respect to Government Furnished Equipment (GFE) support functions (e.g., engineering support, subject matter expertise, programmatics, and other requisite expenses associated with ship construction). Further, the program expects to gain efficiencies with respect to its Ship Design Management team, as LHA 8 and LHA 9 are both Flight 1 ships. The reduction to HM&E Equipment and Engineering is reflective of the program's current plans and expected savings.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3041 / LHA Replacement	
Ordnance	FY 2023		
	Qty (Each)	Total Cost (\$ M)	
P-35 Items			
Enterprise Air Surveillance Radar (EASR)	1	38.262	
NATO Sea Sparrow Missile System (NSSMS) MK 57 Mod 14	1	34.125	
MK31 Mod 3, Rolling Airframe Missile (RAM) (Tech Refresh)	2	22.290	
PHALANX Block 1B MK15 Mod 21 & 22, Close-in Weapon System (CIWS)	1	18.458	
Vertical/Stationary Take-Off Landing Optical Landing System (VSTOL OLS)	1	15.265	
AN/SPQ-9B Radar Set	1	7.628	
P-35 Items Subtotal		136.028	
Major Items			
MK 38 Mod 2 Stabilized Gun Stand Assembly	3	7.143	
AN/SPQ-14	4	0.947	
MORIAH	1	2.395	
Major Items Subtotal		10.485	
Other Cost Elements			
Aviation Support		8.202	
Miscellaneous Ordnance		2.964	
Total Ship Test Program		11.063	
Other Cost Elements Subtotal		22.229	
Total Ordnance		168.742	
Remarks: FY 2023 Ordnance: Due to the decreased duration of procurement between LHA 9 and LHA 10, the program anticipates cost savings and efficiencies across the hulls with respect to Government Furnished Equipment (GFE) support functions (e.g., Ship Design Management and engineering support, subject matter expertise, programmatics, and other requisite expenses associated with ship construction). Further, as the second Flight 1 ship, the program expects to gain efficiencies for LHA 9 with respect to the management and testing of systems that were once new for LHA 8. Reductions to Aviation Support, Miscellaneous Ordnance, and Total Ship Test Program are reflective of the program's current plans and expected savings.			

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: Command, Control, Communication, Computer Intelligence Surveillance and Reconnaissance (C4ISR)						PARM Code: PEO C4I	
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	93.910		
Technical Data and Documentation					1.607		
Spares					5.070		
System Engineering					15.493		
Technical Engineering Services					28.925		
Other Costs					24.696		
Total				1	169.701		
Description: The Command, Control, Communication, Computer Intelligence Surveillance and Reconnaissance (C4ISR) system is used to prove the link between the ship, the command hierarchy, and other units of the operating forces.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	VARIOUS	Various	Various	Various	1	93.910
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	0	0	Sep 2029		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: MK 2 MOD 4E Ship Self Defense System (SSDS)					PARM Code: PEO IWS1A5		
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	14.824		
Technical Data and Documentation					0.689		
Spares					1.434		
System Engineering					2.026		
Technical Engineering Services					1.229		
Other Costs					8.106		
Total				1	28.308		
Description: The Ship Self Defense System (SSDS) MK 2, Mod (x) Common C2 system provides capabilities for multi-mission requirements including Ship Protection against air, surface, and subsurface threats using both own-ship and remote data (Joint Composite Track Number (JCTN) and Joint Data Network (JDN)) in support of the Anti-Air Warfare (AAW) Capstone requirements.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	TBD	TBD	TBD		1	14.824
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	32	24	Jan 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: Integrated Voice Network (IVN)					PARM Code: SEA05H		
P-35 Category				FY 2023			
				Qty (Each)		Total Cost (\$ M)	
Major Hardware				1		6.772	
Technical Data and Documentation						0.125	
System Engineering						0.876	
Technical Engineering Services						1.571	
Other Costs						0.874	
Total				1		10.218	
Description: The Integrated Voice Communications Network (IVCN) is an overarching engineering approach to establish consistent engineering practices and integrated voice communication capabilities across the Fleet. IVN is a fully integrated, supportable communication voice solution.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	TBD	TBD	TBD		1	6.772
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	48	6	Mar 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement																															
Equipment Item: AN/SLQ-32(V), Surface Warfare Improvement Program (SEWIP)						PARM Code: PEO IWS2E																													
P-35 Category				FY 2023																															
				Qty (Each)	Total Cost (\$ M)																														
Major Hardware				1	12.607																														
Technical Data and Documentation					0.056																														
Spares					0.286																														
System Engineering					1.087																														
Technical Engineering Services					0.170																														
Other Costs					0.698																														
Total				1	14.904																														
<p>Description:</p> <p>SEWIP Block 2 is a scalable Electronic Warfare enterprise suite to provide improved Electromagnetic Interference (EMI) mitigation and Combat System Interface capabilities to select new construction ships as well as upgrade current AN/SLQ-32(V)3 and (V)4 Electronic Warfare (EW) suites on existing ships. It provides enhanced shipboard Electronic Warfare (EW) for early detection, analysis, threat warning and protection from anti-ship missiles. SEWIP Block 2 focused on Electronic Support (ES) capability improvements.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2023</td><td>LHA 9</td><td>Lockheed Martin Corporation, RMS</td><td>C/FFP</td><td>Jun 2022</td><td>Option</td><td>1</td><td>12.607</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2023</td><td>LHA 9</td><td>Sep 2029</td><td>24</td><td>23</td><td>Oct 2025</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2023	LHA 9	Lockheed Martin Corporation, RMS	C/FFP	Jun 2022	Option	1	12.607	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2023	LHA 9	Sep 2029	24	23	Oct 2025
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2023	LHA 9	Lockheed Martin Corporation, RMS	C/FFP	Jun 2022	Option	1	12.607																												
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																														
FY 2023	LHA 9	Sep 2029	24	23	Oct 2025																														

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: AN/SPN-50 (V)1						PARM Code: NAVAIR PMA213	
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	13.528		
Technical Data and Documentation					0.053		
Spares					1.119		
System Engineering					0.781		
Technical Engineering Services					0.564		
Other Costs					0.598		
Total				1	16.643		
Description: AN/SPN-50 Shipboard Air Traffic Radar (SATR) system provides aircraft position, radar signal and radar data. Air traffic controllers use the data for aircraft sequencing and separation, airspace identification and containment, safety alerts, traffic advisories and landing guidance.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	TBD	TBD	TBD		1	13.528
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	29	18	Oct 2025		
Competition/Second Source Initiatives: N/A							
Remarks: AN/SPN-50 SATR system replaces the AN/SPN 43C SATR. EASR and AN/SPN-50 are designed to be integrated systems whereas EASR and AN/SPN 43C are not as compatible.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement																			
Equipment Item: Joint Precision Approach and Landing System (JPALS) (AN/USN-3(V)1, SSLS)					PARM Code: NAVAIR PMA213																		
P-35 Category				FY 2023																			
				Qty (Each)	Total Cost (\$ M)																		
Major Hardware				1	3.728																		
Spares					0.480																		
System Engineering					0.821																		
Technical Engineering Services					1.251																		
Other Costs					0.605																		
Total				1	6.885																		
<p>Description:</p> <p>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. 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.</p>																							
<p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2023</td><td>LHA 9</td><td>TBD</td><td>TBD</td><td>TBD</td><td></td><td>1</td><td>3.728</td></tr></table>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2023	LHA 9	TBD	TBD	TBD		1	3.728
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																
FY 2023	LHA 9	TBD	TBD	TBD		1	3.728																
<p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2023</td><td>LHA 9</td><td>Sep 2029</td><td>38</td><td>12</td><td>Jul 2025</td></tr></table>								Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2023	LHA 9	Sep 2029	38	12	Jul 2025				
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																		
FY 2023	LHA 9	Sep 2029	38	12	Jul 2025																		
<p>Competition/Second Source Initiatives:</p> <p>N/A</p>																							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement																															
Equipment Item: Hierarchical Yet Dynamically Reprogrammable Architecture (HYDRA) AN/SRC-55						PARM Code: SEA05H																													
P-35 Category				FY 2023																															
				Qty (Each)	Total Cost (\$ M)																														
Major Hardware				1	2.924																														
Technical Data and Documentation					0.179																														
Spares					0.064																														
System Engineering					0.952																														
Technical Engineering Services					0.672																														
Other Costs					1.234																														
Total				1	6.025																														
<p>Description:</p> <p>AN/SRC-55 HYDRA is a Wireless Interior Communications System that provides wire free mobile communications throughout the ship. HYDRA supports security, navigation, combat systems, engineering, damage control, maintenance and general operations such as maneuvering and docking, shore patrol and beach guard. It is interoperable with other shipboard communication systems and it has improved capabilities over the legacy wireless systems.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2023</td><td>LHA 9</td><td>TBD</td><td>TBD</td><td>TBD</td><td></td><td>1</td><td>2.924</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2023</td><td>LHA 9</td><td>Sep 2029</td><td>30</td><td>12</td><td>Mar 2026</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2023	LHA 9	TBD	TBD	TBD		1	2.924	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2023	LHA 9	Sep 2029	30	12	Mar 2026
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2023	LHA 9	TBD	TBD	TBD		1	2.924																												
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																														
FY 2023	LHA 9	Sep 2029	30	12	Mar 2026																														

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: AN/UPX-29(V), Identification Friend or Foe (IFF) MK12					PARM Code: NAVAIR PMA213		
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	6.143		
Spares					0.747		
System Engineering					0.074		
Technical Engineering Services					0.252		
Other Costs					0.586		
Total				1	7.802		
<p>Description: Identification Friend or Foe (IFF) is an approved and fully supported centralized Mark XII Interrogator system. It uses one receiver transmitter that synchronizes video with up to four radar sweeps. It supplies synthetic video (symbology) to, and accepts requests from, as many as 22 remote locations. It provides digital target reporting to the combat systems/weapon systems computer via full scan, sectored, and/or pop-up interrogations. It provides instantaneous target reporting at requested range and azimuth through the use of an electronically-steered Antenna Group OE-120/UPX or OE-120A/UPX.</p>							
<p>Contract Data:</p>							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	TBD	TBD	TBD		1	6.143
<p>Delivery Date:</p>							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	29	24	Apr 2025		
<p>Competition/Second Source Initiatives: N/A</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: Ring Laser Gyro Navigator (RLGN) AN/WSN-7						PARM Code: PEO IWS6.0	
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	4.038		
System Engineering					0.255		
Technical Engineering Services					0.356		
Other Costs					0.867		
Total				1	5.516		
Description: The AN/WSN-7(V) Ring Laser Gyro Navigation System provides real-time navigation data for use by navigation and combat systems.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	Northrop Grumman Systems Corporation	C/FFP	Aug 2021	Option	1	4.038
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	24	17	Apr 2026		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: Amphibious Air Traffic Control Direct Altitude and Identity Readout (AATC-DAIR)					PARM Code: NAVAIR PMA213		
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	3.834		
Spares					0.073		
System Engineering					0.288		
Technical Engineering Services					0.197		
Other Costs					0.941		
Total				1	5.333		
Description: The Amphibious Air Traffic Control (AATC) Direct Altitude and Identity Readout (DAIR) is an automatic beacon and radar that when integrated with an air traffic control radar, provides numeric and symbolic displays of position, identity, and altitude of aircraft in the terminal airspace on an operator's Plane Position Indicator (PPI) display.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	NAWCAD	WR	Mar 2022	New	1	3.834
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	24	24	Sep 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: Aircraft Control Approach Central AN/SPN-35C						PARM Code: NAVAIR PMA213	
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	5.295		
System Engineering					0.581		
Technical Engineering Services					0.070		
Other Costs					0.327		
Total				1	6.273		
Description: The AN/SPN-35 is a precision approach radar that provides glide slope guidance to Navy and Marine Corps aircraft. The system is used in conjunction with a vertical/short take-off and landing, optical landing system and the AN/SPN-41 Instrument Control Landing System for precision landing operations. It is also used for aircraft recovery during adverse weather and night conditions.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	NAWCAD	WR	Mar 2022	New	1	5.295
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	24	54	Mar 2023		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: Aircraft Approach Control Transmitting Set (AACTS) AN/SPN-41B						PARM Code: NAVAIR PMA213	
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	3.618		
System Engineering					0.616		
Technical Engineering Services					0.065		
Other Costs					0.318		
Total				1	4.617		
Description: The AN/SPN-41 transmitting set is an electronic instrument control landing system that provides proper flight path data to an approaching aircraft. The AN/SPN-41 has two separate transmitters (azimuth and elevation) with individual antennas used for sector scanning. It provides primary or backup instrument approach capability.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	NAWCAD	WR	Mar 2022	New	1	3.618
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	34	44	Mar 2023		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: Enterprise Air Surveillance Radar (EASR)					PARM Code: PEO IWS2.0		
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	23.735		
Technical Data and Documentation					0.034		
Spares					0.833		
System Engineering					1.663		
Technical Engineering Services					2.233		
Other Costs					9.764		
Total				1	38.262		
<p>Description:</p> <p>Enterprise Air Surveillance Radar (EASR) suite will be a modern, long-range, three-dimensional (3-D) radar used to search, detect and provide space-stabilized, three-coordinate (range, bearing, height) data for air intercept control and designation to a weapon system and Air Traffic Control (ATC) system. The LHA(R) Flight 1 configuration includes a rotating antenna array, below decks radar and cooling equipment. Without the EASR suite, LHA(R) Flight 1 ships will not have an air-search radar for self-defense and airspace deconfliction.</p>							
<p>Contract Data:</p>							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	Raytheon	C/FFP	May 2022	Option	1	23.735
<p>Delivery Date:</p>							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	31	28	Oct 2024		
<p>Competition/Second Source Initiatives:</p> <p>N/A</p>							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: NATO Sea Sparrow Missile System (NSSMS) MK 57 Mod 14					PARM Code: PEO IWS3.0		
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	26.442		
Spares					1.444		
System Engineering					1.464		
Technical Engineering Services					2.387		
Other Costs					2.388		
Total				1	34.125		
Description: The NSSMS MK 57 is a short-range weapon system, which provides self-defense capability against air-to-surface missiles, surface-to-surface missiles, manned attack aircraft, and surface craft. The system is designed to provide these capabilities under both clear and adverse environmental conditions as well as in a hostile electronics attack environment. NSSMS MK 57 performs target engageability; and provides launcher control, missile control and missing firing orders.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	TBD	TBD	TBD		1	26.442
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	33	36	Dec 2023		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: MK31 Mod 3, Rolling Airframe Missile (RAM) (Tech Refresh)					PARM Code: PEO IWS3B		
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				2	17.974		
Technical Data and Documentation					0.473		
Spares					0.103		
System Engineering					2.093		
Technical Engineering Services					0.279		
Other Costs					1.368		
Total				2	22.290		
Description: The MK 49 Mod 3 Rolling Airframe Missile (RAM) Weapon System is a lightweight, low cost, high power system for anti-ship missile defense against current and evolving threats.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	Raytheon	C/FFP	May 2022	Option	2	8.987
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	41	30	Oct 2023		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: PHALANX Block 1B MK15 Mod 21 & 22, Close-in Weapon System (CIWS)					PARM Code: PEO IWS3.0		
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	15.378		
Technical Data and Documentation					0.055		
Spares					0.177		
System Engineering					0.705		
Technical Engineering Services					0.545		
Other Costs					1.598		
Total				1	18.458		
Description: Phalanx is a high fire rate Close-In Weapon System (CIWS) that automatically acquires, tracks and destroys Anti-Ship cruise missiles, Helos, Aircraft, and all types of Surface threats.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	TBD	TBD	TBD		1	15.378
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	29	26	Feb 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: Vertical/Stationary Take-Off Landing Optical Landing System (VSTOL OLS)					PARM Code: NAVAIR PMA251		
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	13.323		
Technical Data and Documentation					-		
Spares					-		
System Engineering					0.379		
Technical Engineering Services					0.608		
Other Costs					0.955		
Total				1	15.265		
Description: The Vertical/Stationary Take-Off Landing (VSTOL) Optical Landing System is a visual landing aid that displays glide path and trend information to the VSTOL pilot preparing to land on ship. The system can guide an aircraft to the ship from a distance of 0.8 nautical miles. The OLS guides the aircraft to 50 feet above the flight deck up to the final approach phase.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	Lakehurst Manufacturing	WR	Dec 2021	New	1	13.323
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	30	48	Mar 2023		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement			
Equipment Item: AN/SPQ-9B Radar Set					PARM Code: PEO IWS2B		
P-35 Category				FY 2023			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	5.144		
Technical Data and Documentation					0.134		
Spares					0.247		
System Engineering					0.418		
Technical Engineering Services					0.790		
Other Costs					0.895		
Total				1	7.628		
Description: The AN/SPQ-9B is an X-Band Horizon Search, pulse Doppler, frequency agile radar designed for the littoral environment. It has a very high clutter improvement factor supporting a very low false track rate in the littorals and in high clutter environments.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2023	LHA 9	TBD	TBD	TBD		1	5.144
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2023	LHA 9	Sep 2029	24	24	Sep 2025		
Competition/Second Source Initiatives: N/A							

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Exhibit P-10, Advance Procurement Requirements Analysis (page 1 - Budget Funding Justification): PB 2024 Navy							Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3041 / LHA Replacement						
First System (2024) Award Date:		First System (2024) Completion Date:			Interval Between Systems: 0 Months					
Cost Elements		Production Leadtime (Months)	When Required* (Months)	FY 2022 (\$ M)	FY 2023 (\$ M)	FY 2024 (\$ M)	FY 2025 (\$ M)	FY 2026 (\$ M)	FY 2027 (\$ M)	FY 2028 (\$ M)
LHA 10 Advance Procurement										
Basic Construction		-	-	-	289.000	0.000	78.518	367.400	-	-
Total: LHA 10 Advance Procurement				-	289.000	-	78.518	367.400	-	-
Total Advance Procurement/Obligation Authority				-	289.000	-	78.518	367.400	-	-

*Note: "When Required" is the number of months required before ship delivery.

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Exhibit P-10, Advance Procurement Requirements Analysis (page 2 - Budget Funding Justification): PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 03 / 1

P-1 Line Item Number / Title:
3041 / LHA Replacement

Cost Elements	FY 2024						
	Production Leadtime <i>(Months)</i>	When Required* <i>(Months)</i>	Unit Cost <i>(\$ M)</i>	Contract Forecast Date	2024 Qty <i>(Each)</i>	For FY	Total Cost Request <i>(\$ M)</i>
LHA 10 Advance Procurement							
Basic Construction	-	-	-		-		0.000
Total: LHA 10 Advance Procurement							-
Total Advance Procurement/Obligation Authority							-

Description:
LHA 10 Advance Procurement funding will be used to purchase Long Lead Time Material (LLTM) and maintain schedule.

*Note: "When Required" is the number of months required before ship delivery.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy								Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships						P-1 Line Item Number / Title: 3043 / Expeditionary Fast Transport (EPF)						
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 (<i>Units in Each</i>)	11	2	2	-	-	-	-	-	-	-	-	15
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,374.748	590.000	645.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	3,609.748
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Less Cost To Complete (<i>\$ in Millions</i>)	160.090	-	-	-	-	-	-	-	-	-	-	160.090
Less Program Support (<i>\$ in Millions</i>)	2.732	-	-	-	-	-	-	-	-	-	-	2.732
Net Procurement (P-1) (<i>\$ in Millions</i>)	2,211.926	590.000	645.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	3,446.926
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Plus Cost To Complete (<i>\$ in Millions</i>)	160.090	-	-	-	-	-	-	-	-	-	-	160.090
Plus Program Support (<i>\$ in Millions</i>)	2.732	-	-	-	-	-	-	-	-	-	-	2.732
Total Obligation Authority (<i>\$ in Millions</i>)	2,374.748	590.000	645.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	3,609.748
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	94.433	11.203	17.618	16.059	-	16.059	20.060	11.528	-	-	-	170.901
Total (<i>\$ in Millions</i>)	2,469.181	601.203	662.618	16.059	-	16.059	20.060	11.528	-	-	-	3,780.649
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	215.886	295.000	322.500	-	-	-	-	-	-	-	-	240.650

Description:

Future joint forces will be responsive, deployable, agile, versatile, lethal, survivable, and sustainable. The nation will need lift assets that can provide for assured access, decrease predictability and dwell time, and have the capacity to quickly deliver troops and equipment together in a manner that provides for unit integrity. Expeditionary Fast Transport (EPF) (formerly Joint High Speed Vessel) will provide combatant commanders high-speed intra-theater sealift with inherent cargo handling capability and the agility to achieve positional advantage over operational distances. Not limited to major ports, the EPF will be able to operate in austere port environments.

EPFs 14, 15, and EPF 16 will have modifications to conduct a Role 2 Enhanced (R2E) Medical Transport mission which will include enhanced medical capabilities to support embarked Medical Military Detachment (MILDET) teams while retaining the ability to perform high-speed intra-theater sealift.

EMS 1-3 will have modifications to conduct a Role 2 Enhanced (R2E) Medical Transport mission which will include enhanced medical capabilities to support embarked Medical Military Detachment (MILDET).

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 03: Amphibious Ships / BSA 1: Amphibious Ships			P-1 Line Item Number / Title: 3043 / Expeditionary Fast Transport (EPF)			
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						
<div><div><div>Characteristics:</div><div>Length Overall Beam Displacement Draft</div><div>Aluminum Catamaran 338 ft 93.5 ft 2359 Long Tons 12.5 ft</div></div><div><div>Systems:</div><div>Electronics -C4ISR</div></div></div>						
<div><div>Production Status:</div><div><div>EPF 14</div><div>Contract Award Date Months to Completion a) Award to Delivery b) Construction Start to Delivery Delivery Date Completion Of Fitting Out Obligation Work Limit Date</div><div>Mar 2019 53 months 34 months Aug 2023 Nov 2023 Oct 2024</div></div><div><div>EPF 15⁽¹⁾</div><div>Dec 2021 41 months 40 months May 2025 Aug 2025 Jul 2026</div></div><div><div>EPF 16</div><div>May 2022 46 months 34 months Mar 2026 Jun 2026 May 2027</div></div><div><div>EMS 1</div><div>Apr 2023 48 months 36 months Apr 2027 Jul 2027 Jun 2028</div></div><div><div>EMS 2</div><div>Apr 2023 60 months 36 months Apr 2028 Jul 2028 Jun 2029</div></div><div><div>EMS 3</div><div>Apr 2023 72 months 36 months Apr 2029 Jul 2029 Jun 2030</div></div></div>						
<div><div><div>Design Schedule</div><div>Issue Date for TLR Issue Date for TLS Preliminary Design Contract Design Detail Design Request for Proposals Design Agent</div><div>Start / Issue N/A N/A Jan 2007 Jan 2007 Nov 2008 N/A</div><div>Complete / Response N/A N/A Jul 2008 Jul 2008 Dec 2009 N/A</div><div>Reissue</div><div>Reissue Complete / Response</div></div><div>Classification of Cost Estimate: CLASS C</div></div>						
<div>Footnotes: (1) EPF 15 delivery delay is due to aluminum extrusion supply chain issues</div>						

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy						Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3043 / Expeditionary Fast Transport (EPF)				
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2019		FY 2021		FY 2022		FY 2023	
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>
Plan Costs	1	-	1	-	2	27.000	2	-
Basic Construction/Conversion		238.943		226.091		482.500		537.663
Change Orders		3.257		2.000		9.500		10.753
Electronics ^(†)		16.800		22.500		46.000		56.504
Hull, Mechanical, and Electrical (HM&E) ^(†)		8.000		4.000		15.000		26.720
Other Cost		7.000		5.409		10.000		13.360
Total Ship Estimate		274.000		260.000		590.000		645.000
Less Cost to Complete FY 2020		49.000		-		-		-
Net P-1 Funding		225.000		260.000		590.000		645.000

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 03 / 1

P-1 Line Item Number / Title:
3043 / Expeditionary Fast Transport (EPF)

Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
EPF 14	AUSTAL	2019	Mar 2019	Oct 2020	Aug 2023
EPF 15 ⁽¹⁾	AUSTAL	2021	Dec 2021	Jan 2022	May 2025
EPF 16	AUSTAL	2022	May 2022	May 2023	Mar 2026
EMS 1	AUSTAL	2022	Apr 2023	Apr 2024	Apr 2027
EMS 2	AUSTAL	2023	Apr 2023	Apr 2025	Apr 2028
EMS 3	AUSTAL	2023	Apr 2023	Apr 2026	Apr 2029

Footnotes:
⁽¹⁾ EPF 15 delivery delay is due to aluminum extrusion supply chain issues

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity:		P-1 Line Item Number / Title:		
1611N / 03 / 1		3043 / Expeditionary Fast Transport (EPF)		
Electronics	FY 2022		FY 2023	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items				
C4ISR	2	37.782	2	46.409
P-35 Items Subtotal		37.782		46.409
Major Items				
VISUAL LANDING AIDE SUITE	2	6.640	2	8.156
MISC ELECTRONICS		1.578		1.939
Major Items Subtotal		8.218		10.095
Total Electronics		46.000		56.504

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1		P-1 Line Item Number / Title: 3043 / Expeditionary Fast Transport (EPF)		
Hull, Mechanical, and Electrical (HM&E)	FY 2022		FY 2023	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Major Items				
ENGINEERING SERVICES		4.130		7.357
SUPSHIP MATERIAL SERVICES		1.217		2.168
LOGISTICS SUPPORT SERVICES		1.126		2.006
TEST AND INSTRUMENTATION		0.589		1.049
EQUIPMENT		7.938		14.140
Major Items Subtotal		15.000		26.720
Total Hull, Mechanical, and Electrical (HM&E)		15.000		26.720
Remarks: FY2022 HM&E major item "Equipment" includes ship hardware and support required for EPF 16 and the first Expeditionary Medical Ship (EMS 1) including additional 11M rigid hull inflatable boat procurements.				

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 03 / 1				P-1 Line Item Number / Title: 3043 / Expeditionary Fast Transport (EPF)			
Equipment Item: C4ISR				PARM Code: 3Z (NAVWAR)			
P-35 Category	FY 2022		FY 2023				
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Major Hardware	2	20.606	2	25.311			
Spares		0.960		1.179			
System Engineering		4.086		5.019			
Technical Engineering Services		7.176		8.815			
Other Costs		4.954		6.085			
Total	2	37.782	2	46.409			
Description:							
The Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) system provides the line between the ship, the command hierarchy and other units of the operation force. The C4ISR Suite consists of a Network Suite (MSC-CANES, ADNS and CENTRIXS-M), CBSP, UHF SATCOM Antenna, UHF/VHF LOS Suite and UHF SATCOM Radios, TVS-TVT, IA and RCS.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	EPF 16	Various	Various	May 2022	Various	2	10.303
FY 2023	EMS 2	Various	Various	Apr 2023	Various	2	12.656
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	EPF 16	Mar 2026	0		Various		
FY 2023	EMS 2	Apr 2028	0		Various		
Competition/Second Source Initiatives:							
N/A							
Remarks:							
Multiple systems comprise the C4ISR with varying delivery dates and lead times. NAVWAR PMW760 is the coordinating activity for the C4ISR System.							
FY22 Contract Data and Delivery Dates reflect EPF 16 and EMS 1 hulls.							
FY23 Contract Data and Delivery Dates reflect EMS 2 and EMS 3 hulls.							

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost

P-1 Line Item Number / Title:
5010 / AS Submarine Tender

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)	-	-	-	1	-	1	-	1	-	-	-	2
Gross/Weapon System Cost (\$ in Millions)	0.000	0.000	0.000	1,733.234	0.000	1,733.234	0.000	1,101.297	0.000	0.000	-	2,834.531
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	0.000	0.000	1,733.234	0.000	1,733.234	0.000	1,101.297	0.000	0.000	-	2,834.531
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	0.000	0.000	1,733.234	0.000	1,733.234	0.000	1,101.297	0.000	0.000	-	2,834.531
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Total (\$ in Millions)	-	-	-	1,733.234	-	1,733.234	-	1,101.297	-	-	-	2,834.531
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	1,733.234	-	1,733.234	-	1,101.297	-	-	-	1,417.266

Description:

The Submarine Tender will be specifically designed to conduct steady state and wartime sustained, forward-based / expeditionary tending, resupply, depot and intermediate level repair operations on submarines and ships while anchored or pier side. In steady state, the Submarine Tender will provide pier side support in a forward deployed submarine homeport, providing sustained repair, supply, weapons handling, and tending operations for submarines. The Submarine Tender will supports deployed VIRGINIA class (VCS), COLUMBIA class (CLB) and future generation submarines in the 21st century. In addition, the submarine tender will provide radiological emergency response. Submarine Tenders will be built to commercial standards, including American Bureau of Shipping (ABS) rules and U.S. Coast Guard (USCG) regulations, and will utilize Commercial off-the-shelf (COTS) and Government Furnished Program of Record (POR) systems and equipment as well as Military Specification standards for designated areas including Nuclear Support Facility (NSF).

This program is a new start in FY 2024.

Characteristics:

-

Length Overall

-

Beam

-

Displacement

-

Draft

-

Production Status:

AS 1⁽¹⁾

Contract Award Date

May 2024

Months to Completion

a) Award to Delivery

85 months

b) Construction Start to Delivery

65 months

Delivery Date

Jun 2031

Completion Of Fitting Out

Sep 2031

Obligation Work Limit Date

Aug 2032

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5010 / AS Submarine Tender		
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				
<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>
Issue Date for TLR	Sep 2021	N/A		
Issue Date for TLS	N/A	N/A		
Preliminary Design	Apr 2022	Sep 2023		
Contract Design	N/A	N/A		
Detail Design	May 2024	Nov 2025		
Request for Proposals	Jul 2023	N/A		
Design Agent				
<u>Classification of Cost Estimate:</u>				
Footnotes: (1) Notional Dates				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1		P-1 Line Item Number / Title: 5010 / AS Submarine Tender
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2024	
	Qty <i>(Each)</i>	Total Cost <i>(\$ M)</i>
Plan Costs	1	194.000
Basic Construction/Conversion		1,365.046
Change Orders		55.047
Electronics ^(†)		63.047
Hull, Mechanical, and Electrical (HM&E) ^(†)		43.047
Ordnance ^(†)		6.047
Other Cost		7.000
Total Ship Estimate		1,733.234
Net P-1 Funding		1,733.234

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5010 / AS Submarine Tender		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
AS 1 ⁽¹⁾	TBD	2024	May 2024	Jan 2026	Jun 2031
AS 2 ⁽²⁾	TBD	2026	May 2026	May 2027	Sep 2032
Footnotes:					
⁽¹⁾ Notional Dates					
⁽²⁾ Notional Dates					

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1		P-1 Line Item Number / Title: 5010 / AS Submarine Tender	
Electronics		FY 2024	
		Qty (Each)	Total Cost (\$ M)
P-35 Items			
C4ISR		1	60.939
P-35 Items Subtotal			60.939
Major Items			
Aviation Electronics			2.108
Major Items Subtotal			2.108
Total Electronics			63.047

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1	P-1 Line Item Number / Title: 5010 / AS Submarine Tender	
Hull, Mechanical, and Electrical (HM&E)	FY 2024	
	Qty (Each)	Total Cost (\$ M)
Major Items		
Material Handling Equipment		6.571
Dive Boat	1	1.041
Boats (Rigid Inflatable Boat, 11 meter)	2	2.081
Boats (Rigid Inflatable Boat, 7 meter)	2	1.561
Major Items Subtotal		11.254
Other Cost Elements		
Miscellaneous HM&E		31.793
Other Cost Elements Subtotal		31.793
Total Hull, Mechanical, and Electrical (HM&E)		43.047

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1		P-1 Line Item Number / Title: 5010 / AS Submarine Tender	
Ordnance	FY 2024		
	Qty (Each)	Total Cost (\$ M)	
P-35 Items			
MK 38 Machine Gun System	2	5.912	
P-35 Items Subtotal		5.912	
Other Cost Elements			
MISCELLANEOUS ORDNANCE		0.135	
Other Cost Elements Subtotal		0.135	
Total Ordnance		6.047	

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1				P-1 Line Item Number / Title: 5010 / AS Submarine Tender			
Equipment Item: C4ISR					PARM Code: N/A		
P-35 Category				FY 2024			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	34.627		
Technical Data and Documentation					0.567		
Spares					1.273		
System Engineering					2.399		
Technical Engineering Services					12.803		
Other Costs					1.482		
Logistics					0.651		
Systems Test and Evaluation					1.187		
Program Management					1.426		
Software					4.033		
Data					0.491		
Total				1	60.939		
Description: The Command, Control, Communications, Computer, Intelligence, Surveillance and Reconnaissance (C4ISR) system consist of equipment which is in a containerized environment for secure storage and operation of ship's C2 equipment. The C4ISR Suite consist of (Next Generation Wideband Communications, SMIS (classified and unclassified networks), Military radios to provide VHF, UHF Line of Site, and UHF SATCOM, Commercial Broadband Satellite Program (CBSP) for wideband SATCOM and Consolidated Afloat Networks & Enterprise Services (CANES) and the HYDRA RADIO SYSTEM AN/SRC-5							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2024	AS 1	Various	Various	TBD	Various	1	34.627
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2024	AS 1	Jun 2031	19		Various		
Competition/Second Source Initiatives: N/A							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1				P-1 Line Item Number / Title: 5010 / AS Submarine Tender			
Equipment Item: MK 38 Machine Gun System						PARM Code: N/A	
P-35 Category				FY 2024			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				2	5.777		
Technical Engineering Services					0.135		
Total				2	5.912		
Description: The MK 38 Machine Gun System (MGS) is a 30MM automatic gun system that provides ships with a defensive and offensive gunfire capability for the engagement of a variety of surface targets.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2024	AS 1	TBD	TBD	TBD	New	2	2.889
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2024	AS 1	Jun 2031	24	18	Dec 2027		
Competition/Second Source Initiatives: N/A							

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost							P-1 Line Item Number / Title: 5025 / TAO Fleet Oiler					
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: P452												
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 (<i>Units in Each</i>)	6	2	1	1	-	1	-	2	1	2	5	20
Gross/Weapon System Cost (<i>\$ in Millions</i>)	3,770.321	1,488.469	782.588	815.420	0.000	815.420	0.000	1,632.295	861.022	1,751.894	4,187.383	15,289.392
Less PY Advance Procurement (<i>\$ in Millions</i>)	223.191	-	-	-	-	-	-	-	-	-	-	223.191
Less Cost To Complete (<i>\$ in Millions</i>)	416.849	24.685	-	-	-	-	-	-	-	-	-	441.534
Less Affordability Initiatives (<i>\$ in Millions</i>)	20.000	-	-	-	-	-	-	-	-	-	-	20.000
Net Procurement (P-1) (<i>\$ in Millions</i>)	3,110.281	1,463.784	782.588	815.420	0.000	815.420	0.000	1,632.295	861.022	1,751.894	4,187.383	14,604.667
Plus CY Advance Procurement (<i>\$ in Millions</i>)	223.191	-	-	-	-	-	-	-	-	-	-	223.191
Plus Cost To Complete (<i>\$ in Millions</i>)	79.049	66.700	128.100	122.895	-	122.895	37.040	7.750	-	-	-	441.534
Plus Affordability Initiatives (<i>\$ in Millions</i>)	20.000	-	-	-	-	-	-	-	-	-	-	20.000
Total Obligation Authority (<i>\$ in Millions</i>)	3,432.521	1,530.484	910.688	938.315	0.000	938.315	37.040	1,640.045	861.022	1,751.894	4,187.383	15,289.392
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	46.336	39.621	47.483	29.321	-	29.321	83.947	40.748	59.141	58.608	413.009	818.214
Total (<i>\$ in Millions</i>)	3,478.857	1,570.105	958.171	967.636	-	967.636	120.987	1,680.793	920.163	1,810.502	4,600.392	16,107.606
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	628.387	744.235	782.588	815.420	-	815.420	-	816.148	861.022	875.947	837.477	764.470

Description:
T-AO 205 John Lewis Fleet Oiler Class will recapitalize the existing T-AO 187 fleet oiler class. The Navy's Combat Logistics Force (CLF) oilers supply fuel and dry cargo to Navy ships at sea. The T-AO Class will operate as shuttle ships from resupply posts to customer ships. Additionally, in conjunction with a T-AKE, they will accompany and stay on-station with a Carrier Strike Group (CSG) to provide fuel as required to customer ships.

Note:
The Department is requesting \$102.4 million in FY 2023 funds to reflect revised economic assumptions in accordance with the General Provision Section 8121 of the Department of Defense Appropriations Act, 2023.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy						Date: March 2023																																																		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost				P-1 Line Item Number / Title: 5025 / TAO Fleet Oiler																																																				
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: P452																																																								
<div>Characteristics: T-AO</div> <div>Length Overall746 ft</div> <div>Beam106 ft</div> <div>Displacement22,515 MT (Lightship)</div> <div>Draft33.5 ft (Design)</div>																																																								
<div>Production Status:</div> <table><tr><td>T-AO 206⁽¹⁾</td><td>T-AO 207⁽²⁾</td><td>T-AO 208⁽³⁾</td><td>T-AO 209⁽⁴⁾</td><td>T-AO 210</td><td>T-AO 211⁽⁵⁾</td><td>T-AO 212</td></tr><tr><td>Contract Award Date Mar 2018</td><td>Contract Award Date Dec 2018</td><td>Contract Award Date Dec 2018</td><td>Contract Award Date Mar 2020</td><td>Contract Award Date Mar 2020</td><td>Contract Award Date Jun 2022</td><td>Contract Award Date Jun 2022</td></tr><tr><td>Months to Completion a) Award to Delivery 62 months</td><td>Months to Completion a) Award to Delivery 60 months</td><td>Months to Completion a) Award to Delivery 75 months</td><td>Months to Completion a) Award to Delivery 68 months</td><td>Months to Completion a) Award to Delivery 75 months</td><td>Months to Completion a) Award to Delivery 57 months</td><td>Months to Completion a) Award to Delivery 64 months</td></tr><tr><td>b) Construction Start to Delivery 41 months</td><td>b) Construction Start to Delivery 36 months</td><td>b) Construction Start to Delivery 46 months</td><td>b) Construction Start to Delivery 37 months</td><td>b) Construction Start to Delivery 38 months</td><td>b) Construction Start to Delivery 36 months</td><td>b) Construction Start to Delivery 36 months</td></tr><tr><td>Delivery Date May 2023</td><td>Delivery Date Dec 2023</td><td>Delivery Date Mar 2025</td><td>Delivery Date Nov 2025</td><td>Delivery Date Jun 2026</td><td>Delivery Date Mar 2027</td><td>Delivery Date Oct 2027</td></tr><tr><td>Completion Of Fitting Out Aug 2023</td><td>Completion Of Fitting Out Mar 2024</td><td>Completion Of Fitting Out Jun 2025</td><td>Completion Of Fitting Out Feb 2026</td><td>Completion Of Fitting Out Sep 2026</td><td>Completion Of Fitting Out Jun 2027</td><td>Completion Of Fitting Out Jan 2028</td></tr><tr><td>Obligation Work Limit Date Jul 2024</td><td>Obligation Work Limit Date Feb 2025</td><td>Obligation Work Limit Date May 2026</td><td>Obligation Work Limit Date Jan 2027</td><td>Obligation Work Limit Date Aug 2027</td><td>Obligation Work Limit Date May 2028</td><td>Obligation Work Limit Date Dec 2028</td></tr></table>								T-AO 206 ⁽¹⁾	T-AO 207 ⁽²⁾	T-AO 208 ⁽³⁾	T-AO 209 ⁽⁴⁾	T-AO 210	T-AO 211 ⁽⁵⁾	T-AO 212	Contract Award Date Mar 2018	Contract Award Date Dec 2018	Contract Award Date Dec 2018	Contract Award Date Mar 2020	Contract Award Date Mar 2020	Contract Award Date Jun 2022	Contract Award Date Jun 2022	Months to Completion a) Award to Delivery 62 months	Months to Completion a) Award to Delivery 60 months	Months to Completion a) Award to Delivery 75 months	Months to Completion a) Award to Delivery 68 months	Months to Completion a) Award to Delivery 75 months	Months to Completion a) Award to Delivery 57 months	Months to Completion a) Award to Delivery 64 months	b) Construction Start to Delivery 41 months	b) Construction Start to Delivery 36 months	b) Construction Start to Delivery 46 months	b) Construction Start to Delivery 37 months	b) Construction Start to Delivery 38 months	b) Construction Start to Delivery 36 months	b) Construction Start to Delivery 36 months	Delivery Date May 2023	Delivery Date Dec 2023	Delivery Date Mar 2025	Delivery Date Nov 2025	Delivery Date Jun 2026	Delivery Date Mar 2027	Delivery Date Oct 2027	Completion Of Fitting Out Aug 2023	Completion Of Fitting Out Mar 2024	Completion Of Fitting Out Jun 2025	Completion Of Fitting Out Feb 2026	Completion Of Fitting Out Sep 2026	Completion Of Fitting Out Jun 2027	Completion Of Fitting Out Jan 2028	Obligation Work Limit Date Jul 2024	Obligation Work Limit Date Feb 2025	Obligation Work Limit Date May 2026	Obligation Work Limit Date Jan 2027	Obligation Work Limit Date Aug 2027	Obligation Work Limit Date May 2028	Obligation Work Limit Date Dec 2028
T-AO 206 ⁽¹⁾	T-AO 207 ⁽²⁾	T-AO 208 ⁽³⁾	T-AO 209 ⁽⁴⁾	T-AO 210	T-AO 211 ⁽⁵⁾	T-AO 212																																																		
Contract Award Date Mar 2018	Contract Award Date Dec 2018	Contract Award Date Dec 2018	Contract Award Date Mar 2020	Contract Award Date Mar 2020	Contract Award Date Jun 2022	Contract Award Date Jun 2022																																																		
Months to Completion a) Award to Delivery 62 months	Months to Completion a) Award to Delivery 60 months	Months to Completion a) Award to Delivery 75 months	Months to Completion a) Award to Delivery 68 months	Months to Completion a) Award to Delivery 75 months	Months to Completion a) Award to Delivery 57 months	Months to Completion a) Award to Delivery 64 months																																																		
b) Construction Start to Delivery 41 months	b) Construction Start to Delivery 36 months	b) Construction Start to Delivery 46 months	b) Construction Start to Delivery 37 months	b) Construction Start to Delivery 38 months	b) Construction Start to Delivery 36 months	b) Construction Start to Delivery 36 months																																																		
Delivery Date May 2023	Delivery Date Dec 2023	Delivery Date Mar 2025	Delivery Date Nov 2025	Delivery Date Jun 2026	Delivery Date Mar 2027	Delivery Date Oct 2027																																																		
Completion Of Fitting Out Aug 2023	Completion Of Fitting Out Mar 2024	Completion Of Fitting Out Jun 2025	Completion Of Fitting Out Feb 2026	Completion Of Fitting Out Sep 2026	Completion Of Fitting Out Jun 2027	Completion Of Fitting Out Jan 2028																																																		
Obligation Work Limit Date Jul 2024	Obligation Work Limit Date Feb 2025	Obligation Work Limit Date May 2026	Obligation Work Limit Date Jan 2027	Obligation Work Limit Date Aug 2027	Obligation Work Limit Date May 2028	Obligation Work Limit Date Dec 2028																																																		
<div>Production Status:</div> <table><tr><td>T-AO 213</td><td>T-AO 214</td></tr><tr><td>Contract Award Date Mar 2023</td><td>Contract Award Date Mar 2024</td></tr><tr><td>Months to Completion a) Award to Delivery 65 months</td><td>Months to Completion a) Award to Delivery 61 months</td></tr><tr><td>b) Construction Start to Delivery 36 months</td><td>b) Construction Start to Delivery 36 months</td></tr><tr><td>Delivery Date Aug 2028</td><td>Delivery Date Apr 2029</td></tr><tr><td>Completion Of Fitting Out Nov 2028</td><td>Completion Of Fitting Out Jul 2029</td></tr><tr><td>Obligation Work Limit Date Oct 2029</td><td>Obligation Work Limit Date Jun 2030</td></tr></table>								T-AO 213	T-AO 214	Contract Award Date Mar 2023	Contract Award Date Mar 2024	Months to Completion a) Award to Delivery 65 months	Months to Completion a) Award to Delivery 61 months	b) Construction Start to Delivery 36 months	b) Construction Start to Delivery 36 months	Delivery Date Aug 2028	Delivery Date Apr 2029	Completion Of Fitting Out Nov 2028	Completion Of Fitting Out Jul 2029	Obligation Work Limit Date Oct 2029	Obligation Work Limit Date Jun 2030																																			
T-AO 213	T-AO 214																																																							
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<div>Design Schedule</div> <table><tr><td>Issue Date for TLR</td><td>Start / Issue</td><td>Complete / Response</td><td>Reissue</td><td>Reissue Complete / Response</td></tr><tr><td>Issue Date for TLS</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Preliminary Design</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Contract Design</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Detail Design</td><td>Jun 2016</td><td>Sep 2018</td><td></td><td></td></tr><tr><td>Request for Proposals</td><td>Jun 2015</td><td>Dec 2015</td><td></td><td></td></tr><tr><td>Design Agent</td><td></td><td></td><td></td><td></td></tr></table>								Issue Date for TLR	Start / Issue	Complete / Response	Reissue	Reissue Complete / Response	Issue Date for TLS	N/A	N/A			Preliminary Design	N/A	N/A			Contract Design	N/A	N/A			Detail Design	Jun 2016	Sep 2018			Request for Proposals	Jun 2015	Dec 2015			Design Agent																		
Issue Date for TLR	Start / Issue	Complete / Response	Reissue	Reissue Complete / Response																																																				
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Preliminary Design	N/A	N/A																																																						
Contract Design	N/A	N/A																																																						
Detail Design	Jun 2016	Sep 2018																																																						
Request for Proposals	Jun 2015	Dec 2015																																																						
Design Agent																																																								
<div>Classification of Cost Estimate:</div>																																																								
<div>Justification:</div> <div>FY 2024 requests funding for one T-AO Fleet Oiler.</div>																																																								

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5025 / TAO Fleet Oiler
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: P452		
Footnotes: (1) Delay in delivering T-AO 205 to July 2022, combined with delays on other Navy work at NASSCO and continued COVID driven labor shortages that resulted in yard wide manpower shifts, resulted in a seven month delay for T-AO 206 delivery. (2) Delay in delivering T-AO 205 to July 2022, combined with delays on other Navy work at NASSCO and continued COVID driven labor shortages that resulted in yard wide manpower shifts, resulted in a four month delay for T-AO 207 delivery (3) The twelve month T-AO 208 delivery delay is due to a delay caused by the late receipt of the Main Reduction Gear (MRG). (4) T-AO 209 through T-AO 217 have seven to twenty month delivery delays resulting from TAO 205 through T-AO 208 delays and delays in production timelines reflecting actual shipyard performance. (5) The production timelines, delivery dates, and Completion of Fitting Out dates for ships awarded in FY 2022 and later assume material costs, supply chain availability, and production timelines that reflect the pre-COVID 19 market place with adjustments for inflation.		

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5025 / TAO Fleet Oiler

Cost Categories (†) indicates the presence of a P-8a	FY 2018		FY 2019		FY 2020		FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	1		2		2		2		1		1	
Basic Construction/Conversion		559.546		1,094.103		1,052.398		1,361.291		735.037		747.466
Change Orders		5.891		9.500		9.643		13.366		7.350		7.475
Electronics (†)		28.230		57.590		85.399		68.112		37.179		45.023
Hull, Mechanical, and Electrical (HM&E) (†)		14.287		24.276		24.761		25.700		3.022		15.456
Other Cost		-		-		20.000		20.000		-		-
Total Ship Estimate		607.954		1,185.469		1,192.201		1,488.469		782.588		815.420
Less Advance Procurement FY 2017		73.077		-		-		-		-		-
Less Advance Procurement FY 2018		-		75.068		-		-		-		-
Less Advance Procurement FY 2019		-		-		75.046		-		-		-
Less Subsequent Full Funding FY 2021		-		-		20.000		-		-		-
Less Cost to Complete FY 2020		3.700		-		-		-		-		-
Less Cost to Complete FY 2021		17.400		-		-		-		-		-
Less Cost to Complete FY 2022		43.342		-		-		-		-		-
Less Cost to Complete FY 2023		12.500		106.400		-		-		-		-
Less Cost to Complete FY 2024		-		27.060		93.250		2.585		-		-
Less Cost to Complete FY 2025		-		-		22.690		14.350		-		-
Less Cost to Complete FY 2026		-		-		-		7.750		-		-
Net P-1 Funding		457.935		976.941		981.215		1,463.784		782.588		815.420

Remarks:

The FY 2024 ship includes an additional \$7.1M to fund the non-recurring engineering and integration efforts to upgrade the FY 2023 and follow ships from Network Management System (NMS) 2.0 to the Navy Consolidated Afloat Networks and Enterprise Services (CANES) program of record.

The Department added an additional \$42.0M in Completion of Prior Year Shipbuilding Programs (cost to complete) funding in FY 2024 to FY 2026 to the T-AO program since the FY 2023 budget including:

\$4.6M for Economic Price Adjustment (EPA) bills and fund additional government responsible portion of the shipbuilding contract overrun for T-AO 207/208.

\$12.7M for government furnished equipment (GFE) price increases and to fund additional government responsible portion of the shipbuilding contract overrun for T-AO 209/210.

\$24.7M to properly price the T-AO 211/212 basic construction contract for higher shipbuilding contract costs at award.

The FY 2024 cost to complete funding request of \$122.9M finances the following:

\$24.9M for EPA bills and \$2.2M for the government responsible portion of the shipbuilding contract overrun for T-AO 208 (\$27.1M total for FY 2019 ships).

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1		P-1 Line Item Number / Title: 5025 / TAO Fleet Oiler
<p>\$9.0M for EPA bills, \$18.0M for government furnished equipment (electronics, including upgrades from the now obsolete Network Management System (NMS) 1.0 to NMS 2.0), and \$66.3M for the government responsible portion of the shipbuilding construction contract overrun for T-AO 209/T-AO 210 (\$93.3M total for FY 2020 ships).</p> <p>\$2.6M to properly price the T-AO 211/212 basic construction contract for higher shipbuilding contract costs at award (\$2.6M total for the FY 2022 ships).</p>		

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy	Date: March 2023
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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1	P-1 Line Item Number / Title: 5025 / TAO Fleet Oiler
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Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
T-AO 206 ⁽¹⁾	GD NASSCO	2018	Mar 2018	Dec 2019	May 2023
T-AO 207 ⁽²⁾	GD NASSCO	2019	Dec 2018	Dec 2020	Dec 2023
T-AO 208 ⁽³⁾	GD NASSCO	2019	Dec 2018	May 2021	Mar 2025
T-AO 209 ⁽⁴⁾	GD NASSCO	2020	Mar 2020	Oct 2022	Nov 2025
T-AO 210	GD NASSCO	2020	Mar 2020	Apr 2023	Jun 2026
T-AO 211 ⁽⁵⁾	GD NASSCO	2022	Jun 2022	Mar 2024	Mar 2027
T-AO 212	GD NASSCO	2022	Jun 2022	Oct 2024	Oct 2027
T-AO 213	GD NASSCO	2023	Mar 2023	Aug 2025	Aug 2028
T-AO 214	TBD	2024	Mar 2024	Apr 2026	Apr 2029
T-AO 215	TBD	2026	Mar 2026	Sep 2027	Sep 2030
T-AO 216	TBD	2026	Mar 2026	Mar 2028	Mar 2031
T-AO 217	TBD	2027	Mar 2027	Feb 2029	Feb 2032
T-AO 218	TBD	2028	Mar 2028	Sep 2029	Sep 2032
T-AO 219	TBD	2028	Mar 2028	Jul 2030	Jul 2033

Footnotes:

⁽¹⁾ Delay in delivering T-AO 205 to July 2022, combined with delays on other Navy work at NASSCO and continued COVID driven labor shortages that resulted in yard wide manpower shifts, resulted in a seven month delay for T-AO 206 delivery.

⁽²⁾ Delay in delivering T-AO 205 to July 2022, combined with delays on other Navy work at NASSCO and continued COVID driven labor shortages that resulted in yard wide manpower shifts, resulted in a four month delay for T-AO 207 delivery

⁽³⁾ The twelve month T-AO 208 delivery delay is due to a delay caused by the late receipt of the Main Reduction Gear (MRG).

⁽⁴⁾ T-AO 209 through T-AO 217 have seven to twenty month delivery delays resulting from TAO 205 through T-AO 208 delays and delays in production timelines reflecting actual shipyard performance.

⁽⁵⁾ The production timelines, delivery dates, and Completion of Fitting Out dates for ships awarded in FY 2022 and later assume material costs, supply chain availability, and production timelines that reflect the pre-COVID 19 market place with adjustments for inflation.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5025 / TAO Fleet Oiler			
Electronics	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
P-35 Items						
Radio Communication System (RCS) TURNKEY	2	12.460	1	6.445	1	6.574
Network Management System (NMS) 2.0/Consolidated Afloat Networks and Enterprise Services (CANES)	2	21.665	1	11.597	1	18.929
P-35 Items Subtotal		34.125		18.042		25.503
Major Items						
Digital Modular Radio (DMR)	6	7.686	3	5.025	3	5.125
Commercial Broadband Satellite Program (CBSP)	2	4.758	1	2.434	1	2.483
AN/SLQ-25 NIXIE	2	8.158	1	4.079	1	4.161
AN/USQ-155 Tactical Variant Switch (TVS)	2	2.778	1	1.405	1	1.433
OA-9277A	2	2.657	1	1.944	1	1.983
Major Items Subtotal		26.037		14.887		15.185
Other Cost Elements						
Minor Systems	2	7.950	1	4.250	1	4.335
Other Cost Elements Subtotal		7.950		4.250		4.335
Total Electronics		68.112		37.179		45.023

Remarks:
FY 2024 Electronics: The FY 2024 ship includes an additional \$7.1M to fund the non-recurring engineering and integration efforts to upgrade the FY 2023 and follow ships from Network Management System (NMS) 2.0 to the Navy Consolidated Afloat Networks and Enterprise Services (CANES) program of record.

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5025 / TAO Fleet Oiler			
Hull, Mechanical, and Electrical (HM&E)	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Major Items						
Engineering Services	2	18.725	1	0.546	1	11.411
Logistics Support Services	2	2.327	1	0.205	1	1.729
SOLAS Variant RIB (Qty 2 per ship)	4	2.416	2	1.132	2	1.155
Material Handling Equipment	2	1.768	1	0.902	1	0.920
Shipboard Automated Maintenance Module (SAMM)	2	0.464	1	0.237	1	0.241
Major Items Subtotal		25.700		3.022		15.456
Total Hull, Mechanical, and Electrical (HM&E)		25.700		3.022		15.456
<div>Remarks:</div> <div>FY 2023 BASIC and HM&E: FY2023 HM&E was decreased by \$12.1M due to the FY 2023 congressional reduction. The FY 2023 Basic Construction/Conversion cost reflects the FY 2023 priced option contract price with GD NASSCO and is based on analysis of production man-hours for ships under construction as well as significant cost escalations involving material/commodity quotes that shipyards are experiencing.</div>						

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1				P-1 Line Item Number / Title: 5025 / TAO Fleet Oiler																																																										
Equipment Item: Radio Communication System (RCS) TURNKEY						PARM Code: N/A																																																								
P-35 Category	FY 2022		FY 2023		FY 2024																																																									
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)																																																								
Major Hardware	2	2.554	1	1.320	1	1.347																																																								
Ancillary Equipment		0.184		0.100		0.102																																																								
Technical Engineering Services		3.861		1.995		2.035																																																								
Ship Installation		5.148		2.662		2.715																																																								
Program Management		0.713		0.368		0.375																																																								
Total	2	12.460	1	6.445	1	6.574																																																								
<p>Description:</p> <p>The Radio Communication System (RCS) consists of the subsystems that provide data and voice communications across the RF spectrum. The RCS will be comprised of subsystems provided from various sources, including NAVWAR Program of Record systems, commercial systems, and associated ancillary equipment that can be obtained through the stock system and bought commercially. These subsystems will be integrated into one system and will include the automated and manual patching equipment required to configure these subsystems. The subsystems included in the RCS include the High Frequency System, Digital Modular Radio (DMR) VHF/UHF Line of Sight and UHF SATCOM voice, Naval Modular Automated Communications System (NAVMACS), Battle Force Tactical Network (BFTN), Tactical Variant Switch (TVS), Tactical Voice Terminal (TVT), Advanced Digital Networks System (ADNS), Commercial Broadband Satellite Program (CBSP), Fleet Broadcast System, Navy Order wire (NOW) Terminals, OE-570D/WSC UHF SATCOM Antenna, Portable Communications Equipment and Cryptologic equipment. The subsystems are integrated by NIWC LANT at the C4I- Ship Integration Facility (C-SIF) with the proper interfaces to operate as an overall system. The RCS subsystems and interfaces will be tested prior to shipment for installation onboard the T-AO ships.</p> <p>Contract Data:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Prime Contractor</th><th>Contract Method/Type</th><th>Award Date</th><th>New/Option</th><th>Quantity (Each)</th><th>Unit Cost (\$ M)</th></tr><tr><td>FY 2022</td><td>T-AO 211</td><td>TBD</td><td>TBD</td><td>TBD</td><td></td><td>2</td><td>1.277</td></tr><tr><td>FY 2023</td><td>T-AO 213</td><td>TBD</td><td>TBD</td><td>TBD</td><td></td><td>1</td><td>1.320</td></tr><tr><td>FY 2024</td><td>T-AO 214</td><td>TBD</td><td>TBD</td><td>TBD</td><td></td><td>1</td><td>1.347</td></tr></table> <p>Delivery Date:</p> <table><tr><th>Program Year</th><th>Hull</th><th>Earliest Ship Delivery Date</th><th>Months Required Before Delivery</th><th>Production Leadtime</th><th>Required Award Date</th></tr><tr><td>FY 2022</td><td>T-AO 211</td><td>Mar 2027</td><td>7</td><td>14</td><td>Jun 2025</td></tr><tr><td>FY 2023</td><td>T-AO 213</td><td>Aug 2028</td><td>7</td><td>14</td><td>Nov 2026</td></tr><tr><td>FY 2024</td><td>T-AO 214</td><td>Apr 2029</td><td>7</td><td>14</td><td>Jul 2027</td></tr></table> <p>Competition/Second Source Initiatives: N/A</p> <p>Remarks: FY 2022 includes T-AO 211 and T-AO 212</p>							Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	T-AO 211	TBD	TBD	TBD		2	1.277	FY 2023	T-AO 213	TBD	TBD	TBD		1	1.320	FY 2024	T-AO 214	TBD	TBD	TBD		1	1.347	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	T-AO 211	Mar 2027	7	14	Jun 2025	FY 2023	T-AO 213	Aug 2028	7	14	Nov 2026	FY 2024	T-AO 214	Apr 2029	7	14	Jul 2027
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																																																							
FY 2022	T-AO 211	TBD	TBD	TBD		2	1.277																																																							
FY 2023	T-AO 213	TBD	TBD	TBD		1	1.320																																																							
FY 2024	T-AO 214	TBD	TBD	TBD		1	1.347																																																							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																																																									
FY 2022	T-AO 211	Mar 2027	7	14	Jun 2025																																																									
FY 2023	T-AO 213	Aug 2028	7	14	Nov 2026																																																									
FY 2024	T-AO 214	Apr 2029	7	14	Jul 2027																																																									

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1				P-1 Line Item Number / Title: 5025 / TAO Fleet Oiler			
Equipment Item: Network Management System (NMS) 2.0/Consolidated Afloat Networks and Enterprise Services (CANES)						PARM Code: N/A	
P-35 Category	FY 2022		FY 2023		FY 2024		
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	
Major Hardware	2	7.071	1	3.692	1	3.766	
System Engineering		-		-		7.100	
Technical Engineering Services		5.458		2.979		3.039	
Software		4.532		2.385		2.432	
Ship Installation		1.231		0.648		0.661	
Program Management		1.339		0.837		0.854	
Integrated Logistics Support and Data		2.034		1.056		1.077	
Total	2	21.665	1	11.597	1	18.929	
Description: Consolidated Afloat Networks and Enterprise Services (CANES) is an on-board network classified and unclassified infrastructure that leverages the next generation of Afloat Navy Networks computing and services infrastructure. The system delivers required support to MSC communications and network infrastructure capabilities of the Combat Logistics Force Platforms.							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	T-AO 211	TBD	TBD	TBD		2	3.536
FY 2023	T-AO 213	TBD	TBD	TBD		1	3.692
FY 2024	T-AO 214	TBD	TBD	TBD		1	3.766
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	T-AO 211	Mar 2027	8	24	Jul 2024		
FY 2023	T-AO 213	Aug 2028	8	24	Dec 2025		
FY 2024	T-AO 214	Apr 2029	8	24	Aug 2026		
Competition/Second Source Initiatives: N/A							
Remarks: FY 2022 includes T-AO 211 and T-AO 212 The FY 2024 ship includes an additional \$7.1M to fund the non-recurring engineering and integration efforts to upgrade the FY 2023 and follow ships from Network Management System (NMS) 2.0 to the Navy Consolidated Afloat Networks and Enterprise Services (CANES) program of record.							

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost							P-1 Line Item Number / Title: 5030 / TAGOS Surtass Ships					
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)	-	1	-	-	-	-	1	1	1	1	2	7
Gross/Weapon System Cost (\$ in Millions)	0.000	789.550	0.000	0.000	0.000	0.000	433.858	416.613	421.135	427.134	876.750	3,365.040
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Less Cost To Complete (\$ in Millions)	-	355.166	-	-	-	-	-	-	-	-	-	355.166
Net Procurement (P-1) (\$ in Millions)	0.000	434.384	0.000	0.000	0.000	0.000	433.858	416.613	421.135	427.134	876.750	3,009.874
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Plus Cost To Complete (\$ in Millions)	-	-	-	355.166	-	355.166	-	-	-	-	-	355.166
Total Obligation Authority (\$ in Millions)	0.000	434.384	0.000	355.166	0.000	355.166	433.858	416.613	421.135	427.134	876.750	3,365.040
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (\$ in Millions)	-	-	-	-	-	-	0.902	9.968	17.818	26.669	99.559	154.916
Total (\$ in Millions)	-	434.384	-	355.166	-	355.166	434.760	426.581	438.953	453.803	976.309	3,519.956
Gross/Weapon System Unit Cost (\$ in Millions)	-	789.550	-	-	-	-	433.858	416.613	421.135	427.134	438.375	480.720

Description:

Auxiliary General Ocean Surveillance (T-AGOS) ships gather underwater acoustical data to support the mission of the Integrated Undersea Surveillance System (IUSS) by providing a ship platform capable of theater anti-submarine acoustic passive and active surveillance. T-AGOS ships are operated by Military Sealift Command to support the anti-submarine warfare mission of the commanders of the Atlantic and Pacific Fleets. The two current classes of surveillance ships use Surveillance Towed-Array Sensor System (SURTASS) equipment to gather undersea acoustic data. The ships also carry electronic equipment to process and transmit that data via satellite to shore stations for evaluation. Funding will support recapitalization of the four Small Waterplane Area Twin Hull (SWATH) T-19 Class and one SWATH T-23 Class ships.

Characteristics:

T-AGOS 25

Length Overall
Beam
Displacement
Draft

TBD
TBD
TBD
TBD

Production Status:

T-AGOS 25

Contract Award Date
Months to Completion
a) Award to Delivery
b) Construction Start to Delivery
Delivery Date
Completion Of Fitting Out
Obligation Work Limit Date

Jan 2024
48 months
30 months
Jan 2028
Oct 2028
Sep 2029

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5030 / TAGOS Surtass Ships		
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				
<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>
Issue Date for TLR	N/A	N/A		
Issue Date for TLS	N/A	N/A		
Preliminary Design	Mar 2019	Jun 2020	N/A	N/A
Contract Design	Jun 2020	Jun 2021	N/A	N/A
Detail Design	Jan 2024	Jul 2025	N/A	N/A
Request for Proposals	Nov 2021	May 2022	N/A	Jan 2023
Design Agent	TBD			
<u>Classification of Cost Estimate:</u>				
Justification: The FY24 Completion of Prior Year Shipbuilding Programs request of \$355.2M supports award and proper pricing of the lead FY22 ship.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1		P-1 Line Item Number / Title: 5030 / TAGOS Surtass Ships	
Cost Categories <small>(†) indicates the presence of a P-8a</small>	FY 2022		
	Qty <small>(Each)</small>	Total Cost <small>(\$ M)</small>	
Plan Costs	1	60.000	
Basic Construction/Conversion		582.880	
Change Orders		11.470	
Electronics ^(†)		105.000	
Hull, Mechanical, and Electrical (HM&E)		30.200	
Total Ship Estimate		789.550	
Less Cost to Complete FY 2024		355.166	
Net P-1 Funding		434.384	
Remarks: The lead ship cost estimate has increased due to several factors affecting shipbuilding prices including direct material inflation, supply chain challenges, and increased non-recurring engineering costs. Change orders increase supports the higher basic construction cost. HM&E has been increased to cover the FY 2024 procurement gap year for continuous class engineering and logistics support.			

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5030 / TAGOS Surtass Ships		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
T-AGOS 25	TBD	2022	Jan 2024	Jul 2025	Jan 2028
T-AGOS 26	TBD	2025	Jul 2025	Apr 2026	Jul 2028
T-AGOS 27	TBD	2026	Feb 2026	Oct 2026	Feb 2029
T-AGOS 28	TBD	2027	Feb 2027	Oct 2027	Feb 2030
T-AGOS 29	TBD	2028	Feb 2028	Oct 2028	Feb 2031

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LI 5030 - TAGOS Surtass Ships
Navy

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1				P-1 Line Item Number / Title: 5030 / TAGOS Surtass Ships			
Equipment Item: C4I						PARM Code: N/A	
P-35 Category				FY 2022			
				Qty (Each)	Total Cost (\$ M)		
Major Hardware				1	14.274		
Ancillary Equipment					18.496		
System Engineering					3.252		
Other Costs					2.478		
Total				1	38.500		
Description: The C4I includes Global Command & Control system - Maritime (GCCS-M) via Consolidated Afloat Networks and Enterprise Services (CANES), Global Positioning Navigation and Timing Service (GPNTS), Automatic Identification System AN/URN-31(V)1/(V)2, Identification Friend or Foe (IFF) AN/APX-123(V)3, Commercial Broadband Satellite Program (CBSP), Digital Modular Radio (DMR) UHF Line of Site and UHF SATCOM, Command and Control Office Information Exchange (C2OIX), Tactical Variant Switch, SI and HF communications, Consolidated Afloat Networks and Enterprise Services (CANES), and Advanced Digital Networks System (ADNS).							
Contract Data:							
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)
FY 2022	T-AGOS 25	TBD	TBD	TBD		1	14.274
Delivery Date:							
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date		
FY 2022	T-AGOS 25	Jan 2028	12	12	Jan 2026		
Competition/Second Source Initiatives: N/A							
Remarks: The lead ship Government Furnished Equipment (GFE) cost estimates have increased due to several factors affecting shipbuilding prices including direct material inflation, supply chain challenges, and increased non-recurring engineering costs reflected in the System Engineering category.							

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Exhibit P-35, Major Ship Component Fact Sheet: PB 2024 Navy						Date: March 2023																													
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1				P-1 Line Item Number / Title: 5030 / TAGOS Surtass Ships																															
Equipment Item: SURTASS						PARM Code: N/A																													
P-35 Category				FY 2022																															
				Qty (Each)		Total Cost (\$ M)																													
Major Hardware				1		25.610																													
Ancillary Equipment						3.176																													
System Engineering						4.196																													
Active Array				1		19.604																													
Active Handling System				1		9.278																													
Passive Handling System				1		4.636																													
Total				4		66.500																													
<p>Description:</p> <p>The SURTASS mission system is a Navy Acquisition Program of Record and T-AGOS is the host platform for the Surveillance Towed Array Sensor System (SURTASS). SURTASS is comprised of active and passive acoustic arrays, a processing segment, and a command, control, communications, computer, combat systems, and intelligence (C5I) segment to deliver tactical mission data to fleet and intelligence community users. SURTASS mission system will be procured to outfit the T-AGOS 25.</p> <p>Contract Data:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Prime Contractor</td><td>Contract Method/Type</td><td>Award Date</td><td>New/Option</td><td>Quantity (Each)</td><td>Unit Cost (\$ M)</td></tr><tr><td>FY 2022</td><td>T-AGOS 25</td><td>VARIOUS</td><td>TBD</td><td>Various</td><td></td><td>1</td><td>25.610</td></tr></table> <p>Delivery Date:</p> <table><tr><td>Program Year</td><td>Hull</td><td>Earliest Ship Delivery Date</td><td>Months Required Before Delivery</td><td>Production Leadtime</td><td>Required Award Date</td></tr><tr><td>FY 2022</td><td>T-AGOS 25</td><td>Jan 2028</td><td>12</td><td>36</td><td>Jan 2024</td></tr></table> <p>Competition/Second Source Initiatives:</p> <p>N/A</p> <p>Remarks:</p> <p>The lead ship GFE cost estimates have increased due to several factors affecting shipbuilding prices including direct material inflation, supply chain challenges, and increased non-recurring engineering costs reflected in the System Engineering category.</p>								Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)	FY 2022	T-AGOS 25	VARIOUS	TBD	Various		1	25.610	Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date	FY 2022	T-AGOS 25	Jan 2028	12	36	Jan 2024
Program Year	Hull	Prime Contractor	Contract Method/Type	Award Date	New/Option	Quantity (Each)	Unit Cost (\$ M)																												
FY 2022	T-AGOS 25	VARIOUS	TBD	Various		1	25.610																												
Program Year	Hull	Earliest Ship Delivery Date	Months Required Before Delivery	Production Leadtime	Required Award Date																														
FY 2022	T-AGOS 25	Jan 2028	12	36	Jan 2024																														

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost							P-1 Line Item Number / Title: 5035 / Towing, Salvage, and Rescue Ship (ATS)					
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 (<i>Units in Each</i>)	7	2	1	-	-	-	-	-	-	-	-	10
Gross/Weapon System Cost (<i>\$ in Millions</i>)	595.518	187.100	95.915	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	878.533
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Less Cost To Complete (<i>\$ in Millions</i>)	55.886	3.300	-	-	-	-	-	-	-	-	-	59.186
Net Procurement (P-1) (<i>\$ in Millions</i>)	539.632	183.800	95.915	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	819.347
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Plus Cost To Complete (<i>\$ in Millions</i>)	-	-	22.727	26.259	-	26.259	10.200	-	-	-	-	59.186
Total Obligation Authority (<i>\$ in Millions</i>)	539.632	183.800	118.642	26.259	0.000	26.259	10.200	0.000	0.000	0.000	-	878.533
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	13.031	6.516	10.758	10.148	-	10.148	24.722	12.075	2.195	-	-	79.445
Total (<i>\$ in Millions</i>)	552.663	190.316	129.400	36.407	-	36.407	34.922	12.075	2.195	-	-	957.978
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	85.074	93.550	95.915	-	-	-	-	-	-	-	-	87.853

Description:
 The Navy requires ocean-going towing, salvage, and rescue capabilities to support Fleet operations. The Navy's current capabilities are provided by four T-ATF 166 Class Fleet tugs and four T-ARS 50 Class salvage ships which will reach the end of their expected service lives beginning in 2020 and 2025, respectively. The Towing, Salvage and Rescue Ships (T-ATS 6 Navajo Class) will recapitalize the current Fleet tugs and salvage ships with a common hull that is capable of performing the missions of the retiring T-ATF and T-ARS classes.

Note:
 The Department is requesting \$3.0 million in FY 2023 funds to reflect revised economic assumptions in accordance with the General Provision Section 8121 of the Department of Defense Appropriations Act, 2023.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy						Date: March 2023																																									
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost				P-1 Line Item Number / Title: 5035 / Towing, Salvage, and Rescue Ship (ATS)																																											
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																																															
<table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Characteristics:</td> <td style="width:15%;">T-ATS</td> <td colspan="6"></td> </tr> <tr> <td>Length Overall</td> <td>263 ft</td> <td colspan="6"></td> </tr> <tr> <td>Beam</td> <td>59 ft</td> <td colspan="6"></td> </tr> <tr> <td>Displacement</td> <td>5,110 tons</td> <td colspan="6"></td> </tr> <tr> <td>Draft</td> <td>18 ft</td> <td colspan="6"></td> </tr> </table>								Characteristics:	T-ATS							Length Overall	263 ft							Beam	59 ft							Displacement	5,110 tons							Draft	18 ft						
Characteristics:	T-ATS																																														
Length Overall	263 ft																																														
Beam	59 ft																																														
Displacement	5,110 tons																																														
Draft	18 ft																																														
Production Status:		T-ATS 6 ⁽¹⁾	T-ATS 7	T-ATS 8	T-ATS 9	T-ATS 10	T-ATS 11	T-ATS 12																																							
Contract Award Date		Mar 2018	Apr 2019	Apr 2019	Apr 2020	Apr 2020	Sep 2021	Sep 2021																																							
Months to Completion																																															
a) Award to Delivery		79 months	72 months	80 months	78 months	83 months	38 months	44 months																																							
b) Construction Start to Delivery		64 months	66 months	70 months	50 months	48 months	28 months	28 months																																							
Delivery Date		Oct 2024	Apr 2025	Dec 2025	Oct 2026	Mar 2027	Nov 2024	May 2025																																							
Completion Of Fitting Out		Nov 2024	May 2025	Jan 2026	Nov 2026	Apr 2027	Dec 2024	Jun 2025																																							
Obligation Work Limit Date		Oct 2025	Apr 2026	Dec 2026	Oct 2027	Mar 2028	Nov 2025	May 2026																																							

Production Status:	T-ATS 13	T-ATS 14	T-ATS 15				
Contract Award Date	Jul 2022	Jul 2022	Jul 2023				
Months to Completion							
a) Award to Delivery	40 months	47 months	42 months				
b) Construction Start to Delivery	28 months	31 months	30 months				
Delivery Date	Nov 2025	Jun 2026	Jan 2027				
Completion Of Fitting Out	Dec 2025	Jul 2026	Feb 2027				
Obligation Work Limit Date	Nov 2026	Jun 2027	Jan 2028				

Design Schedule	Start / Issue	Complete / Response	Reissue	Reissue Complete / Response
Issue Date for TLR	Dec 2015	Mar 2016		
Issue Date for TLS	N/A	N/A		
Preliminary Design	N/A	N/A		
Contract Design	N/A	N/A		
Detail Design	Mar 2018	Sep 2019		
Request for Proposals	Mar 2017	May 2017		
Design Agent	Wartsila			

Classification of Cost Estimate:

Footnotes:
⁽¹⁾ T-ATS 6 through T-ATS 10 ship delivery delays are due to combination of labor shortages, rework associated with first of class production design, and delays in lead ship launch.

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy	Date: March 2023
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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1	P-1 Line Item Number / Title: 5035 / Towing, Salvage, and Rescue Ship (ATS)
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Cost Categories	FY 2016		FY 2018		FY 2019		FY 2020		FY 2021		FY 2022		FY 2023	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	1		1		1		2		2		2		1	
Basic Construction/Conversion		65.492		67.688		67.200		131.925		187.558		160.906		81.589
Change Orders		3.062		2.145		2.008		2.602		4.018		4.366		2.493
Electronics		5.033		5.779		5.547		11.300		11.241		11.756		5.696
Hull, Mechanical, and Electrical (HM&E)		3.163		3.277		8.166		6.583		1.731		10.072		6.137
Total Ship Estimate		76.750		78.889		82.921		152.410		204.548		187.100		95.915
Less Cost to Complete FY 2023		1.750		2.800		2.450		-		15.727		-		-
Less Cost to Complete FY 2024		-		-		-		1.150		21.809		3.300		-
Less Cost to Complete FY 2025		-		-		-		0.978		9.222		-		-
Net P-1 Funding		75.000		76.089		80.471		150.282		157.790		183.800		95.915

Remarks:

FY 2016, FY 2018, and FY 2019 basic construction reductions reflect a total reduction of \$15.5M in FY 2023 Completion of Prior Year Shipbuilding Programs (cost to complete) funding due to updated Hurricane Ida insurance claims.

The Department added an additional \$33.2M in cost to complete funding in FY 2024 to FY 2025 to the T-ATS program since the FY 2023 budget including:

Economic price adjustments (EPA) (\$1.8M) and additional HM&E funds for oversight (\$0.3M) for T-ATS 9/T-ATS 10.

Funds for the Government responsible portion of the shipbuilding contract overrun (\$22.8M) on T-ATS 11/T-ATS 12, additional HM&E funds for oversight (\$1.3M) for T-ATS 11/T-ATS 12, and an Austal request for equitable adjustment (\$7.0M) for T-ATS 11.

The FY 2024 cost to complete funding request of \$26.3M finances the following:

\$1.0M EPA for T-ATS 9 and \$0.2M additional HM&E oversight for T-ATS 9/T-ATS 10.

\$14.2M for the Government responsible portion of the shipbuilding contract overrun T-ATS 11, \$7.0M for an Austal request for equitable adjustment for T-ATS 11, and \$0.6M for additional HM&E oversight for T-ATS 11/T-ATS 12.

\$3.3M for T-ATS 13/T-ATS 14 delivery incentives.

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1

P-1 Line Item Number / Title:
5035 / Towing, Salvage, and Rescue Ship (ATS)

Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
T-ATS 6 ⁽¹⁾	Bollinger Houma Shipyards	2016	Mar 2018	Jun 2019	Oct 2024
T-ATS 7	Bollinger Houma Shipyards	2018	Apr 2019	Oct 2019	Apr 2025
T-ATS 8	Bollinger Houma Shipyards	2019	Apr 2019	Feb 2020	Dec 2025
T-ATS 9	Bollinger Houma Shipyards	2020	Apr 2020	Aug 2022	Oct 2026
T-ATS 10	Bollinger Houma Shipyards	2020	Apr 2020	Mar 2023	Mar 2027
T-ATS 11	Austal USA	2021	Sep 2021	Jul 2022	Nov 2024
T-ATS 12	Austal USA	2021	Sep 2021	Jan 2023	May 2025
T-ATS 13	Austal USA	2022	Jul 2022	Jul 2023	Nov 2025
T-ATS 14	Austal USA	2022	Jul 2022	Nov 2023	Jun 2026
T-ATS 15	Austal USA	2023	Jul 2023	Jul 2024	Jan 2027

Footnotes:
⁽¹⁾ T-ATS 6 through T-ATS 10 ship delivery delays are due to combination of labor shortages, rework associated with first of class production design, and delays in lead ship launch.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost						P-1 Line Item Number / Title: 5100 / LCU 1700						
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 (<i>Units in Each</i>)	11	4	-	2	-	2	2	2	2	2	5	30
Gross/Weapon System Cost (<i>\$ in Millions</i>)	258.349	67.928	0.000	62.532	0.000	62.532	45.164	48.481	48.534	50.034	122.212	703.234
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Less Cost To Complete (<i>\$ in Millions</i>)	11.816	-	-	-	-	-	-	-	-	-	-	11.816
Net Procurement (P-1) (<i>\$ in Millions</i>)	246.533	67.928	0.000	62.532	0.000	62.532	45.164	48.481	48.534	50.034	122.212	691.418
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Plus Cost To Complete (<i>\$ in Millions</i>)	-	11.816	-	-	-	-	-	-	-	-	-	11.816
Total Obligation Authority (<i>\$ in Millions</i>)	246.533	79.744	0.000	62.532	0.000	62.532	45.164	48.481	48.534	50.034	122.212	703.234
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	2.492	4.134	9.991	0.235	-	0.235	18.471	7.850	5.093	-	-	48.266
Total (<i>\$ in Millions</i>)	249.025	83.878	9.991	62.767	-	62.767	63.635	56.331	53.627	50.034	122.212	751.500
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	23.486	16.982	-	31.266	-	31.266	22.582	24.241	24.267	25.017	24.442	23.441

Description:
 The Landing Craft, Utility (LCU) 1700 program will provide heavy lift capability to transport personnel, weapons, equipment, and cargo from the ship to shore and shore to shore across the range of military operations (ROMO). LCU 1700 will be able to conduct 24 hours/day operations for up to 10 days for continuous landing of troops, equipment, and supplies; provide support for missions requiring persistence such as riverine sustainment, surveillance or port clearing; and execute missions to reinforce, reposition, and resupply forces over a wide operating area.

LCU 1700 provides the functional replacement for the LCU 1610 class of landing craft, all of which have significantly exceeded their 25 year service life, the average age is approaching 50 years old.

Note:
 Swiftships, LLC experienced significant construction delays for LCU 1700- LCU 1706 due to material availability, design issues, and labor issues. To resolve some of these issues, Swiftships submitted, and the Navy resolved a request for equitable adjustment (REA) in September 2022. As part of the REA, Navy and Swiftships re-baselined the contract target costs and delivery dates for seven craft on contract including one FY 2016 craft, 2 FY 2019 craft, three FY 2020 craft, and 1 FY 2021 craft (Navy plans to award the remaining 4 craft to a second source, discussed below). Additionally, Navy and Swiftships agreed to descope one craft in FY 2020. Finally, Navy provided Swiftships an additional \$16.5M (financed as part of the FY 22 Omnibus prior approval reprogramming action).

Given the schedule delays and the need to replace the existing LCU 1610 Class craft in the fleet, Navy established a second source, Austal USA. The remaining 4 FY 2021 craft initially awarded to Swiftships are now planned to award to Austal USA. The Navy also plans to award the FY 2022 craft to Austal USA.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy						Date: March 2023																																																																	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost				P-1 Line Item Number / Title: 5100 / LCU 1700																																																																			
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																																																																							
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Characteristics:</td> <td style="width: 15%;">LCU</td> <td colspan="6"></td> </tr> <tr> <td>Length Overall</td> <td>139 ft</td> <td colspan="6"></td> </tr> <tr> <td>Beam</td> <td>31 ft</td> <td colspan="6"></td> </tr> <tr> <td>Displacement</td> <td>428 Tons</td> <td colspan="6"></td> </tr> <tr> <td>Draft</td> <td>7.3 ft</td> <td colspan="6"></td> </tr> </table>								Characteristics:	LCU							Length Overall	139 ft							Beam	31 ft							Displacement	428 Tons							Draft	7.3 ft																														
Characteristics:	LCU																																																																						
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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost			P-1 Line Item Number / Title: 5100 / LCU 1700		
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					
<u>Design Schedule</u> Design Agent <u>Classification of Cost Estimate:</u>		<u>Start / Issue</u> Swiftships LLC	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>
 Justification: The FY 2024 request is for two LCU 1700 craft					

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1

P-1 Line Item Number / Title:
5100 / LCU 1700

Cost Categories	FY 2016		FY 2019		FY 2020		FY 2021		FY 2022		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	1	5.000	2	-	3	-	5	-	4	-	2	-
Basic Construction/Conversion		35.468		33.163		67.673		62.862		52.615		45.900
Change Orders		1.600		1.500		3.170		2.799		2.263		1.500
Electronics		3.890		3.768		6.761		11.607		8.307		7.911
Hull, Mechanical, and Electrical (HM&E)		2.360		1.589		3.060		3.922		2.388		2.711
Other Cost		2.080		1.500		3.006		6.205		2.355		4.510
Total Ship Estimate		50.398		41.520		83.670		87.395		67.928		62.532
Less Cost to Complete FY 2022		11.816		-		-		-		-		-
Net P-1 Funding		38.582		41.520		83.670		87.395		67.928		62.532

Remarks:
FY 2020 had a reduction of one craft due to settlement of shipbuilder request for equitable adjustment (REA). As part of the REA, Navy also added \$16.5M of funding to the FY 2016 craft. This was financed as part of the FY 22 Omnibus prior approval reprogramming action.

FY 2016 Electronics cost includes non-recurring engineering costs.

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5100 / LCU 1700

Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
LCU 1700	Swiftships LLC	2016	Mar 2018	Feb 2020	Aug 2023
LCU 1701	Swiftships LLC	2019	Feb 2019	Aug 2020	Sep 2023
LCU 1702	Swiftships LLC	2019	Feb 2019	Nov 2020	Dec 2023
LCU 1703	Swiftships LLC	2020	Apr 2020	Apr 2021	Mar 2024
LCU 1704	Swiftships LLC	2020	Apr 2020	Sep 2021	Aug 2024
LCU 1705	Swiftships LLC	2020	Apr 2020	Apr 2022	Nov 2024
LCU 1706	Swiftships LLC	2021	Apr 2020	Jun 2023	Feb 2025
LCU 1707	Austal USA	2021	Apr 2023	Oct 2024	Apr 2026
LCU 1708	Austal USA	2021	Apr 2023	Jan 2025	Jul 2026
LCU 1709	Austal USA	2021	Apr 2023	Apr 2025	Oct 2026
LCU 1710	Austal USA	2021	Apr 2023	Jul 2025	Jan 2027
LCU 1711	Austal USA	2022	Apr 2023	Nov 2023	May 2025
LCU 1712	Austal USA	2022	Apr 2023	Jan 2024	Jul 2025
LCU 1713	Austal USA	2022	Apr 2023	Apr 2024	Oct 2025
LCU 1714	Austal USA	2022	Apr 2023	Jul 2024	Jan 2026
LCU 1715	TBD	2024	Apr 2024	Oct 2025	Apr 2027
LCU 1716	TBD	2024	Apr 2024	Jan 2026	Jul 2027
LCU 1717	TBD	2025	Apr 2025	Apr 2026	Oct 2027
LCU 1718	TBD	2025	Apr 2025	Jul 2026	Jan 2028
LCU 1719	TBD	2026	Apr 2026	Oct 2026	Apr 2028
LCU 1720	TBD	2026	Apr 2026	Jan 2027	Jul 2028
LCU 1721	TBD	2027	Apr 2027	Nov 2027	May 2029
LCU 1722	TBD	2027	Apr 2027	Jan 2028	Jul 2029
LCU 1723	TBD	2028	Apr 2028	Nov 2028	May 2030
LCU 1724	TBD	2028	Apr 2028	Jan 2029	Jul 2030

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy								Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost						P-1 Line Item Number / Title: 5110 / Outfitting				
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	FY 2025	FY 2026	FY 2027	FY 2028	To Complete	Total
Full Funding TOA - Outfitting (\$ in Millions)	602.457	186.951	306.901	240.842	372.038	353.500	334.059	295.116	1,083.254	3,775.118
Full Funding TOA - Post Delivery (\$ in Millions)	359.567	422.360	394.989	310.670	647.724	382.065	342.537	452.958	2,084.842	5,397.712
Full Funding TOA - First Destination (\$ in Millions)	52.219	5.420	5.522	5.853	5.976	6.147	6.282	6.435	6.589	100.443
Total Obligation Authority (\$ in Millions)	1,014.243	614.731	707.412	557.365	1,025.738	741.712	682.878	754.509	3,174.685	9,273.273

Description:

Outfitting (OF) funds are used to acquire on board repair parts, other secondary items, equipage, recreation items, precommissioning crew support and general use consumables furnished to the shipbuilder or the fitting-out activity to fill the ship's initial allowances as defined by the baseline coordinated shipboard allowance list (COSAL). The program also budgets for contractor-furnished spares, a lead-time away from delivery. The program ensures operational readiness of ships undergoing new construction, conversion, service life extension program (SLEP), and nuclear refueling. It ensures these ships receive their full allowances of spare parts and equipment which are vitally required to support the shipboard maintenance process; ensures ships are equipped with operating space items (tools, test equipment, damage control), personnel safety and survivability commodities for successful completion of builder sea trials; supports shipboard maintenance and thereby achieving the OPNAV-directed supply readiness goals for material on board ship at delivery. SCN funding for the initial fill of allowance list items are limited to those items on the COSAL and authorized requirements through the Obligation Work Limiting Date (OWLD). While most outfitting funds are executed prior to ships' completion of fitting out dates, some outfitting funding may be required in the fiscal year following the scheduled Delivery Date.

Post Delivery (PD) funding covers the repair of government-responsible items which were believed to have been complete to standard and/or operable at delivery, as well as funding to conduct tests and trials after delivery.

It is essential to deliver to the Fleet complete ships, free from both contractor and government responsible deficiencies, capable of supporting the Navy's mission. The Post Shakedown Availability (PSA) is a shipyard availability assigned to commence after delivery and to be completed prior to the expiration of the SCN OWLD. It is during this time that acceptance and final contract trials deficiencies will be corrected. The purpose of the PSA is to correct new construction deficiencies found during the shakedown period; to correct contractor and government responsible deficiencies previously authorized; and accomplishment of other improvements or class items as authorized. Funding is used for corrections authorized by the ship's Program Manager as a result of builders' trials (pre-delivery), acceptance or underway trials, final contract trials, trial board items, and correction of production-related defects or deficiencies which develop during the post delivery period. Although the majority of post delivery funding occurs after ships' delivery dates, some funding is required prior to the delivery date in preparation for post delivery events.

First Destination Transportation (FDT). FDT delivers material from a procurement source to the first point of use or storage which may be in the Continental United States or overseas. The procurement source may be a supplier outside of the Department of Defense (DoD) supply system or a DoD activity which fabricates new material. FDT also includes transportation from point of origin to point of use or storage when Navy-owned material or equipment is provided to a contractor incident to a Research and Development project or a system/equipment acquisition or modification.

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Exhibit P-29, Outfitting: PB 2024 Navy												Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1								P-1 Line Item Number / Title: 5110 / Outfitting							
Ship Class	Hull Number	Program Year	Contract Award	Start of Const.	Delivery Date	CFO	PSA Start	PSA Finish	OWL Date	Prior Years	FY 2022	FY 2023	FY 2024	To Complete	Total
CO CLASS	826	2021	Oct 2020	Oct 2020	Oct 2027	Oct 2027	Mar 2029	Sep 2029	Mar 2030	-	-	-	10.742	63.962	74.704
CO CLASS	827	2024	Oct 2020	Sep 2023	Apr 2030	Apr 2030	Jan 2031	Jul 2031	Jan 2032	-	-	-	-	74.664	74.664
CO CLASS	828	2026	Nov 2025	Apr 2025	Aug 2031	Aug 2031	May 2032	Nov 2032	May 2033	-	-	-	-	81.346	81.346
CO CLASS	829	2027	Nov 2025	Jun 2026	Sep 2032	Sep 2032	Jun 2033	Dec 2033	Jun 2034	-	-	-	-	83.151	83.151
CO CLASS Total										-	-	-	10.742	303.123	313.865
CVN	79	2013	Jun 2015	Feb 2011	Jul 2025	Nov 2025	Dec 2025	Feb 2026	Oct 2026	42.517	41.981	66.622	39.306	17.136	207.562
CVN	80	2018	Jan 2019	Jan 2019	Mar 2028	May 2028	Oct 2028	Mar 2029	Apr 2029	-	-	-	4.096	220.269	224.365
CVN Total										42.517	41.981	66.622	43.402	237.405	431.927
CVN	81	2020	Jan 2019	Jan 2019	Feb 2032	Apr 2032	Sep 2032	Feb 2033	Mar 2033	-	-	-	-	190.435	190.435
CVN Total										-	-	-	-	190.435	190.435
VIRGINIA	792	2014	Apr 2014	May 2014	Apr 2020	Apr 2020	Nov 2021	Feb 2023	Apr 2023	19.403	-	-	-	-	19.403
VIRGINIA	793	2014	Apr 2014	Sep 2014	Feb 2022	Feb 2022	May 2023	Mar 2024	May 2024	20.262	-	-	-	-	20.262
VIRGINIA	794	2015	Apr 2014	Apr 2015	Mar 2022	Mar 2022	Jan 2023	Dec 2023	Jan 2024	19.501	-	-	-	-	19.501
VIRGINIA	795	2015	Apr 2014	Sep 2015	May 2023	May 2023	Jan 2024	Oct 2024	Dec 2024	16.419	0.068	2.544	-	-	19.031
VIRGINIA	796	2016	Apr 2014	Mar 2016	Sep 2023	Sep 2023	Jan 2024	Sep 2024	Dec 2024	17.333	0.099	0.363	-	-	17.795
VIRGINIA	797	2016	Apr 2014	Sep 2016	Jun 2024	Jun 2024	Jan 2025	Apr 2025	May 2025	15.665	0.119	2.231	2.799	-	20.814
VIRGINIA	798	2017	Apr 2014	Mar 2017	Nov 2024	Nov 2024	Apr 2025	Jul 2025	Oct 2025	15.575	0.122	2.241	1.937	1.564	21.439
VIRGINIA	799	2017	Apr 2014	Sep 2017	Mar 2025	Mar 2025	Jul 2025	Nov 2025	Feb 2026	14.165	0.119	3.055	3.756	0.394	21.489
VIRGINIA	800	2018	Apr 2014	Mar 2018	Dec 2025	Dec 2025	Apr 2026	Aug 2026	Nov 2026	10.509	3.692	0.030	4.534	2.842	21.607
VIRGINIA	801	2018	Apr 2014	Sep 2018	Sep 2026	Sep 2026	Feb 2027	Jun 2027	Aug 2027	-	13.052	0.030	1.318	8.114	22.514
VIRGINIA	802	2019	Dec 2019	Sep 2019	May 2027	May 2027	Sep 2027	Feb 2028	Apr 2028	-	-	-	-	22.925	22.925
VIRGINIA	803	2019	Dec 2019	Mar 2020	Nov 2028	Nov 2028	Sep 2029	Jan 2030	Mar 2030	-	-	-	-	25.664	25.664
VIRGINIA	804	2020	Dec 2019	Sep 2020	Mar 2029	Mar 2029	Jul 2029	Nov 2029	Feb 2030	-	-	-	-	25.674	25.674
VIRGINIA	805	2020	Dec 2019	Jul 2021	Jul 2029	Jul 2029	Nov 2029	Mar 2030	Jun 2030	-	-	-	-	25.727	25.727
VIRGINIA	806	2021	Dec 2019	Aug 2022	Feb 2030	Feb 2030	Jun 2030	Oct 2030	Jan 2031	-	-	-	-	26.184	26.184
VIRGINIA	807	2021	Dec 2019	Nov 2022	Feb 2031	Feb 2031	Jun 2031	Oct 2031	Jan 2032	-	-	-	-	26.697	26.697
VIRGINIA	808	2022	Dec 2019	May 2023	Dec 2030	Dec 2030	Apr 2031	Aug 2031	Nov 2031	-	-	-	-	26.691	26.691
VIRGINIA	809	2022	Dec 2019	Oct 2023	Oct 2031	Oct 2031	Feb 2032	Jun 2032	Sep 2032	-	-	-	-	27.030	27.030
VIRGINIA	810	2023	Dec 2019	Mar 2024	Dec 2031	Dec 2031	Apr 2032	Aug 2032	Nov 2032	-	-	-	-	27.030	27.030
VIRGINIA	811	2023	Dec 2019	Sep 2024	Jul 2032	Jul 2032	Nov 2032	Mar 2033	Jun 2033	-	-	-	-	27.030	27.030
VIRGINIA	812	2024	May 2024	Mar 2025	Jun 2033	Jun 2033	Sep 2033	Jan 2034	May 2034	-	-	-	-	27.030	27.030
VIRGINIA Total										148.832	17.271	10.494	14.344	300.596	491.537
CVN-RCOH	73	2016	Aug 2017	Aug 2017	Jun 2023	Aug 2023	Jun 2023	Jun 2024	Jul 2024	53.349	7.334	-	-	-	60.683
CVN-RCOH	74	2020	Jan 2021	May 2021	Aug 2025	Dec 2025	Nov 2025	Dec 2025	Nov 2026	1.342	2.876	19.074	37.566	4.760	65.618
CVN-RCOH	75	2025	May 2025	May 2025	Mar 2029	May 2029	Mar 2029	Mar 2030	Apr 2030	-	-	-	-	70.253	70.253
CVN-RCOH Total										54.691	10.210	19.074	37.566	75.013	196.554
DDG 1000	1001	2007	Sep 2011	Mar 2010	Oct 2023	Oct 2023	Sep 2022	Mar 2023	Sep 2024	22.035	2.046	1.611	-	-	25.692
DDG 1000	1002	2009	Sep 2011	Apr 2012	Dec 2026	Dec 2026	May 2027	Aug 2027	Nov 2027	10.241	-	21.164	-	-	31.405
DDG 1000 Total										32.276	2.046	22.775	-	-	57.097

UNCLASSIFIED

Exhibit P-29, Outfitting: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5110 / Outfitting

Ship Class	Hull Number	Program Year	Contract Award	Start of Const.	Delivery Date	CFO	PSA Start	PSA Finish	OWL Date	Prior Years	FY 2022	FY 2023	FY 2024	To Complete	Total
DDG	120	2013	Mar 2014	Sep 2016	Jan 2023	Jun 2023	Jan 2024	May 2024	May 2024	20.408	1.102	3.135	0.662	-	25.307
DDG	121	2015	Jun 2013	Apr 2016	Nov 2021	Apr 2022	Nov 2022	Feb 2023	Mar 2023	24.022	0.648	0.972	-	-	25.642
DDG	122	2015	Jun 2013	Sep 2017	Nov 2023	Mar 2024	Nov 2024	Jan 2025	Feb 2025	17.260	0.604	4.297	2.511	0.337	25.009
DDG	123	2016	Jun 2013	Jan 2017	Nov 2022	Apr 2023	Oct 2023	Feb 2024	Mar 2024	21.875	0.764	2.239	0.662	-	25.540
DDG	124	2016	Jun 2013	Jul 2018	Sep 2024	Jan 2025	Aug 2025	Nov 2025	Dec 2025	5.153	11.013	4.002	5.897	1.563	27.628
DDG	127	2016	Sep 2017	Apr 2019	Aug 2025	Dec 2025	Jun 2026	Oct 2026	Nov 2026	-	-	16.336	8.960	2.103	27.399
DDG	125	2017	Jun 2013	May 2018	Jun 2023	Mar 2024	Aug 2024	Nov 2024	Feb 2025	15.707	5.797	3.081	4.219	-	28.804
DDG	126	2017	Jun 2013	Mar 2020	Jul 2026	Nov 2026	May 2027	Sep 2027	Oct 2027	-	-	-	0.600	28.267	28.867
DDG	128	2018	Sep 2018	Apr 2020	Mar 2025	Jul 2025	Jan 2026	Apr 2026	Jun 2026	-	-	16.336	8.622	2.468	27.426
DDG	129	2018	Sep 2018	Jan 2021	Jan 2026	May 2026	Nov 2026	Mar 2027	Apr 2027	-	-	-	11.670	15.683	27.353
DDG	131	2019	Sep 2018	Nov 2021	Oct 2026	Feb 2027	Jul 2027	Nov 2027	Jan 2028	-	-	-	-	30.170	30.170
DDG	130	2019	Sep 2018	May 2021	Apr 2027	Aug 2027	Feb 2028	Jun 2028	Jul 2028	-	-	-	-	30.218	30.218
DDG	132	2019	Dec 2018	Feb 2022	Feb 2028	Jul 2028	Jan 2029	May 2029	Jun 2029	-	-	-	-	30.772	30.772
DDG	133	2020	Sep 2018	Dec 2022	Jun 2027	Oct 2027	Mar 2028	Jun 2028	Aug 2028	-	-	-	-	30.340	30.340
DDG	135	2020	Jun 2020	May 2023	Feb 2028	Jun 2028	Dec 2028	Apr 2029	May 2029	-	-	-	-	30.799	30.799
DDG	134	2020	Sep 2018	May 2023	Nov 2028	Mar 2029	Sep 2029	Jan 2030	Feb 2030	-	-	-	-	30.930	30.930
DDG	137	2021	Sep 2018	Oct 2023	Oct 2028	Feb 2029	Jul 2029	Nov 2029	Jan 2030	-	-	-	-	31.304	31.304
DDG	136	2021	Sep 2018	Feb 2024	Aug 2029	Nov 2029	Jun 2030	Sep 2030	Oct 2030	-	-	-	-	31.374	31.374
DDG	139	2022	Sep 2018	Mar 2024	Jun 2029	Oct 2029	Apr 2030	Aug 2030	Sep 2030	-	-	-	-	31.532	31.532
DDG	138	2022	Sep 2018	Nov 2024	May 2030	Sep 2030	Mar 2031	Jul 2031	Aug 2031	-	-	-	-	31.351	31.351
DDG	140	2023	Jun 2023	Dec 2025	Dec 2030	Apr 2031	Oct 2031	Feb 2032	Mar 2032	-	-	-	-	32.066	32.066
DDG	141	2023	Jun 2023	Dec 2025	Dec 2030	Apr 2031	Oct 2031	Feb 2032	Mar 2032	-	-	-	-	32.061	32.061
DDG	142	2023	Sep 2023	Jun 2026	Jun 2031	Oct 2031	May 2032	Sep 2032	Sep 2032	-	-	-	-	32.558	32.558
DDG	143	2024	Jun 2023	Dec 2026	Dec 2031	Apr 2032	Nov 2032	Feb 2033	Mar 2033	-	-	-	-	32.563	32.563
DDG	144	2024	Jun 2023	Dec 2026	Dec 2031	Apr 2032	Nov 2032	Feb 2033	Mar 2033	-	-	-	-	32.727	32.727
DDG	145	2025	Jun 2023	Sep 2027	Sep 2032	Jan 2033	Aug 2033	Nov 2033	Dec 2033	-	-	-	-	32.721	32.721
DDG	146	2025	Jun 2023	Sep 2027	Sep 2032	Jan 2033	Aug 2033	Nov 2033	Dec 2033	-	-	-	-	33.242	33.242
DDG	147	2026	Jun 2023	Jun 2028	Jun 2033	Oct 2033	May 2034	Aug 2034	Sep 2034	-	-	-	-	33.181	33.181
DDG	148	2026	Jun 2023	Jun 2028	Jun 2033	Oct 2033	May 2034	Aug 2034	Sep 2034	-	-	-	-	33.628	33.628
DDG	149	2027	Jun 2023	Feb 2029	Feb 2034	Jun 2034	Jan 2035	May 2035	May 2035	-	-	-	-	34.155	34.155
DDG Total										104.425	19.928	50.398	43.803	688.113	906.667
LCS	19	2014	Mar 2014	Aug 2016	Feb 2020	Dec 2020	Mar 2021	Nov 2022	Dec 2022	7.783	-	-	-	-	7.783
LCS	21	2015	Mar 2015	Feb 2017	Nov 2021	Sep 2022	May 2023	Aug 2023	Aug 2023	7.667	0.230	-	-	-	7.897
LCS	26	2016	Mar 2016	Jan 2018	Dec 2020	Sep 2021	Jan 2022	Apr 2022	Aug 2022	8.119	0.084	-	-	-	8.203
LCS	23	2016	Nov 2015	Sep 2017	Sep 2022	Apr 2023	Nov 2023	Jan 2024	Mar 2024	6.709	0.260	0.972	-	-	7.941
LCS	25	2016	Mar 2016	Feb 2018	Jan 2023	Oct 2023	Apr 2024	Jul 2024	Sep 2024	6.784	0.330	1.036	-	-	8.150
LCS	28	2017	Jun 2017	Oct 2018	Jun 2021	Mar 2022	Oct 2022	Dec 2022	Feb 2023	8.169	0.084	-	-	-	8.253
LCS	30	2017	Oct 2017	May 2019	Dec 2021	Sep 2022	Feb 2023	Apr 2023	Aug 2023	7.276	1.089	-	-	-	8.365
LCS	27	2017	Oct 2017	Nov 2018	Aug 2023	Mar 2024	Aug 2024	Nov 2024	Feb 2025	5.274	0.099	1.878	0.965	-	8.216

UNCLASSIFIED

Exhibit P-29, Outfitting: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5110 / Outfitting

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LCS	32	2018	Sep 2018	Dec 2019	Jul 2022	Apr 2023	Sep 2023	Nov 2023	Mar 2024	6.742	0.755	1.095	-	-	8.592
LCS	34	2018	Sep 2018	Jun 2020	Apr 2023	Jan 2024	Jun 2024	Aug 2024	Dec 2024	4.043	2.383	2.195	-	-	8.621
LCS	29	2018	Sep 2018	Jun 2019	May 2024	Dec 2024	May 2025	Jul 2025	Nov 2025	3.317	1.129	2.500	1.302	-	8.248
LCS	36	2019	Dec 2018	Jan 2021	Jan 2024	Oct 2024	Feb 2025	Apr 2025	Sep 2025	1.734	2.960	2.817	1.259	-	8.770
LCS	31	2019	Jan 2019	Jun 2020	Jul 2024	Mar 2025	Aug 2025	Oct 2025	Feb 2026	-	3.541	2.523	1.588	0.970	8.622
LCS	38	2019	Dec 2018	Jul 2021	Dec 2024	Sep 2025	Jan 2026	Mar 2026	Aug 2026	-	1.739	1.964	4.267	1.020	8.990
LCS Total										73.617	14.683	16.980	9.381	1.990	116.651
FFG	62	2020	Apr 2020	Aug 2022	Sep 2026	Mar 2027	Jan 2028	Apr 2028	Apr 2028	-	-	-	-	40.962	40.962
FFG	63	2021	May 2021	Apr 2023	Sep 2027	Mar 2028	Nov 2028	Feb 2029	Feb 2029	-	-	-	-	41.739	41.739
FFG	64	2022	Jun 2022	Apr 2023	Aug 2028	Dec 2028	Aug 2029	Nov 2029	Nov 2029	-	-	-	-	32.853	32.853
FFG	65	2023	Apr 2023	Oct 2023	Oct 2028	Jan 2029	Sep 2029	Dec 2029	Dec 2029	-	-	-	-	32.986	32.986
FFG	67	2024	Apr 2024	Nov 2024	Aug 2029	Nov 2029	Jul 2030	Oct 2030	Oct 2030	-	-	-	-	33.619	33.619
FFG	66	2024	Apr 2024	Aug 2024	Mar 2030	Jun 2030	Feb 2031	May 2031	May 2031	-	-	-	-	34.291	34.291
FFG Total										-	-	-	-	216.450	216.450
LPD Flight II	30	2018	Mar 2019	Mar 2020	May 2026	Jan 2027	Jul 2027	Nov 2027	Dec 2027	-	-	11.888	8.480	11.048	31.416
LPD Flight II	31	2021	Apr 2020	Sep 2022	Mar 2028	Nov 2028	May 2029	Sep 2029	Oct 2029	-	-	-	-	31.407	31.407
LPD Flight II	32	2023	Jun 2023	Jul 2024	Sep 2029	May 2030	Nov 2030	Mar 2031	Apr 2031	-	-	-	-	32.124	32.124
LPD Flight II Total										-	-	11.888	8.480	74.579	94.947
LPD	28	2016	Dec 2016	Dec 2016	Mar 2022	Apr 2023	Dec 2023	Feb 2024	Mar 2024	26.582	1.557	-	-	-	28.139
LPD	29	2017	Feb 2018	Jul 2018	Jan 2024	Sep 2024	Feb 2025	Jul 2025	Aug 2025	-	16.231	12.777	2.286	-	31.294
LPD Total										26.582	17.788	12.777	2.286	-	59.433
ESB	6	2018	Aug 2019	Jun 2020	Mar 2023	Jun 2023	Sep 2023	Jan 2024	May 2024	13.167	4.601	-	-	-	17.768
ESB	7	2019	Aug 2019	Dec 2021	Sep 2024	Dec 2024	Mar 2025	Jul 2025	Nov 2025	-	4.486	11.819	1.640	-	17.945
ESB	8	2022	Jul 2022	Aug 2023	Jun 2026	Sep 2026	Jan 2027	Apr 2027	Aug 2027	-	-	-	-	17.305	17.305
ESB Total										13.167	9.087	11.819	1.640	17.305	53.018
LHA	8	2017	Jun 2017	Oct 2018	Oct 2025	Jun 2026	Feb 2027	May 2027	May 2027	1.000	4.418	21.459	19.039	21.900	67.816
LHA Total										1.000	4.418	21.459	19.039	21.900	67.816
EMS	1	2022	Apr 2023	Apr 2024	Apr 2027	Jul 2027	Jan 2028	May 2028	Jun 2028	-	-	-	-	14.351	14.351
EMS Total										-	-	-	-	14.351	14.351
EPF	13	2018	Mar 2019	Aug 2019	Feb 2023	May 2023	Jan 2024	Apr 2024	Jul 2024	6.000	2.166	-	-	-	8.166
EPF	14	2019	Mar 2019	Oct 2020	Aug 2023	Nov 2023	May 2024	Aug 2024	Oct 2024	0.800	5.113	8.248	-	-	14.161
EPF	15	2021	Dec 2021	Jan 2022	May 2025	Aug 2025	Feb 2026	May 2026	Jul 2026	-	-	5.600	8.295	-	13.895
EPF	16	2022	May 2022	May 2023	Mar 2026	Jun 2026	Dec 2026	Mar 2027	May 2027	-	-	-	3.822	10.164	13.986
EPF Total										6.800	7.279	13.848	12.117	10.164	50.208
T-AO	205	2016	Jun 2016	Sep 2018	Jul 2022	Oct 2022	Feb 2023	May 2023	Sep 2023	20.609	-	-	-	-	20.609
T-AO	206	2018	Mar 2018	Dec 2019	May 2023	Aug 2023	Jan 2024	Apr 2024	Jul 2024	15.646	2.359	-	-	-	18.005
T-AO	207	2019	Dec 2018	Dec 2020	Dec 2023	Mar 2024	Jul 2024	Oct 2024	Feb 2025	1.208	11.722	4.941	-	-	17.871
T-AO	208	2019	Dec 2018	May 2021	Mar 2025	Jun 2025	Oct 2025	Jan 2026	May 2026	-	7.555	10.354	-	-	17.909
T-AO	209	2020	Mar 2020	Oct 2022	Nov 2025	Feb 2026	Jun 2026	Sep 2026	Jan 2027	-	-	9.631	8.886	-	18.517

UNCLASSIFIED

Exhibit P-29, Outfitting: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5110 / Outfitting

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T-AO	210	2020	Mar 2020	Apr 2023	Jun 2026	Sep 2026	Jan 2027	Apr 2027	Aug 2027	-	-	-	-	18.782	18.782
T-AO	211	2022	Jun 2022	Mar 2024	Mar 2027	Jun 2027	Oct 2027	Jan 2028	May 2028	-	-	-	-	19.135	19.135
T-AO	212	2022	Jun 2022	Oct 2024	Oct 2027	Jan 2028	May 2028	Aug 2028	Dec 2028	-	-	-	-	19.251	19.251
T-AO	213	2023	Mar 2023	Aug 2025	Aug 2028	Nov 2028	Mar 2029	Jun 2029	Oct 2029	-	-	-	-	19.540	19.540
T-AO	214	2024	Mar 2024	Apr 2026	Apr 2029	Jul 2029	Nov 2029	Feb 2030	Jun 2030	-	-	-	-	19.909	19.909
T-AO	215	2026	Mar 2026	Sep 2027	Sep 2030	Dec 2030	Apr 2031	Jul 2031	Nov 2031	-	-	-	-	20.344	20.344
T-AO	216	2026	Mar 2026	Mar 2028	Mar 2031	Jun 2031	Oct 2031	Jan 2032	May 2032	-	-	-	-	20.712	20.712
T-AO Total										37.463	21.636	24.926	8.886	137.673	230.584
T-AGOS	25	2022	Jan 2024	Jul 2025	Jan 2028	Oct 2028	Oct 2028	Dec 2028	Sep 2029	-	-	-	-	9.733	9.733
T-AGOS	26	2025	Jul 2025	Apr 2026	Jul 2028	Apr 2029	Apr 2029	Jun 2029	Mar 2030	-	-	-	-	9.795	9.795
T-AGOS	27	2026	Feb 2026	Oct 2026	Feb 2029	Nov 2029	Nov 2029	Jan 2030	Oct 2030	-	-	-	-	9.913	9.913
T-AGOS	28	2027	Feb 2027	Oct 2027	Feb 2030	Nov 2030	Nov 2030	Jan 2031	Oct 2031	-	-	-	-	9.944	9.944
T-AGOS Total										-	-	-	-	39.385	39.385
T-ATS	6	2016	Mar 2018	Jun 2019	Oct 2024	Nov 2024	Jun 2025	Jun 2025	Oct 2025	4.361	-	-	-	-	4.361
T-ATS	7	2018	Apr 2019	Oct 2019	Apr 2025	May 2025	Dec 2025	Dec 2025	Apr 2026	4.339	-	-	-	-	4.339
T-ATS	8	2019	Apr 2019	Feb 2020	Dec 2025	Jan 2026	Aug 2026	Aug 2026	Dec 2026	4.331	-	-	-	-	4.331
T-ATS	9	2020	Apr 2020	Aug 2022	Oct 2026	Nov 2026	Jun 2027	Jun 2027	Oct 2027	-	2.841	1.490	-	-	4.331
T-ATS	10	2020	Apr 2020	Mar 2023	Mar 2027	Apr 2027	Nov 2027	Nov 2027	Mar 2028	-	0.783	3.550	-	-	4.333
T-ATS	11	2021	Sep 2021	Jul 2022	Nov 2024	Dec 2024	Jul 2025	Jul 2025	Nov 2025	-	-	1.187	3.123	-	4.310
T-ATS	12	2021	Sep 2021	Jan 2023	May 2025	Jun 2025	Jan 2026	Jan 2026	May 2026	-	-	-	4.011	0.410	4.421
T-ATS	13	2022	Jul 2022	Jul 2023	Nov 2025	Dec 2025	Jul 2026	Jul 2026	Nov 2026	-	-	-	-	4.431	4.431
T-ATS	14	2022	Jul 2022	Nov 2023	Jun 2026	Jul 2026	Feb 2027	Feb 2027	Jun 2027	-	-	-	-	4.466	4.466
T-ATS	15	2023	Jul 2023	Jul 2024	Jan 2027	Feb 2027	Sep 2027	Sep 2027	Jan 2028	-	-	-	-	4.519	4.519
T-ATS Total										13.031	3.624	6.227	7.134	13.826	43.842
T-AGS/AGOR	67	2018	Jun 2021	Apr 2022	Jun 2026	Sep 2026	Jul 2027	Aug 2027	Aug 2027	-	-	-	5.978	2.500	8.478
T-AGS/AGOR Total										-	-	-	5.978	2.500	8.478
LCU	1700	2016	Mar 2018	Feb 2020	Aug 2023	Oct 2023	Oct 2023	Dec 2023	Sep 2024	1.115	-	-	-	-	1.115
LCU	1701	2019	Feb 2019	Aug 2020	Sep 2023	Oct 2023	Dec 2023	Feb 2024	Sep 2024	0.163	0.272	0.498	0.182	-	1.115
LCU	1702	2019	Feb 2019	Nov 2020	Dec 2023	May 2024	Jun 2024	Aug 2024	Mar 2025	-	0.923	0.168	-	0.024	1.115
LCU	1703	2020	Apr 2020	Apr 2021	Mar 2024	May 2024	Sep 2024	Dec 2024	Mar 2025	-	0.203	0.709	-	0.220	1.132
LCU	1704	2020	Apr 2020	Sep 2021	Aug 2024	Dec 2024	Jan 2025	Mar 2025	Nov 2025	-	-	1.132	-	-	1.132
LCU	1705	2020	Apr 2020	Apr 2022	Nov 2024	Dec 2024	Mar 2025	May 2025	Nov 2025	-	-	1.132	-	-	1.132
LCU	1706	2021	Apr 2020	Jun 2023	Feb 2025	Mar 2025	Jun 2025	Aug 2025	Feb 2026	-	-	1.132	-	-	1.132
LCU	1707	2021	Apr 2023	Oct 2024	Apr 2026	Aug 2026	Sep 2026	Jan 2027	Jul 2027	-	-	1.132	-	-	1.132
LCU	1708	2021	Apr 2023	Jan 2025	Jul 2026	Aug 2026	Feb 2027	May 2027	Jul 2027	-	-	-	-	1.136	1.136
LCU	1709	2021	Apr 2023	Apr 2025	Oct 2026	Feb 2027	Mar 2027	Jun 2027	Jan 2028	-	-	-	-	1.132	1.132
LCU	1710	2021	Apr 2023	Jul 2025	Jan 2027	Feb 2027	Jun 2027	Sep 2027	Jan 2028	-	-	-	-	1.166	1.166
LCU	1711	2022	Apr 2023	Nov 2023	May 2025	Aug 2025	Sep 2025	Dec 2025	Jul 2026	-	-	-	-	1.166	1.166
LCU	1712	2022	Apr 2023	Jan 2024	Jul 2025	Aug 2025	Jan 2026	Mar 2026	Jul 2026	-	-	-	-	1.166	1.166

UNCLASSIFIED

Exhibit P-29, Outfitting: PB 2024 Navy

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Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5110 / Outfitting

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LCU	1713	2022	Apr 2023	Apr 2024	Oct 2025	Feb 2026	Mar 2026	Jun 2026	Jan 2027	-	-	-	-	1.166	1.166
LCU	1714	2022	Apr 2023	Jul 2024	Jan 2026	Feb 2026	Jul 2026	Sep 2026	Jan 2027	-	-	-	-	1.166	1.166
LCU	1715	2024	Apr 2024	Oct 2025	Apr 2027	Aug 2027	Sep 2027	Dec 2027	Jul 2028	-	-	-	-	1.166	1.166
LCU	1716	2024	Apr 2024	Jan 2026	Jul 2027	Aug 2027	Jan 2028	Mar 2028	Jul 2028	-	-	-	-	1.200	1.200
LCU	1717	2025	Apr 2025	Apr 2026	Oct 2027	Feb 2028	Mar 2028	Jun 2028	Jan 2029	-	-	-	-	1.200	1.200
LCU	1718	2025	Apr 2025	Jul 2026	Jan 2028	Feb 2028	Jun 2028	Aug 2028	Jan 2029	-	-	-	-	1.237	1.237
LCU	1719	2026	Apr 2026	Oct 2026	Apr 2028	Aug 2028	Sep 2028	Nov 2028	Jul 2029	-	-	-	-	1.236	1.236
LCU	1720	2026	Apr 2026	Jan 2027	Jul 2028	Aug 2028	Nov 2028	Feb 2029	Jul 2029	-	-	-	-	1.273	1.273
LCU	1721	2027	Apr 2027	Nov 2027	May 2029	Jul 2029	Aug 2029	Nov 2029	Jun 2030	-	-	-	-	1.273	1.273
LCU	1722	2027	Apr 2027	Jan 2028	Jul 2029	Jul 2029	Dec 2029	Feb 2030	Jun 2030	-	-	-	-	1.273	1.273
LCU	1723	2028	Apr 2028	Nov 2028	May 2030	Aug 2030	Aug 2030	Nov 2030	Jun 2031	-	-	-	-	1.310	1.310
LCU	1724	2028	Apr 2028	Jan 2029	Jul 2030	Aug 2030	Dec 2030	Feb 2031	Jun 2031	-	-	-	-	1.310	1.310
LCU Total										1.278	1.398	5.903	0.182	20.820	29.581
LCAC	101	2015	Dec 2012	Mar 2015	Aug 2020	Feb 2022	May 2022	Jul 2022	Apr 2023	2.995	-	-	-	-	2.995
LCAC	102	2015	Mar 2015	Sep 2016	Jun 2021	Feb 2022	Nov 2022	Dec 2022	Feb 2023	1.070	-	-	-	-	1.070
LCAC	103	2015	Mar 2015	Nov 2016	Dec 2021	Jul 2022	Jan 2023	Mar 2023	Apr 2023	1.070	-	-	-	-	1.070
LCAC	104	2016	Mar 2016	Feb 2017	Jun 2022	Aug 2022	Mar 2023	May 2023	Jul 2023	1.079	-	-	-	-	1.079
LCAC	106	2016	Mar 2016	Oct 2017	Nov 2022	May 2023	Jul 2023	Sep 2023	Apr 2024	1.284	-	-	-	-	1.284
LCAC	105	2016	Mar 2016	May 2017	Mar 2023	May 2023	May 2023	Jul 2023	Apr 2024	1.079	-	-	-	-	1.079
LCAC	107	2016	Mar 2016	Apr 2018	May 2023	Sep 2023	Sep 2023	Dec 2023	Aug 2024	1.037	-	-	-	-	1.037
LCAC	108	2016	Mar 2016	Jul 2018	Sep 2023	Sep 2023	Dec 2023	Mar 2024	Aug 2024	1.007	-	-	-	-	1.007
LCAC	109	2017	Apr 2020	Dec 2018	Mar 2024	Aug 2024	Sep 2024	Jan 2025	Jul 2025	1.007	-	-	-	-	1.007
LCAC	110	2018	Apr 2020	Mar 2019	Jul 2024	Aug 2024	Nov 2024	Feb 2025	Jul 2025	1.057	-	-	-	-	1.057
LCAC	111	2018	Apr 2020	Aug 2019	Sep 2024	Jan 2025	Feb 2025	May 2025	Dec 2025	0.430	0.726	-	-	-	1.156
LCAC	112	2018	Apr 2020	Feb 2020	Dec 2024	Jan 2025	Mar 2025	Jul 2025	Dec 2025	-	1.199	-	-	-	1.199
LCAC	113	2018	Apr 2020	Aug 2020	Apr 2025	Aug 2025	Sep 2025	Dec 2025	Jul 2026	-	1.222	-	-	-	1.222
LCAC	114	2018	Apr 2020	Dec 2020	Jul 2025	Aug 2025	Oct 2025	Feb 2026	Jul 2026	-	1.222	-	-	-	1.222
LCAC	115	2018	Apr 2020	Jul 2021	Sep 2025	Jan 2026	Feb 2026	May 2026	Dec 2026	-	1.222	-	-	-	1.222
LCAC	116	2018	Apr 2020	Jan 2022	Dec 2025	Jan 2026	Mar 2026	Jul 2026	Dec 2026	-	0.314	0.908	-	-	1.222
LCAC	117	2019	Apr 2020	Jun 2022	Feb 2026	Jun 2026	Jul 2026	Oct 2026	May 2027	-	-	1.096	0.027	-	1.123
LCAC	118	2019	Apr 2020	Dec 2022	May 2026	Jun 2026	Aug 2026	Dec 2026	May 2027	-	-	-	1.145	-	1.145
LCAC	119	2019	Apr 2020	May 2023	Aug 2026	Oct 2026	Nov 2026	Mar 2027	Sep 2027	-	-	-	1.145	-	1.145
LCAC	120	2019	Apr 2020	Jul 2023	Oct 2026	Oct 2026	Jan 2027	Apr 2027	Sep 2027	-	-	-	1.145	-	1.145
LCAC	121	2019	Apr 2020	Oct 2023	Dec 2026	Jan 2027	Feb 2027	May 2027	Dec 2027	-	-	-	1.145	-	1.145
LCAC	122	2019	Apr 2020	Dec 2023	Mar 2027	Mar 2027	Mar 2027	Jul 2027	Feb 2028	-	-	-	0.445	0.700	1.145
LCAC	123	2020	Apr 2020	Feb 2024	May 2027	Aug 2027	Sep 2027	Dec 2027	Jun 2028	-	-	-	0.410	0.769	1.179
LCAC	124	2022	Sep 2023	Apr 2024	Jul 2027	Aug 2027	Oct 2027	Jan 2028	Jun 2028	-	-	-	-	1.179	1.179
LCAC	125	2022	Sep 2023	Jul 2024	Sep 2027	Dec 2027	Jan 2028	Apr 2028	Nov 2028	-	-	-	-	1.179	1.179
LCAC	126	2022	Sep 2023	Sep 2024	Dec 2027	Dec 2027	Mar 2028	Jun 2028	Nov 2028	-	-	-	-	1.179	1.179

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Exhibit P-29, Outfitting: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1

P-1 Line Item Number / Title:
5110 / Outfitting

Ship Class	Hull Number	Program Year	Contract Award	Start of Const.	Delivery Date	CFO	PSA Start	PSA Finish	OWL Date	Prior Years	FY 2022	FY 2023	FY 2024	To Complete	Total
LCAC	127	2022	Sep 2023	Nov 2024	Feb 2028	May 2028	Jun 2028	Sep 2028	Apr 2029	-	-	-	-	1.179	1.179
LCAC	128	2022	Sep 2023	Feb 2025	Apr 2028	May 2028	Jul 2028	Nov 2028	Apr 2029	-	-	-	-	1.214	1.214
LCAC	129	2023	Sep 2023	Apr 2025	Jul 2028	Sep 2028	Oct 2028	Feb 2029	Aug 2029	-	-	-	-	1.250	1.250
LCAC	130	2023	Sep 2023	Jun 2025	Sep 2028	Sep 2028	Dec 2028	Mar 2029	Aug 2029	-	-	-	-	1.250	1.250
LCAC	131	2023	Sep 2023	Sep 2025	Nov 2028	Feb 2029	Mar 2029	Jun 2029	Jan 2030	-	-	-	-	1.288	1.288
LCAC	132	2023	Sep 2023	Nov 2025	Jan 2029	Feb 2029	May 2029	Aug 2029	Jan 2030	-	-	-	-	1.288	1.288
LCAC	133	2023	Sep 2023	Jan 2026	Apr 2029	Jul 2029	Aug 2029	Nov 2029	May 2030	-	-	-	-	1.288	1.288
LCAC	134	2025	Mar 2025	Mar 2026	Jun 2029	Jul 2029	Sep 2029	Dec 2029	May 2030	-	-	-	-	1.288	1.288
LCAC	135	2025	Mar 2025	Jun 2026	Aug 2029	Dec 2029	Jan 2030	Apr 2030	Nov 2030	-	-	-	-	1.288	1.288
LCAC	136	2026	Mar 2026	Sep 2026	Nov 2029	Dec 2029	Mar 2030	Jun 2030	Nov 2030	-	-	-	-	1.288	1.288
LCAC	137	2026	Mar 2026	Dec 2026	Mar 2030	Aug 2030	Sep 2030	Dec 2030	Jul 2031	-	-	-	-	1.288	1.288
LCAC Total										13.115	5.905	2.004	5.462	18.915	45.401
APL	71	2021	Mar 2021	Jun 2021	Oct 2023	Nov 2023			Oct 2024	-	-	0.260	-	-	0.260
APL Total										-	-	0.260	-	-	0.260
LCAC SLEP	45	2021	Feb 2021	Jul 2021	Feb 2023	Apr 2023	May 2023	May 2023	Mar 2024	-	0.172	-	0.229	-	0.401
LCAC SLEP	31	2021	Feb 2021	Nov 2021	Jul 2023	Aug 2023	Sep 2023	Sep 2023	Jul 2024	-	0.172	-	0.229	-	0.401
LCAC SLEP	48	2021	Feb 2021	Mar 2022	Nov 2023	Dec 2023	Jan 2024	Jan 2024	Nov 2024	-	0.171	-	0.152	-	0.323
LCAC SLEP Total										-	0.515	-	0.610	-	1.125
PUBS	0	2010								33.663	9.182	9.447	9.790	53.424	115.506
PUBS Total										33.663	9.182	9.447	9.790	53.424	115.506
Full Funding TOA - Outfitting Total										602.457	186.951	306.901	240.842	2,437.967	3,775.118

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Exhibit P-30, Delivery: PB 2024 Navy												Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1								P-1 Line Item Number / Title: 5110 / Outfitting							
Ship Class	Hull Number	Program Year	Contract Award	Start of Const.	Delivery Date	CFO	PSA Start	PSA Finish	OWL Date	Prior Years	FY 2022	FY 2023	FY 2024	To Complete	Total
CO CLASS	826	2021	Oct 2020	Oct 2020	Oct 2027	Oct 2027	Mar 2029	Sep 2029	Mar 2030	-	-	-	-	239.929	239.929
CO CLASS	827	2024	Oct 2020	Sep 2023	Apr 2030	Apr 2030	Jan 2031	Jul 2031	Jan 2032	-	-	-	-	232.100	232.100
CO CLASS Total										-	-	-	-	472.029	472.029
CVN	79	2013	Jun 2015	Feb 2011	Jul 2025	Nov 2025	Dec 2025	Feb 2026	Oct 2026	-	-	-	-	142.857	142.857
CVN	80	2018	Jan 2019	Jan 2019	Mar 2028	May 2028	Oct 2028	Mar 2029	Apr 2029	-	-	-	-	202.053	202.053
CVN Total										-	-	-	-	344.910	344.910
CVN	81	2020	Jan 2019	Jan 2019	Feb 2032	Apr 2032	Sep 2032	Feb 2033	Mar 2033	-	-	-	-	218.108	218.108
CVN Total										-	-	-	-	218.108	218.108
VIRGINIA	792	2014	Apr 2014	May 2014	Apr 2020	Apr 2020	Nov 2021	Feb 2023	Apr 2023	46.644	30.411	6.000	-	-	83.055
VIRGINIA	793	2014	Apr 2014	Sep 2014	Feb 2022	Feb 2022	May 2023	Mar 2024	May 2024	14.901	13.452	19.888	10.767	-	59.008
VIRGINIA	794	2015	Apr 2014	Apr 2015	Mar 2022	Mar 2022	Jan 2023	Dec 2023	Jan 2024	9.883	23.299	25.180	1.630	-	59.992
VIRGINIA	795	2015	Apr 2014	Sep 2015	May 2023	May 2023	Jan 2024	Oct 2024	Dec 2024	-	-	16.867	33.020	10.000	59.887
VIRGINIA	796	2016	Apr 2014	Mar 2016	Sep 2023	Sep 2023	Jan 2024	Sep 2024	Dec 2024	-	-	-	30.841	28.526	59.367
VIRGINIA	797	2016	Apr 2014	Sep 2016	Jun 2024	Jun 2024	Jan 2025	Apr 2025	May 2025	-	-	-	2.832	36.145	38.977
VIRGINIA	798	2017	Apr 2014	Mar 2017	Nov 2024	Nov 2024	Apr 2025	Jul 2025	Oct 2025	-	-	-	2.000	37.799	39.799
VIRGINIA	799	2017	Apr 2014	Sep 2017	Mar 2025	Mar 2025	Jul 2025	Nov 2025	Feb 2026	-	-	-	-	38.066	38.066
VIRGINIA	800	2018	Apr 2014	Mar 2018	Dec 2025	Dec 2025	Apr 2026	Aug 2026	Nov 2026	-	-	-	-	39.772	39.772
VIRGINIA	801	2018	Apr 2014	Sep 2018	Sep 2026	Sep 2026	Feb 2027	Jun 2027	Aug 2027	-	-	-	-	40.395	40.395
VIRGINIA	802	2019	Dec 2019	Sep 2019	May 2027	May 2027	Sep 2027	Feb 2028	Apr 2028	-	-	-	-	40.865	40.865
VIRGINIA	803	2019	Dec 2019	Mar 2020	Nov 2028	Nov 2028	Sep 2029	Jan 2030	Mar 2030	-	-	-	-	41.114	41.114
VIRGINIA	804	2020	Dec 2019	Sep 2020	Mar 2029	Mar 2029	Jul 2029	Nov 2029	Feb 2030	-	-	-	-	41.327	41.327
VIRGINIA	805	2020	Dec 2019	Jul 2021	Jul 2029	Jul 2029	Nov 2029	Mar 2030	Jun 2030	-	-	-	-	41.902	41.902
VIRGINIA	806	2021	Dec 2019	Aug 2022	Feb 2030	Feb 2030	Jun 2030	Oct 2030	Jan 2031	-	-	-	-	42.182	42.182
VIRGINIA	807	2021	Dec 2019	Nov 2022	Feb 2031	Feb 2031	Jun 2031	Oct 2031	Jan 2032	-	-	-	-	42.983	42.983
VIRGINIA	808	2022	Dec 2019	May 2023	Dec 2030	Dec 2030	Apr 2031	Aug 2031	Nov 2031	-	-	-	-	43.352	43.352
VIRGINIA	809	2022	Dec 2019	Oct 2023	Oct 2031	Oct 2031	Feb 2032	Jun 2032	Sep 2032	-	-	-	-	43.918	43.918
VIRGINIA Total										71.428	67.162	67.935	81.090	568.346	855.961
CVN-RCOH	73	2016	Aug 2017	Aug 2017	Jun 2023	Aug 2023	Jun 2023	Jun 2024	Jul 2024	6.187	25.012	-	-	-	31.199
CVN-RCOH	74	2020	Jan 2021	May 2021	Aug 2025	Dec 2025	Nov 2025	Dec 2025	Nov 2026	-	-	-	-	37.877	37.877
CVN-RCOH Total										6.187	25.012	-	-	37.877	69.076
DDG 1000	1001	2007	Sep 2011	Mar 2010	Oct 2023	Oct 2023	Sep 2022	Mar 2023	Sep 2024	25.498	58.340	15.930	-	-	99.768
DDG 1000	1002	2009	Sep 2011	Apr 2012	Dec 2026	Dec 2026	May 2027	Aug 2027	Nov 2027	0.500	2.013	-	-	40.000	42.513
DDG 1000 Total										25.998	60.353	15.930	-	40.000	142.281
DDG	120	2013	Mar 2014	Sep 2016	Jan 2023	Jun 2023	Jan 2024	May 2024	May 2024	-	36.458	12.736	-	-	49.194
DDG	121	2015	Jun 2013	Apr 2016	Nov 2021	Apr 2022	Nov 2022	Feb 2023	Mar 2023	23.438	23.655	-	-	-	47.093
DDG	122	2015	Jun 2013	Sep 2017	Nov 2023	Mar 2024	Nov 2024	Jan 2025	Feb 2025	-	-	26.258	16.868	-	43.126
DDG	123	2016	Jun 2013	Jan 2017	Nov 2022	Apr 2023	Oct 2023	Feb 2024	Mar 2024	-	24.613	19.499	-	-	44.112
DDG	124	2016	Jun 2013	Jul 2018	Sep 2024	Jan 2025	Aug 2025	Nov 2025	Dec 2025	-	-	-	25.463	17.734	43.197
DDG	127	2016	Sep 2017	Apr 2019	Aug 2025	Dec 2025	Jun 2026	Oct 2026	Nov 2026	-	-	-	-	43.906	43.906

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Exhibit P-30, Delivery: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5110 / Outfitting

Ship Class	Hull Number	Program Year	Contract Award	Start of Const.	Delivery Date	CFO	PSA Start	PSA Finish	OWL Date	Prior Years	FY 2022	FY 2023	FY 2024	To Complete	Total
DDG	125	2017	Jun 2013	May 2018	Jun 2023	Mar 2024	Aug 2024	Nov 2024	Feb 2025	-	-	42.018	10.299	-	52.317
DDG	126	2017	Jun 2013	Mar 2020	Jul 2026	Nov 2026	May 2027	Sep 2027	Oct 2027	-	-	-	-	51.295	51.295
DDG	128	2018	Sep 2018	Apr 2020	Mar 2025	Jul 2025	Jan 2026	Apr 2026	Jun 2026	-	-	-	-	48.353	48.353
DDG	129	2018	Sep 2018	Jan 2021	Jan 2026	May 2026	Nov 2026	Mar 2027	Apr 2027	-	-	-	-	48.809	48.809
DDG	131	2019	Sep 2018	Nov 2021	Oct 2026	Feb 2027	Jul 2027	Nov 2027	Jan 2028	-	-	-	-	49.545	49.545
DDG	130	2019	Sep 2018	May 2021	Apr 2027	Aug 2027	Feb 2028	Jun 2028	Jul 2028	-	-	-	-	49.537	49.537
DDG	132	2019	Dec 2018	Feb 2022	Feb 2028	Jul 2028	Jan 2029	May 2029	Jun 2029	-	-	-	-	49.840	49.840
DDG	133	2020	Sep 2018	Dec 2022	Jun 2027	Oct 2027	Mar 2028	Jun 2028	Aug 2028	-	-	-	-	49.692	49.692
DDG	135	2020	Jun 2020	May 2023	Feb 2028	Jun 2028	Dec 2028	Apr 2029	May 2029	-	-	-	-	49.680	49.680
DDG	134	2020	Sep 2018	May 2023	Nov 2028	Mar 2029	Sep 2029	Jan 2030	Feb 2030	-	-	-	-	49.403	49.403
DDG	137	2021	Sep 2018	Oct 2023	Oct 2028	Feb 2029	Jul 2029	Nov 2029	Jan 2030	-	-	-	-	49.718	49.718
DDG	136	2021	Sep 2018	Feb 2024	Aug 2029	Nov 2029	Jun 2030	Sep 2030	Oct 2030	-	-	-	-	49.949	49.949
DDG	139	2022	Sep 2018	Mar 2024	Jun 2029	Oct 2029	Apr 2030	Aug 2030	Sep 2030	-	-	-	-	51.908	51.908
DDG	138	2022	Sep 2018	Nov 2024	May 2030	Sep 2030	Mar 2031	Jul 2031	Aug 2031	-	-	-	-	50.624	50.624
DDG	140	2023	Jun 2023	Dec 2025	Dec 2030	Apr 2031	Oct 2031	Feb 2032	Mar 2032	-	-	-	-	52.351	52.351
DDG	141	2023	Jun 2023	Dec 2025	Dec 2030	Apr 2031	Oct 2031	Feb 2032	Mar 2032	-	-	-	-	52.377	52.377
DDG	142	2023	Sep 2023	Jun 2026	Jun 2031	Oct 2031	May 2032	Sep 2032	Sep 2032	-	-	-	-	53.447	53.447
DDG	143	2024	Jun 2023	Dec 2026	Dec 2031	Apr 2032	Nov 2032	Feb 2033	Mar 2033	-	-	-	-	54.143	54.143
DDG	144	2024	Jun 2023	Dec 2026	Dec 2031	Apr 2032	Nov 2032	Feb 2033	Mar 2033	-	-	-	-	54.267	54.267
DDG	145	2025	Jun 2023	Sep 2027	Sep 2032	Jan 2033	Aug 2033	Nov 2033	Dec 2033	-	-	-	-	54.464	54.464
DDG	146	2025	Jun 2023	Sep 2027	Sep 2032	Jan 2033	Aug 2033	Nov 2033	Dec 2033	-	-	-	-	54.482	54.482
DDG	147	2026	Jun 2023	Jun 2028	Jun 2033	Oct 2033	May 2034	Aug 2034	Sep 2034	-	-	-	-	54.503	54.503
DDG	148	2026	Jun 2023	Jun 2028	Jun 2033	Oct 2033	May 2034	Aug 2034	Sep 2034	-	-	-	-	54.518	54.518
DDG	149	2027	Jun 2023	Feb 2029	Feb 2034	Jun 2034	Jan 2035	May 2035	May 2035	-	-	-	-	54.593	54.593
DDG Total										23.438	84.726	100.511	52.630	1,249.138	1,510.443
LCS	19	2014	Mar 2014	Aug 2016	Feb 2020	Dec 2020	Mar 2021	Nov 2022	Dec 2022	79.767	2.491	6.431	-	-	88.689
LCS	21	2015	Mar 2015	Feb 2017	Nov 2021	Sep 2022	May 2023	Aug 2023	Aug 2023	34.931	6.990	0.407	-	-	42.328
LCS	26	2016	Mar 2016	Jan 2018	Dec 2020	Sep 2021	Jan 2022	Apr 2022	Aug 2022	24.079	1.246	-	-	-	25.325
LCS	23	2016	Nov 2015	Sep 2017	Sep 2022	Apr 2023	Nov 2023	Jan 2024	Mar 2024	12.075	18.719	11.202	-	-	41.996
LCS	25	2016	Mar 2016	Feb 2018	Jan 2023	Oct 2023	Apr 2024	Jul 2024	Sep 2024	7.009	13.231	21.501	-	-	41.741
LCS	28	2017	Jun 2017	Oct 2018	Jun 2021	Mar 2022	Oct 2022	Dec 2022	Feb 2023	19.659	12.389	3.396	-	-	35.444
LCS	30	2017	Oct 2017	May 2019	Dec 2021	Sep 2022	Feb 2023	Apr 2023	Aug 2023	15.980	13.896	6.033	-	-	35.909
LCS	27	2017	Oct 2017	Nov 2018	Aug 2023	Mar 2024	Aug 2024	Nov 2024	Feb 2025	0.485	0.276	26.192	12.469	-	39.422
LCS	32	2018	Sep 2018	Dec 2019	Jul 2022	Apr 2023	Sep 2023	Nov 2023	Mar 2024	0.236	16.463	17.573	0.712	-	34.984
LCS	34	2018	Sep 2018	Jun 2020	Apr 2023	Jan 2024	Jun 2024	Aug 2024	Dec 2024	-	6.793	21.028	7.223	-	35.044
LCS	29	2018	Sep 2018	Jun 2019	May 2024	Dec 2024	May 2025	Jul 2025	Nov 2025	-	0.086	-	22.065	18.021	40.172
LCS	36	2019	Dec 2018	Jan 2021	Jan 2024	Oct 2024	Feb 2025	Apr 2025	Sep 2025	-	-	6.928	26.820	1.812	35.560
LCS	31	2019	Jan 2019	Jun 2020	Jul 2024	Mar 2025	Aug 2025	Oct 2025	Feb 2026	-	-	-	16.478	23.965	40.443
LCS	38	2019	Dec 2018	Jul 2021	Dec 2024	Sep 2025	Jan 2026	Mar 2026	Aug 2026	-	-	-	4.819	31.140	35.959

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Exhibit P-30, Delivery: PB 2024 Navy												Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1								P-1 Line Item Number / Title: 5110 / Outfitting							
Ship Class	Hull Number	Program Year	Contract Award	Start of Const.	Delivery Date	CFO	PSA Start	PSA Finish	OWL Date	Prior Years	FY 2022	FY 2023	FY 2024	To Complete	Total
LCS Total										194.221	92.580	120.691	90.586	74.938	573.016
FFG	62	2020	Apr 2020	Aug 2022	Sep 2026	Mar 2027	Jan 2028	Apr 2028	Apr 2028	-	-	-	-	118.705	118.705
FFG	63	2021	May 2021	Apr 2023	Sep 2027	Mar 2028	Nov 2028	Feb 2029	Feb 2029	-	-	-	-	75.759	75.759
FFG	64	2022	Jun 2022	Apr 2023	Aug 2028	Dec 2028	Aug 2029	Nov 2029	Nov 2029	-	-	-	-	70.496	70.496
FFG Total										-	-	-	-	264.960	264.960
LPD Flight II	30	2018	Mar 2019	Mar 2020	May 2026	Jan 2027	Jul 2027	Nov 2027	Dec 2027	-	-	-	-	62.429	62.429
LPD Flight II	31	2021	Apr 2020	Sep 2022	Mar 2028	Nov 2028	May 2029	Sep 2029	Oct 2029	-	-	-	-	70.967	70.967
LPD Flight II	32	2023	Jun 2023	Jul 2024	Sep 2029	May 2030	Nov 2030	Mar 2031	Apr 2031	-	-	-	-	72.451	72.451
LPD Flight II Total										-	-	-	-	205.847	205.847
LPD	28	2016	Dec 2016	Dec 2016	Mar 2022	Apr 2023	Dec 2023	Feb 2024	Mar 2024	13.507	39.700	7.094	-	-	60.301
LPD	29	2017	Feb 2018	Jul 2018	Jan 2024	Sep 2024	Feb 2025	Jul 2025	Aug 2025	-	0.763	16.884	28.995	16.114	62.756
LPD Total										13.507	40.463	23.978	28.995	16.114	123.057
ESB	6	2018	Aug 2019	Jun 2020	Mar 2023	Jun 2023	Sep 2023	Jan 2024	May 2024	-	6.362	6.188	-	-	12.550
ESB	7	2019	Aug 2019	Dec 2021	Sep 2024	Dec 2024	Mar 2025	Jul 2025	Nov 2025	-	-	5.823	6.955	-	12.778
ESB	8	2022	Jul 2022	Aug 2023	Jun 2026	Sep 2026	Jan 2027	Apr 2027	Aug 2027	-	-	-	-	13.544	13.544
ESB Total										-	6.362	12.011	6.955	13.544	38.872
LHA	8	2017	Jun 2017	Oct 2018	Oct 2025	Jun 2026	Feb 2027	May 2027	May 2027	-	-	-	5.687	50.954	56.641
LHA Total										-	-	-	5.687	50.954	56.641
EMS	1	2022	Apr 2023	Apr 2024	Apr 2027	Jul 2027	Jan 2028	May 2028	Jun 2028	-	-	-	-	4.222	4.222
EMS Total										-	-	-	-	4.222	4.222
EPF	13	2018	Mar 2019	Aug 2019	Feb 2023	May 2023	Jan 2024	Apr 2024	Jul 2024	0.833	3.023	-	-	-	3.856
EPF	14	2019	Mar 2019	Oct 2020	Aug 2023	Nov 2023	May 2024	Aug 2024	Oct 2024	0.500	0.901	2.936	-	-	4.337
EPF	15	2021	Dec 2021	Jan 2022	May 2025	Aug 2025	Feb 2026	May 2026	Jul 2026	-	-	0.834	3.017	-	3.851
EPF	16	2022	May 2022	May 2023	Mar 2026	Jun 2026	Dec 2026	Mar 2027	May 2027	-	-	-	0.925	2.851	3.776
EPF Total										1.333	3.924	3.770	3.942	2.851	15.820
T-AO	205	2016	Jun 2016	Sep 2018	Jul 2022	Oct 2022	Feb 2023	May 2023	Sep 2023	9.021	14.623	-	-	-	23.644
T-AO	206	2018	Mar 2018	Dec 2019	May 2023	Aug 2023	Jan 2024	Apr 2024	Jul 2024	-	3.362	20.755	-	-	24.117
T-AO	207	2019	Dec 2018	Dec 2020	Dec 2023	Mar 2024	Jul 2024	Oct 2024	Feb 2025	-	-	1.802	20.435	-	22.237
T-AO	208	2019	Dec 2018	May 2021	Mar 2025	Jun 2025	Oct 2025	Jan 2026	May 2026	-	-	-	-	22.228	22.228
T-AO	209	2020	Mar 2020	Oct 2022	Nov 2025	Feb 2026	Jun 2026	Sep 2026	Jan 2027	-	-	-	-	22.665	22.665
T-AO	210	2020	Mar 2020	Apr 2023	Jun 2026	Sep 2026	Jan 2027	Apr 2027	Aug 2027	-	-	-	-	22.701	22.701
T-AO	211	2022	Jun 2022	Mar 2024	Mar 2027	Jun 2027	Oct 2027	Jan 2028	May 2028	-	-	-	-	22.694	22.694
T-AO	212	2022	Jun 2022	Oct 2024	Oct 2027	Jan 2028	May 2028	Aug 2028	Dec 2028	-	-	-	-	23.040	23.040
T-AO	213	2023	Mar 2023	Aug 2025	Aug 2028	Nov 2028	Mar 2029	Jun 2029	Oct 2029	-	-	-	-	23.387	23.387
T-AO	214	2024	Mar 2024	Apr 2026	Apr 2029	Jul 2029	Nov 2029	Feb 2030	Jun 2030	-	-	-	-	23.483	23.483
T-AO	215	2026	Mar 2026	Sep 2027	Sep 2030	Dec 2030	Apr 2031	Jul 2031	Nov 2031	-	-	-	-	23.952	23.952
T-AO	216	2026	Mar 2026	Mar 2028	Mar 2031	Jun 2031	Oct 2031	Jan 2032	May 2032	-	-	-	-	24.431	24.431
T-AO Total										9.021	17.985	22.557	20.435	208.581	278.579
T-AGOS	25	2022	Jan 2024	Jul 2025	Jan 2028	Oct 2028	Oct 2028	Dec 2028	Sep 2029	-	-	-	-	8.586	8.586

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Exhibit P-30, Delivery: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5110 / Outfitting

Ship Class	Hull Number	Program Year	Contract Award	Start of Const.	Delivery Date	CFO	PSA Start	PSA Finish	OWL Date	Prior Years	FY 2022	FY 2023	FY 2024	To Complete	Total
T-AGOS	26	2025	Jul 2025	Apr 2026	Jul 2028	Apr 2029	Apr 2029	Jun 2029	Mar 2030	-	-	-	-	8.663	8.663
T-AGOS	27	2026	Feb 2026	Oct 2026	Feb 2029	Nov 2029	Nov 2029	Jan 2030	Oct 2030	-	-	-	-	8.786	8.786
T-AGOS	28	2027	Feb 2027	Oct 2027	Feb 2030	Nov 2030	Nov 2030	Jan 2031	Oct 2031	-	-	-	-	8.962	8.962
T-AGOS Total										-	-	-	-	34.997	34.997
T-ATS	6	2016	Mar 2018	Jun 2019	Oct 2024	Nov 2024	Jun 2025	Jun 2025	Oct 2025	-	2.892	1.321	-	-	4.213
T-ATS	7	2018	Apr 2019	Oct 2019	Apr 2025	May 2025	Dec 2025	Dec 2025	Apr 2026	-	-	3.210	0.440	-	3.650
T-ATS	8	2019	Apr 2019	Feb 2020	Dec 2025	Jan 2026	Aug 2026	Aug 2026	Dec 2026	-	-	-	2.574	1.227	3.801
T-ATS	9	2020	Apr 2020	Aug 2022	Oct 2026	Nov 2026	Jun 2027	Jun 2027	Oct 2027	-	-	-	-	3.750	3.750
T-ATS	10	2020	Apr 2020	Mar 2023	Mar 2027	Apr 2027	Nov 2027	Nov 2027	Mar 2028	-	-	-	-	3.751	3.751
T-ATS	11	2021	Sep 2021	Jul 2022	Nov 2024	Dec 2024	Jul 2025	Jul 2025	Nov 2025	-	-	-	-	3.828	3.828
T-ATS	12	2021	Sep 2021	Jan 2023	May 2025	Jun 2025	Jan 2026	Jan 2026	May 2026	-	-	-	-	3.910	3.910
T-ATS	13	2022	Jul 2022	Jul 2023	Nov 2025	Dec 2025	Jul 2026	Jul 2026	Nov 2026	-	-	-	-	3.990	3.990
T-ATS	14	2022	Jul 2022	Nov 2023	Jun 2026	Jul 2026	Feb 2027	Feb 2027	Jun 2027	-	-	-	-	3.990	3.990
T-ATS	15	2023	Jul 2023	Jul 2024	Jan 2027	Feb 2027	Sep 2027	Sep 2027	Jan 2028	-	-	-	-	3.990	3.990
T-ATS Total										-	2.892	4.531	3.014	28.436	38.873
T-AGS/AGOR	67	2018	Jun 2021	Apr 2022	Jun 2026	Sep 2026	Jul 2027	Aug 2027	Aug 2027	-	-	-	-	4.100	4.100
T-AGS/AGOR Total										-	-	-	-	4.100	4.100
LCU	1700	2016	Mar 2018	Feb 2020	Aug 2023	Oct 2023	Oct 2023	Dec 2023	Sep 2024	-	1.125	0.970	0.053	-	2.148
LCU	1701	2019	Feb 2019	Aug 2020	Sep 2023	Oct 2023	Dec 2023	Feb 2024	Sep 2024	-	0.793	1.357	-	-	2.150
LCU	1702	2019	Feb 2019	Nov 2020	Dec 2023	May 2024	Jun 2024	Aug 2024	Mar 2025	-	0.793	0.760	-	0.600	2.153
LCU	1703	2020	Apr 2020	Apr 2021	Mar 2024	May 2024	Sep 2024	Dec 2024	Mar 2025	-	0.025	1.001	-	1.142	2.168
LCU	1704	2020	Apr 2020	Sep 2021	Aug 2024	Dec 2024	Jan 2025	Mar 2025	Nov 2025	-	-	-	-	1.058	1.058
LCU	1705	2020	Apr 2020	Apr 2022	Nov 2024	Dec 2024	Mar 2025	May 2025	Nov 2025	-	-	-	-	1.059	1.059
LCU	1706	2021	Apr 2020	Jun 2023	Feb 2025	Mar 2025	Jun 2025	Aug 2025	Feb 2026	-	-	-	-	1.023	1.023
LCU	1707	2021	Apr 2023	Oct 2024	Apr 2026	Aug 2026	Sep 2026	Jan 2027	Jul 2027	-	-	-	-	0.959	0.959
LCU	1708	2021	Apr 2023	Jan 2025	Jul 2026	Aug 2026	Feb 2027	May 2027	Jul 2027	-	-	-	-	0.959	0.959
LCU	1709	2021	Apr 2023	Apr 2025	Oct 2026	Feb 2027	Mar 2027	Jun 2027	Jan 2028	-	-	-	-	0.959	0.959
LCU	1710	2021	Apr 2023	Jul 2025	Jan 2027	Feb 2027	Jun 2027	Sep 2027	Jan 2028	-	-	-	-	0.992	0.992
LCU	1711	2022	Apr 2023	Nov 2023	May 2025	Aug 2025	Sep 2025	Dec 2025	Jul 2026	-	-	-	-	0.992	0.992
LCU	1712	2022	Apr 2023	Jan 2024	Jul 2025	Aug 2025	Jan 2026	Mar 2026	Jul 2026	-	-	-	-	0.992	0.992
LCU	1713	2022	Apr 2023	Apr 2024	Oct 2025	Feb 2026	Mar 2026	Jun 2026	Jan 2027	-	-	-	-	0.992	0.992
LCU	1714	2022	Apr 2023	Jul 2024	Jan 2026	Feb 2026	Jul 2026	Sep 2026	Jan 2027	-	-	-	-	0.992	0.992
LCU	1715	2024	Apr 2024	Oct 2025	Apr 2027	Aug 2027	Sep 2027	Dec 2027	Jul 2028	-	-	-	-	0.992	0.992
LCU	1716	2024	Apr 2024	Jan 2026	Jul 2027	Aug 2027	Jan 2028	Mar 2028	Jul 2028	-	-	-	-	0.992	0.992
LCU	1717	2025	Apr 2025	Apr 2026	Oct 2027	Feb 2028	Mar 2028	Jun 2028	Jan 2029	-	-	-	-	0.992	0.992
LCU	1718	2025	Apr 2025	Jul 2026	Jan 2028	Feb 2028	Jun 2028	Aug 2028	Jan 2029	-	-	-	-	0.992	0.992
LCU	1719	2026	Apr 2026	Oct 2026	Apr 2028	Aug 2028	Sep 2028	Nov 2028	Jul 2029	-	-	-	-	0.992	0.992
LCU	1720	2026	Apr 2026	Jan 2027	Jul 2028	Aug 2028	Nov 2028	Feb 2029	Jul 2029	-	-	-	-	0.992	0.992
LCU	1721	2027	Apr 2027	Nov 2027	May 2029	Jul 2029	Aug 2029	Nov 2029	Jun 2030	-	-	-	-	0.992	0.992

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Exhibit P-30, Delivery: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5110 / Outfitting

Ship Class	Hull Number	Program Year	Contract Award	Start of Const.	Delivery Date	CFO	PSA Start	PSA Finish	OWL Date	Prior Years	FY 2022	FY 2023	FY 2024	To Complete	Total
LCU	1722	2027	Apr 2027	Jan 2028	Jul 2029	Jul 2029	Dec 2029	Feb 2030	Jun 2030	-	-	-	-	0.992	0.992
LCU	1723	2028	Apr 2028	Nov 2028	May 2030	Aug 2030	Aug 2030	Nov 2030	Jun 2031	-	-	-	-	0.992	0.992
LCU	1724	2028	Apr 2028	Jan 2029	Jul 2030	Aug 2030	Dec 2030	Feb 2031	Jun 2031	-	-	-	-	0.992	0.992
LCU Total										-	2.736	4.088	0.053	22.639	29.516
LCAC	101	2015	Dec 2012	Mar 2015	Aug 2020	Feb 2022	May 2022	Jul 2022	Apr 2023	4.951	1.562	1.029	-	-	7.542
LCAC	102	2015	Mar 2015	Sep 2016	Jun 2021	Feb 2022	Nov 2022	Dec 2022	Feb 2023	2.807	2.703	1.229	-	-	6.739
LCAC	103	2015	Mar 2015	Nov 2016	Dec 2021	Jul 2022	Jan 2023	Mar 2023	Apr 2023	1.329	2.899	1.028	-	-	5.256
LCAC	104	2016	Mar 2016	Feb 2017	Jun 2022	Aug 2022	Mar 2023	May 2023	Jul 2023	1.066	1.831	1.027	-	-	3.924
LCAC	106	2016	Mar 2016	Oct 2017	Nov 2022	May 2023	Jul 2023	Sep 2023	Apr 2024	1.066	1.832	1.017	0.800	-	4.715
LCAC	105	2016	Mar 2016	May 2017	Mar 2023	May 2023	May 2023	Jul 2023	Apr 2024	1.066	1.831	1.022	0.500	-	4.419
LCAC	107	2016	Mar 2016	Apr 2018	May 2023	Sep 2023	Sep 2023	Dec 2023	Aug 2024	1.217	1.349	1.468	1.233	-	5.267
LCAC	108	2016	Mar 2016	Jul 2018	Sep 2023	Sep 2023	Dec 2023	Mar 2024	Aug 2024	0.932	1.564	1.248	1.364	-	5.108
LCAC	109	2017	Apr 2020	Dec 2018	Mar 2024	Aug 2024	Sep 2024	Jan 2025	Jul 2025	-	1.053	2.468	1.741	-	5.262
LCAC	110	2018	Apr 2020	Mar 2019	Jul 2024	Aug 2024	Nov 2024	Feb 2025	Jul 2025	-	0.643	2.058	1.926	-	4.627
LCAC	111	2018	Apr 2020	Aug 2019	Sep 2024	Jan 2025	Feb 2025	May 2025	Dec 2025	-	0.345	1.760	1.269	0.904	4.278
LCAC	112	2018	Apr 2020	Feb 2020	Dec 2024	Jan 2025	Mar 2025	Jul 2025	Dec 2025	-	0.401	1.816	1.177	0.932	4.326
LCAC	113	2018	Apr 2020	Aug 2020	Apr 2025	Aug 2025	Sep 2025	Dec 2025	Jul 2026	-	0.152	1.567	0.932	1.413	4.064
LCAC	114	2018	Apr 2020	Dec 2020	Jul 2025	Aug 2025	Oct 2025	Feb 2026	Jul 2026	-	-	-	0.792	2.917	3.709
LCAC	115	2018	Apr 2020	Jul 2021	Sep 2025	Jan 2026	Feb 2026	May 2026	Dec 2026	-	-	-	1.951	3.385	5.336
LCAC	116	2018	Apr 2020	Jan 2022	Dec 2025	Jan 2026	Mar 2026	Jul 2026	Dec 2026	-	-	-	1.551	3.512	5.063
LCAC	117	2019	Apr 2020	Jun 2022	Feb 2026	Jun 2026	Jul 2026	Oct 2026	May 2027	-	-	-	1.120	3.861	4.981
LCAC	118	2019	Apr 2020	Dec 2022	May 2026	Jun 2026	Aug 2026	Dec 2026	May 2027	-	-	-	0.927	4.039	4.966
LCAC	119	2019	Apr 2020	May 2023	Aug 2026	Oct 2026	Nov 2026	Mar 2027	Sep 2027	-	-	-	-	2.563	2.563
LCAC	120	2019	Apr 2020	Jul 2023	Oct 2026	Oct 2026	Jan 2027	Apr 2027	Sep 2027	-	-	-	-	2.304	2.304
LCAC	121	2019	Apr 2020	Oct 2023	Dec 2026	Jan 2027	Feb 2027	May 2027	Dec 2027	-	-	-	-	1.612	1.612
LCAC	122	2019	Apr 2020	Dec 2023	Mar 2027	Mar 2027	Mar 2027	Jul 2027	Feb 2028	-	-	-	-	1.505	1.505
LCAC	123	2020	Apr 2020	Feb 2024	May 2027	Aug 2027	Sep 2027	Dec 2027	Jun 2028	-	-	-	-	1.504	1.504
LCAC	124	2022	Sep 2023	Apr 2024	Jul 2027	Aug 2027	Oct 2027	Jan 2028	Jun 2028	-	-	-	-	1.502	1.502
LCAC	125	2022	Sep 2023	Jul 2024	Sep 2027	Dec 2027	Jan 2028	Apr 2028	Nov 2028	-	-	-	-	1.072	1.072
LCAC	126	2022	Sep 2023	Sep 2024	Dec 2027	Dec 2027	Mar 2028	Jun 2028	Nov 2028	-	-	-	-	1.072	1.072
LCAC	127	2022	Sep 2023	Nov 2024	Feb 2028	May 2028	Jun 2028	Sep 2028	Apr 2029	-	-	-	-	1.072	1.072
LCAC	128	2022	Sep 2023	Feb 2025	Apr 2028	May 2028	Jul 2028	Nov 2028	Apr 2029	-	-	-	-	1.072	1.072
LCAC	129	2023	Sep 2023	Apr 2025	Jul 2028	Sep 2028	Oct 2028	Feb 2029	Aug 2029	-	-	-	-	1.072	1.072
LCAC	130	2023	Sep 2023	Jun 2025	Sep 2028	Sep 2028	Dec 2028	Mar 2029	Aug 2029	-	-	-	-	1.072	1.072
LCAC	131	2023	Sep 2023	Sep 2025	Nov 2028	Feb 2029	Mar 2029	Jun 2029	Jan 2030	-	-	-	-	1.072	1.072
LCAC	132	2023	Sep 2023	Nov 2025	Jan 2029	Feb 2029	May 2029	Aug 2029	Jan 2030	-	-	-	-	1.072	1.072
LCAC	133	2023	Sep 2023	Jan 2026	Apr 2029	Jul 2029	Aug 2029	Nov 2029	May 2030	-	-	-	-	1.072	1.072
LCAC	134	2025	Mar 2025	Mar 2026	Jun 2029	Jul 2029	Sep 2029	Dec 2029	May 2030	-	-	-	-	1.072	1.072
LCAC	135	2025	Mar 2025	Jun 2026	Aug 2029	Dec 2029	Jan 2030	Apr 2030	Nov 2030	-	-	-	-	1.072	1.072

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Exhibit P-30, Delivery: PB 2024 Navy											Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1								P-1 Line Item Number / Title: 5110 / Outfitting							
Ship Class	Hull Number	Program Year	Contract Award	Start of Const.	Delivery Date	CFO	PSA Start	PSA Finish	OWL Date	Prior Years	FY 2022	FY 2023	FY 2024	To Complete	Total
LCAC	136	2026	Mar 2026	Sep 2026	Nov 2029	Dec 2029	Mar 2030	Jun 2030	Nov 2030	-	-	-	-	1.072	1.072
LCAC	137	2026	Mar 2026	Dec 2026	Mar 2030	Aug 2030	Sep 2030	Dec 2030	Jul 2031	-	-	-	-	1.072	1.072
LCAC	138	2027	Mar 2027	May 2027	Jul 2030	Aug 2030	Nov 2030	Feb 2031	Jul 2031	-	-	-	-	1.072	1.072
LCAC Total										14.434	18.165	18.737	17.283	46.961	115.580
APL	71	2021	Mar 2021	Jun 2021	Oct 2023	Nov 2023			Oct 2024	-	-	0.250	-	-	0.250
APL Total										-	-	0.250	-	-	0.250
LCAC SLEP	90	2023	Apr 2023	Aug 2023	Feb 2025	Mar 2025	Apr 2025	Apr 2025	Feb 2026	-	-	-	-	0.138	0.138
LCAC SLEP	81	2023	Apr 2023	Jan 2024	Jul 2025	Aug 2025	Sep 2025	Sep 2025	Jul 2026	-	-	-	-	0.293	0.293
LCAC SLEP	76	2024	Jan 2024	Oct 2024	Feb 2026	Mar 2026	Apr 2026	Apr 2026	Feb 2027	-	-	-	-	0.143	0.143
LCAC SLEP Total										-	-	-	-	0.574	0.574
Full Funding TOA - Post Delivery Total										359.567	422.360	394.989	310.670	3,910.126	5,397.712

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost							P-1 Line Item Number / Title: 5112 / Ship to Shore Connector					
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 (<i>Units in Each</i>)	23	5	5	-	-	-	2	2	2	2	31	72
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,739.223	391.838	454.533	0.000	0.000	0.000	201.887	205.114	206.945	211.857	2,773.111	6,184.508
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Less Cost To Complete (<i>\$ in Millions</i>)	121.619	-	-	-	-	-	-	-	-	-	-	121.619
Less Previously Appropriated RDT&E,N (<i>\$ in Millions</i>)	23.700	-	-	-	-	-	-	-	-	-	-	23.700
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,593.904	391.838	454.533	0.000	0.000	0.000	201.887	205.114	206.945	211.857	2,773.111	6,039.189
Full Funding TOA (<i>\$ in Millions</i>)	1,593.904	391.838	454.533	-	-	-	201.887	205.114	206.945	211.857	2,773.111	6,039.189
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Plus Cost To Complete (<i>\$ in Millions</i>)	14.500	-	-	43.600	-	43.600	50.421	13.098	-	-	-	121.619
Plus Previously Appropriated RDT&E,N (<i>\$ in Millions</i>)	23.700	-	-	-	-	-	-	-	-	-	-	23.700
Total Obligation Authority (<i>\$ in Millions</i>)	1,632.104	391.838	454.533	43.600	0.000	43.600	252.308	218.212	206.945	211.857	2,773.111	6,184.508
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	29.241	24.070	20.741	22.745	-	22.745	33.513	6.909	0.029	0.030	72.611	209.889
Total (<i>\$ in Millions</i>)	1,661.345	415.908	475.274	66.345	-	66.345	285.821	225.121	206.974	211.887	2,845.722	6,394.397
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	75.618	78.368	90.907	-	-	-	100.944	102.557	103.473	105.929	89.455	85.896
<p>Description:</p> <p>The Ship to Shore Connector (SSC) program provides the capability to rapidly move assault forces within the littoral operational environment to accomplish Unified Command Plan (UCP) missions and ensures the Joint Force Commander's (JFCDR's) ability to conduct amphibious operations and operate over the high water mark, including movement over ice, mud, rivers, swamps and marshes. SSC provides the functional replacement for the Landing Craft, Air Cushion (LCAC) Class of ships, which began reaching extended service life in 2015.</p> <p>Section 126 of the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 provided authority to enter into one or more contracts for the procurement of up to twenty-five Ship-to-Shore Connector class craft and associated material.</p>												

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy					Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost				P-1 Line Item Number / Title: 5112 / Ship to Shore Connector				
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								
Characteristics:		Aluminum		Systems:				
Length Overall		91.8 ft		Hull, Mechanical, and Electrical				
Beam		48.3 ft		(HM&E)				
Displacement		180.57 metric tons		-MT7 Engines, Skirt & Composite Components				
Draft		N/A						
Production Status:		LCAC 107	LCAC 108	LCAC 109 ⁽¹⁾	LCAC 110	LCAC 111	LCAC 112	LCAC 113
Contract Award Date		Mar 2016	Mar 2016	Apr 2020	Apr 2020	Apr 2020	Apr 2020	Apr 2020
Months to Completion								
a) Award to Delivery		86 months	90 months	47 months	51 months	53 months	56 months	60 months
b) Construction Start to Delivery		61 months	62 months	63 months	64 months	61 months	58 months	56 months
Delivery Date		May 2023	Sep 2023	Mar 2024	Jul 2024	Sep 2024	Dec 2024	Apr 2025
Completion Of Fitting Out		Sep 2023	Sep 2023	Aug 2024	Aug 2024	Jan 2025	Jan 2025	Aug 2025
Obligation Work Limit Date		Aug 2024	Aug 2024	Jul 2025	Jul 2025	Dec 2025	Dec 2025	Jul 2026
Production Status:		LCAC 114	LCAC 115	LCAC 116	LCAC 117	LCAC 118	LCAC 119	LCAC 120
Contract Award Date		Apr 2020	Apr 2020	Apr 2020	Apr 2020	Apr 2020	Apr 2020	Apr 2020
Months to Completion								
a) Award to Delivery		63 months	65 months	68 months	70 months	73 months	76 months	78 months
b) Construction Start to Delivery		55 months	50 months	47 months	44 months	41 months	39 months	39 months
Delivery Date		Jul 2025	Sep 2025	Dec 2025	Feb 2026	May 2026	Aug 2026	Oct 2026
Completion Of Fitting Out		Aug 2025	Jan 2026	Jan 2026	Jun 2026	Jun 2026	Oct 2026	Oct 2026
Obligation Work Limit Date		Jul 2026	Dec 2026	Dec 2026	May 2027	May 2027	Sep 2027	Sep 2027
Production Status:		LCAC 121	LCAC 122	LCAC 123	LCAC 124	LCAC 125	LCAC 126	LCAC 127
Contract Award Date		Apr 2020	Apr 2020	Apr 2020	Sep 2023	Sep 2023	Sep 2023	Sep 2023
Months to Completion								
a) Award to Delivery		80 months	83 months	85 months	46 months	48 months	51 months	53 months
b) Construction Start to Delivery		38 months	39 months	39 months	39 months	38 months	39 months	39 months
Delivery Date		Dec 2026	Mar 2027	May 2027	Jul 2027	Sep 2027	Dec 2027	Feb 2028
Completion Of Fitting Out		Jan 2027	Mar 2027	Aug 2027	Aug 2027	Dec 2027	Dec 2027	May 2028
Obligation Work Limit Date		Dec 2027	Feb 2028	Jun 2028	Jun 2028	Nov 2028	Nov 2028	Apr 2029
Production Status:		LCAC 128	LCAC 129	LCAC 130	LCAC 131	LCAC 132	LCAC 133	
Contract Award Date		Sep 2023	Sep 2023	Sep 2023	Sep 2023	Sep 2023	Sep 2023	
Months to Completion								
a) Award to Delivery		55 months	58 months	60 months	62 months	64 months	67 months	
b) Construction Start to Delivery		38 months	39 months	39 months	38 months	38 months	39 months	
Delivery Date		Apr 2028	Jul 2028	Sep 2028	Nov 2028	Jan 2029	Apr 2029	
Completion Of Fitting Out		May 2028	Sep 2028	Sep 2028	Feb 2029	Feb 2029	Jul 2029	
Obligation Work Limit Date		Apr 2029	Aug 2029	Aug 2029	Jan 2030	Jan 2030	May 2030	

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5112 / Ship to Shore Connector		
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				
Design Schedule	Start / Issue	Complete / Response	Reissue	Reissue Complete / Response
Issue Date for TLR	N/A	N/A		
Issue Date for TLS	N/A	N/A		
Preliminary Design	Apr 2008	May 2009		
Contract Design	May 2009	Jul 2010		
Detail Design	Jul 2012	Sep 2014		
Request for Proposals	May 2011	Jul 2012		
Design Agent	NAVSEA/TEXTRON,INC			
Classification of Cost Estimate:				
Footnotes: (1) LCAC 109-112 start of construction is prior to stated contract award date due to prior undefinitized contract award (UCA)				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5112 / Ship to Shore Connector

Cost Categories (^(†) indicates the presence of a P-8a)	FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		FY 2022		FY 2023	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	5		1		7		6		1		5		5	
Basic Construction/Conversion		191.718		77.566		465.409		370.838		50.800		265.106		318.593
Change Orders		7.592		1.564		13.068		13.819		0.898		8.957		9.636
Electronics		6.432		20.200		34.525		9.877		0.056		13.355		13.897
Hull, Mechanical, and Electrical (HM&E) (^(†))		4.000		13.926		61.170		103.057		13.246		93.852		101.611
Ordnance														
Other Cost		0.888		14.811		6.854		59.109		-		10.568		10.796
Total Ship Estimate		210.630		128.067		581.026		556.700		65.000		391.838		454.533
Less Cost to Complete FY 2024		-		-		43.600		-		-		-		-
Less Cost to Complete FY 2025		-		-		14.694		35.727		-		-		-
Less Cost to Complete FY 2026		-		-		-		13.098		-		-		-
Net P-1 Funding		210.630		128.067		522.732		507.875		65.000		391.838		454.533

Remarks:

FY 2018 craft: The Department added Completion of Prior Year Shipbuilding Programs funding (\$43.6M in FY 2024) to finance the Government responsible portion of the shipbuilding construction contract overruns. \$4.3M was realigned from electronics to change orders and other cost to align with known costs across LCAC 110-116.

FY 2019 craft: Updated Basic Construction to show FY 2019 craft at ceiling. Added additional funds for change orders, HM&E, Electronics, and other cost to finance cost increases that exceed previous estimates.

For the FY 2020 through FY 2022 craft, funds were realigned to cover the cost of known requirements in HM&E and other costs.

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy					Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5112 / Ship to Shore Connector		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
LCAC 107	TEXTRON, INC	2016	Mar 2016	Apr 2018	May 2023
LCAC 108	TEXTRON, INC	2016	Mar 2016	Jul 2018	Sep 2023
LCAC 109 ⁽¹⁾	TEXTRON, INC	2017	Apr 2020	Dec 2018	Mar 2024
LCAC 110	TEXTRON, INC	2018	Apr 2020	Mar 2019	Jul 2024
LCAC 111	TEXTRON, INC	2018	Apr 2020	Aug 2019	Sep 2024
LCAC 112	TEXTRON, INC	2018	Apr 2020	Feb 2020	Dec 2024
LCAC 113	TEXTRON, INC	2018	Apr 2020	Aug 2020	Apr 2025
LCAC 114	TEXTRON, INC	2018	Apr 2020	Dec 2020	Jul 2025
LCAC 115	TEXTRON, INC	2018	Apr 2020	Jul 2021	Sep 2025
LCAC 116	TEXTRON, INC	2018	Apr 2020	Jan 2022	Dec 2025
LCAC 117	TEXTRON, INC	2019	Apr 2020	Jun 2022	Feb 2026
LCAC 118	TEXTRON, INC	2019	Apr 2020	Dec 2022	May 2026
LCAC 119	TEXTRON, INC	2019	Apr 2020	May 2023	Aug 2026
LCAC 120	TEXTRON, INC	2019	Apr 2020	Jul 2023	Oct 2026
LCAC 121	TEXTRON, INC	2019	Apr 2020	Oct 2023	Dec 2026
LCAC 122	TEXTRON, INC	2019	Apr 2020	Dec 2023	Mar 2027
LCAC 123	TEXTRON, INC	2020	Apr 2020	Feb 2024	May 2027
LCAC 124	TEXTRON, INC	2022	Sep 2023	Apr 2024	Jul 2027
LCAC 125	TEXTRON, INC	2022	Sep 2023	Jul 2024	Sep 2027
LCAC 126	TEXTRON, INC	2022	Sep 2023	Sep 2024	Dec 2027
LCAC 127	TEXTRON, INC	2022	Sep 2023	Nov 2024	Feb 2028
LCAC 128	TEXTRON, INC	2022	Sep 2023	Feb 2025	Apr 2028
LCAC 129	TEXTRON, INC	2023	Sep 2023	Apr 2025	Jul 2028
LCAC 130	TEXTRON, INC	2023	Sep 2023	Jun 2025	Sep 2028
LCAC 131	TEXTRON, INC	2023	Sep 2023	Sep 2025	Nov 2028
LCAC 132	TEXTRON, INC	2023	Sep 2023	Nov 2025	Jan 2029
LCAC 133	TEXTRON, INC	2023	Sep 2023	Jan 2026	Apr 2029
LCAC 134	TEXTRON, INC	2025	Mar 2025	Mar 2026	Jun 2029
LCAC 135	TEXTRON, INC	2025	Mar 2025	Jun 2026	Aug 2029
LCAC 136	TEXTRON, INC	2026	Mar 2026	Sep 2026	Nov 2029
LCAC 137	TEXTRON, INC	2026	Mar 2026	Dec 2026	Mar 2030
LCAC 138	TBD	2027	Mar 2027	May 2027	Jul 2030
LCAC 139	TBD	2027	Mar 2027	Oct 2027	Dec 2030

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1

P-1 Line Item Number / Title:
5112 / Ship to Shore Connector

Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
LCAC 140	TBD	2028	Mar 2028	Apr 2028	Jun 2031
LCAC 141	TBD	2028	Mar 2028	Sep 2028	Dec 2031

Footnotes:

(1) LCAC 109-112 start of construction is prior to stated contract award date due to prior undefinitized contract award (UCA)

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Exhibit P-8a, Analysis of Ship Cost Estimates: PB 2024 Navy					Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5112 / Ship to Shore Connector			
Hull, Mechanical, and Electrical (HM&E)	FY 2020		FY 2022		FY 2023	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Major Items						
MT7 Engines, Skirt & Composite Components	4	13.246	20	93.852	20	101.611
Major Items Subtotal		13.246		93.852		101.611
Total Hull, Mechanical, and Electrical (HM&E)		13.246		93.852		101.611

Remarks:
Total quantity refers to procurement of MT7 engines.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy								Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost						P-1 Line Item Number / Title: 5113 / Service Craft						
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)	66	5	1	3	-	3	6	6	6	6	-	99
Gross/Weapon System Cost (\$ in Millions)	635.822	67.866	21.056	63.815	0.000	63.815	56.902	57.735	58.878	60.609	-	1,022.683
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	635.822	67.866	21.056	63.815	0.000	63.815	56.902	57.735	58.878	60.609	-	1,022.683
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	635.822	67.866	21.056	63.815	0.000	63.815	56.902	57.735	58.878	60.609	-	1,022.683
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (\$ in Millions)	3.000	-	0.510	-	-	-	-	-	-	-	-	3.510
Total (\$ in Millions)	638.822	67.866	21.566	63.815	-	63.815	56.902	57.735	58.878	60.609	-	1,026.193
Gross/Weapon System Unit Cost (\$ in Millions)	9.634	13.573	21.056	21.272	-	21.272	9.484	9.623	9.813	10.102	-	10.330
Description: The FY 2022 funding shown on exhibit P-40 includes \$6.092M of FY 2022 funding rescinded by the Department of Defense Appropriations Act, 2023. The US Navy owns and operates 347 Service Craft consisting of 33 different classes of craft at 56 different commands and activities throughout the world. Service Craft provide critical support to carriers, submarines, and other Navy vessels through port operations, ship maintenance, testing, and training missions. Nearly half of the Service Craft inventory is over 40 years of age. The Service Craft budget supports the acquisition of replacement craft as follows: Auxiliary Floating Dry Dock Medium (AFDM) is used to dry dock surface ships (including CG, DDG, LCS, and LSD) in order to perform maintenance availabilities. Auxiliary Personnel Lighter - Small (APL(S)) provides crew messing, duty crew berthing, and administrative spaces to ships during CNO maintenance availabilities and improves the quality-of-life for sailors over legacy barges. The Department of Defense Appropriations Act, 2023 moved the FY 2023 requested Auxiliary Personnel Lighter (APL) from the Service Craft line item (SCN 5113) to a new line, now SCN 5114, Auxiliary Personnel Lighter. FY 2023 and future APL craft are shown in the Auxiliary Personnel Lighter budget exhibit. Harbor Tug (YT) provides critical vessel towing, escort, personnel transfer, and emergency services to carriers, ships, and submarines. The YT program replaces aging YTB tugboats in the Northwest Region, Yokosuka, and Portsmouth Naval Shipyard and is required to meet port operations mission requirements. Small Harbor Tug (YTL) is used by port operations for ship assist, towing, and escort of smaller Navy ships and craft. Fuel Oil Barge (YON) carries liquid petroleum products for refueling ships. YON barges greatly reduce the risk of a major fuel oil spill. Many existing YONs are 50 to 60 years old and of single hull construction. The new YONs will be double-hulled and will meet the requirements of the Oil Pollution Act of 1990 (OPA-90). Waste Oil Barge (YWO) offloads oily waste water from ships for transport and processing. The YWO will be double-hulled and have piping and other systems specifically designed for transferring oily waste. The YWO program will replace 66 to 78 year old barges that were not specifically designed to transport oily waste and are in extremely poor condition. Covered Lighter (YFN) transports ordnance and sensitive equipment, and cargo that requires protection from the weather.												

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5113 / Service Craft
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>Open Lighter (YC) transports cargo/equipment and serves as a work platform for ship maintenance.</p> <p>Repair, Berthing and Messing Barge (YRBM) provides crew messing, duty crew berthing, and administrative spaces for small to mid-size ships and submarines during CNO maintenance availabilities.</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy					Date: March 2023			
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost				P-1 Line Item Number / Title: 5113 / Service Craft				
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								
Characteristics:	Hull Various	Multiple Craft						
Length Overall	Various	Various						
Beam	Various	Various						
Displacement	Various	Various						
Draft	Various	Various						
Production Status:	YTL 815	YTL 816	YON 1901	YON 2001	YON 2002	YC 2001	YC 2002	
Contract Award Date	Sep 2019	Feb 2020	Apr 2023	Apr 2023	Apr 2023	Jun 2023	Jun 2023	
Months to Completion								
a) Award to Delivery	57 months	58 months	20 months	20 months	26 months	10 months	11 months	
b) Construction Start to Delivery	45 months	51 months	15 months	15 months	15 months	7 months	7 months	
Delivery Date	Jun 2024	Dec 2024	Dec 2024	Dec 2024	Jun 2025	Apr 2024	May 2024	
Completion Of Fitting Out	Sep 2024	Mar 2025	Mar 2025	Mar 2025	Sep 2025	Jul 2024	Aug 2024	
Obligation Work Limit Date	Aug 2025	Feb 2026	Sep 2025	Feb 2026	Jan 2026	Jun 2025	Jul 2025	
Production Status:	YWO 2001	APL 71	YRBM 57	AFDM 15	YFN 2101	YFN 2102	YC 2101	
Contract Award Date	Sep 2024	Mar 2021	Mar 2022	Jun 2022	Jun 2023	Jun 2023	Jun 2023	
Months to Completion								
a) Award to Delivery	16 months	31 months	20 months	38 months	13 months	16 months	16 months	
b) Construction Start to Delivery	7 months	28 months	14 months	28 months	7 months	7 months	7 months	
Delivery Date	Jan 2026	Oct 2023	Nov 2023	Aug 2025	Jul 2024	Oct 2024	Oct 2024	
Completion Of Fitting Out	Apr 2026	Nov 2023	Feb 2024	Nov 2025	Oct 2024	Jan 2025	Jan 2025	
Obligation Work Limit Date	May 2027	Oct 2024	Jan 2025	Oct 2026	Sep 2025	Dec 2025	Dec 2025	
Production Status:	YT 814	YRBM 58	YRBM 59	YRBM 60	YC 2201	YC 2202	YRBM 2301	
Contract Award Date	Dec 2024	Jul 2022	Jul 2022	Sep 2022	Jun 2023	Jun 2023	Apr 2023	
Months to Completion								
a) Award to Delivery	26 months	20 months	24 months	24 months	18 months	19 months	14 months	
b) Construction Start to Delivery	18 months	14 months	13 months	13 months	6 months	6 months	13 months	
Delivery Date	Feb 2027	Mar 2024	Jul 2024	Sep 2024	Dec 2024	Jan 2025	Jun 2024	
Completion Of Fitting Out	May 2027	Jun 2024	Oct 2024	Dec 2024	Mar 2025	Apr 2025	Oct 2024	
Obligation Work Limit Date	Apr 2028	May 2025	Sep 2025	Nov 2025	Feb 2026	Mar 2026	Sep 2025	
Production Status:	YRBM 2401	YRBM 2402	YRBM 2403					
Contract Award Date	Apr 2024	Apr 2024	Apr 2024					
Months to Completion								
a) Award to Delivery	16 months	19 months	31 months					
b) Construction Start to Delivery	12 months	12 months	21 months					
Delivery Date	Aug 2025	Nov 2025	Nov 2026					
Completion Of Fitting Out	Nov 2025	Feb 2026	Feb 2027					
Obligation Work Limit Date	Oct 2026	Jan 2027	Jan 2028					

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5113 / Service Craft		
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				
<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>
Issue Date for TLR	N/A	N/A		
Issue Date for TLS	N/A	N/A		
Preliminary Design	N/A	N/A		
Contract Design	N/A	N/A		
Detail Design	N/A	N/A		
Request for Proposals	N/A	N/A		
Design Agent				
<u>Classification of Cost Estimate:</u>				
Justification: New YRBM barges will augment legacy YR, YRB, YRBM, and YRBM(L) barges that are 50-80 years old, not built to current safety standards, and not dual gender-compatible.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy								Date: March 2023				
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1						P-1 Line Item Number / Title: 5113 / Service Craft						
Cost Categories	FY 2019		FY 2020		FY 2021		FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	5		6		7		5		1		3	
Basic Construction/Conversion		69.721		55.161		230.363		66.588		20.419		62.797
Change Orders		1.391		0.528		8.535		0.678		0.210		0.407
Hull, Mechanical, and Electrical (HM&E)		0.950		0.600		5.249		0.600		0.427		0.611
Total Ship Estimate		72.062		56.289		244.147		67.866		21.056		63.815
Net P-1 Funding		72.062		56.289		244.147		67.866		21.056		63.815
Remarks:												
FY 2019 Craft:												
1 APL: \$39.808												
1 YON: \$4.490												
1 YT: \$13.660												
2 YTL: \$14.104												
TOTAL: \$72.062												
FY 2020 Craft:												
2 YC: \$3.264												
1 YWO: \$3.338												
2 YON: \$9.780												
1 APL: \$39.907												
TOTAL: \$56.289												
FY 2021 Craft:												
1 APL: \$41.104												
2 YFN: \$5.816												
1 AFDM:\$155.000												
1 YC: \$1.731												
1 YRBM: \$19.300												
YRBM: \$7.000 (YRBM-56 Conversion)												
1 YT: \$14.196												
TOTAL: \$244.147												
FY 2022 Craft:												
2 YC: \$3.837												
3 YRBM: \$64.029												
TOTAL: \$67.866												
The total FY 2022 estimate for YRBMs includes \$6.092M funds rescinded by the Department of Defense Appropriations Act, 2023. This funding is reflected in the FY 2022 Basic Construction/Conversion category.												
FY 2023 Craft:												
1 YRBM: \$21.056												

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LI 5113 - Service Craft
Navy

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N / 05 / 1P-1 Line Item Number / Title:
5113 / Service Craft

Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
YTL 815	Modutech Marine, Inc	2019	Sep 2019	Sep 2020	Jun 2024
YTL 816	Modutech Marine, Inc	2019	Feb 2020	Sep 2020	Dec 2024
YON 1901	TBD	2019	Apr 2023	Sep 2023	Dec 2024
YON 2001	TBD	2020	Apr 2023	Sep 2023	Dec 2024
YON 2002	TBD	2020	Apr 2023	Mar 2024	Jun 2025
YC 2001	TBD	2020	Jun 2023	Sep 2023	Apr 2024
YC 2002	TBD	2020	Jun 2023	Oct 2023	May 2024
YWO 2001	TBD	2020	Sep 2024	Jun 2025	Jan 2026
APL 71	Bollinger Mississippi Shipbuilding	2021	Mar 2021	Jun 2021	Oct 2023
YRBM 57	Conrad Shipyard, LLC	2021	Mar 2022	Sep 2022	Nov 2023
AFDM 15	AUSTAL USA, LLC	2021	Jun 2022	Apr 2023	Aug 2025
YFN 2101	TBD	2021	Jun 2023	Dec 2023	Jul 2024
YFN 2102	TBD	2021	Jun 2023	Mar 2024	Oct 2024
YC 2101	TBD	2021	Jun 2023	Mar 2024	Oct 2024
YT 814	TBD	2021	Dec 2024	Aug 2025	Feb 2027
YRBM 58	Conrad Shipyard, LLC	2022	Jul 2022	Jan 2023	Mar 2024
YRBM 59	Conrad Shipyard, LLC	2022	Jul 2022	Jun 2023	Jul 2024
YRBM 60	Conrad Shipyard, LLC	2022	Sep 2022	Aug 2023	Sep 2024
YC 2201	TBD	2022	Jun 2023	Jun 2024	Dec 2024
YC 2202	TBD	2022	Jun 2023	Jul 2024	Jan 2025
YRBM 2301	Conrad Shipyard, LLC	2023	Apr 2023	May 2023	Jun 2024
YRBM 2401	Conrad Shipyard, LLC	2024	Apr 2024	Aug 2024	Aug 2025
YRBM 2402	Conrad Shipyard, LLC	2024	Apr 2024	Nov 2024	Nov 2025
YRBM 2403	Conrad Shipyard, LLC	2024	Apr 2024	Feb 2025	Nov 2026
YWO 2501	TBD	2025	Mar 2025	Jul 2025	Jul 2026
YON 2501	TBD	2025	Apr 2025	Jun 2025	Jun 2026
YFN 2501	TBD	2025	Apr 2025	Jun 2025	May 2026
YT 817	TBD	2025	Apr 2025	Jul 2025	Jul 2026
YRBM 2501	TBD	2025	Apr 2025	Aug 2025	Aug 2026
YON 2502	TBD	2025	Apr 2025	Sep 2025	Sep 2026
YFN 2601	TBD	2026	Mar 2026	Apr 2026	Nov 2026
YON 2602	TBD	2026	Mar 2026	May 2026	May 2027
YON 2601	TBD	2026	Mar 2026	May 2026	May 2027

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5113 / Service Craft		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
YWO 2601	TBD	2026	Mar 2026	Jul 2026	Jul 2027
YT 818	TBD	2026	Apr 2026	Jul 2026	Jul 2027
YRBM 2601	TBD	2026	Apr 2026	Aug 2026	Aug 2027
YFN 2701	TBD	2027	Mar 2027	Apr 2027	Nov 2027
YT 819	TBD	2027	Apr 2027	Jul 2027	Jul 2028
YRBM 2701	TBD	2027	Apr 2027	Aug 2027	Aug 2028
YWO 2701	TBD	2027	Apr 2027	Sep 2027	Sep 2028
YON 2701	TBD	2027	Apr 2027	Sep 2027	Sep 2028
YON 2702	TBD	2027	Apr 2027	Nov 2027	Dec 2028
YC 2801	TBD	2028	Apr 2028	Jul 2028	Apr 2029
YON 2801	TBD	2028	Apr 2028	Jul 2028	Jul 2029
YRBM 2801	TBD	2028	Apr 2028	Aug 2028	Aug 2029
YT 2801	TBD	2028	Apr 2028	Aug 2028	Aug 2029
YON 2802	TBD	2028	Apr 2028	Sep 2028	Sep 2029
YON 2803	TBD	2028	Apr 2028	Nov 2028	Nov 2029

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost

P-1 Line Item Number / Title:
5114 / Auxiliary Personnel Lighter

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)	-	-	1	-	-	-	1	1	1	1	-	5
Gross/Weapon System Cost (\$ in Millions)	0.000	0.000	71.218	0.000	0.000	0.000	47.084	48.025	48.985	49.965	-	265.277
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.000	0.000	71.218	0.000	0.000	0.000	47.084	48.025	48.985	49.965	-	265.277
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.000	0.000	71.218	0.000	0.000	0.000	47.084	48.025	48.985	49.965	-	265.277
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Total (\$ in Millions)	-	-	71.218	-	-	-	47.084	48.025	48.985	49.965	-	265.277
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	71.218	-	-	-	47.084	48.025	48.985	49.965	-	53.055

Description:

The Department of Defense Appropriations Act, 2023 moved the FY 2023 requested Auxiliary Personnel Lighter (APL) from the Service Craft line item (SCN 5113) to a new line item, now SCN 5114, Auxiliary Personnel Lighter. FY 2022 and prior year APL craft are shown in the Service Craft item.

Auxiliary Personnel Lighter - APL(S) barracks craft provide berthing and messing facilities for sailors while their ships are in port for availabilities and Inter-Deployment Training Cycles (IDTC). It supports up to an aircraft carrier (CVN) size ship where it is designed to provide berthing for up to 600 personnel and messing for up to 1,130 personnel. APL(S) facilities include classrooms, conference rooms, administrative offices, disbursing office, galley, mess, scullery, post office, convenience store, barbershop, lounges, laundry facilities, physical fitness center, chaplain's office, medical complex, quarterdeck, equipment/ machinery rooms, and various storerooms. Last, it provides berthing and sanitary facilities designed for dual-gender use.

Twelve (12) of the twenty (20) APLs in service were built from 1944-1946, not built to current safety standards, and cannot be easily configured for dual-gender crews. The APL program replaces outdated and dilapidated transport ships and will greatly improve sailors' quality of life, improve safety, and reduce crew berthing and messing costs during ship maintenance availabilities.

Characteristics:

APL

Length Overall269 ft

Beam69 ft

Displacement3315 MT

Draft8 ft

Production Status:

APL 72

Contract Award DateApr 2023

Months to Completion

a) Award to Delivery24 months

b) Construction Start to Delivery13 months

Delivery DateApr 2025

Completion Of Fitting OutJul 2025

Obligation Work Limit DateJun 2026

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5114 / Auxiliary Personnel Lighter		
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				
Design Schedule	Start / Issue	Complete / Response	Reissue	Reissue Complete / Response
Issue Date for TLR	N/A	N/A		
Issue Date for TLS	N/A	N/A		
Preliminary Design	N/A	N/A		
Contract Design	N/A	N/A		
Detail Design	N/A	N/A		
Request for Proposals	N/A	N/A		
Design Agent				
Classification of Cost Estimate:				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1		P-1 Line Item Number / Title: 5114 / Auxiliary Personnel Lighter	
Cost Categories	FY 2023		
	Qty (Each)	Total Cost (\$ M)	
Plan Costs	1		
Basic Construction/Conversion		68.418	
Change Orders		2.000	
Hull, Mechanical, and Electrical (HM&E)		0.800	
Total Ship Estimate		71.218	
Net P-1 Funding		71.218	

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LI 5114 - Auxiliary Personnel Lighter
Navy

UNCLASSIFIED
Page 4 of 4

P-1 Line #29

Volume 1 - 408

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost						P-1 Line Item Number / Title: 5139 / LCAC SLEP						
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 (<i>Units in Each</i>)	70	1	2	1	-	1	3	3	3	3	-	86
Gross/Weapon System Cost (<i>\$ in Millions</i>)	1,474.866	17.712	36.301	15.286	0.000	15.286	55.147	56.153	57.274	58.511	-	1,771.250
Less PY Advance Procurement (<i>\$ in Millions</i>)	27.900	-	-	-	-	-	-	-	-	-	-	27.900
Less Cost To Complete (<i>\$ in Millions</i>)	14.000	-	-	-	-	-	-	-	-	-	-	14.000
Less Subsequent Year Full Funding (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	0.000
Less Hurricane (<i>\$ in Millions</i>)	19.800	-	-	-	-	-	-	-	-	-	-	19.800
Less Transfer (<i>\$ in Millions</i>)	1.500	-	-	-	-	-	-	-	-	-	-	1.500
Net Procurement (P-1) (<i>\$ in Millions</i>)	1,411.666	17.712	36.301	15.286	0.000	15.286	55.147	56.153	57.274	58.511	-	1,708.050
Plus Subsequent Year Full Funding (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	0.000
Full Funding TOA (<i>\$ in Millions</i>)	1,411.666	17.712	36.301	15.286	-	15.286	55.147	56.153	57.274	58.511	-	1,708.050
Plus CY Advance Procurement (<i>\$ in Millions</i>)	27.900	-	-	-	-	-	-	-	-	-	-	27.900
Plus Cost To Complete (<i>\$ in Millions</i>)	14.000	-	-	-	-	-	-	-	-	-	-	14.000
Plus Transfer (<i>\$ in Millions</i>)	1.500	-	-	-	-	-	-	-	-	-	-	1.500
Plus Hurricane (<i>\$ in Millions</i>)	19.800	-	-	-	-	-	-	-	-	-	-	19.800
Total Obligation Authority (<i>\$ in Millions</i>)	1,474.866	17.712	36.301	15.286	0.000	15.286	55.147	56.153	57.274	58.511	-	1,771.250
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	13.842	0.515	-	0.610	-	0.610	0.138	0.293	0.143	-	-	15.541
Total (<i>\$ in Millions</i>)	1,488.708	18.227	36.301	15.896	-	15.896	55.285	56.446	57.417	58.511	-	1,786.791
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	21.070	17.712	18.151	15.286	-	15.286	18.382	18.718	19.091	19.504	-	20.596
<p>Description:</p> <p>Landing Craft, Air Cushion (LCAC) transports weapon systems, equipment, cargo and personnel of the assault elements of the Marine Air/Ground Task Force from ship to shore and across the beach. The LCAC Service Life Extension Program (SLEP) and LCAC Extended Service Life Extension Program (ESLEP) extends the craft service life past the original twenty years.</p> <p>The LCAC SLEP program incorporates the following modifications and enhancements: upgrade from the TF40B engines to the ETF40B engines; repair corrosion damage; replace obsolete electronics; upgrade C4N suite; and replace deep skirt. The LCAC SLEP program was completed in March 2022 with the delivery of LCAC SLEP 77.</p> <p>The LCAC ESLEP program incorporates the following modifications and enhancements: repairs corrosion damage; replaces obsolete electronics, upgrades C4N including cyber hardening; and replaces the deep skirt.</p> <p>The FY 2022 quantity and amount was reduced by Prior Approval Reprogramming Action 22-08. This action reduced the FY22 funding amount by \$15.000 million and reduced 1 LCAC E-SLEP.</p>												

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy						Date: March 2023																																																																																				
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost				P-1 Line Item Number / Title: 5139 / LCAC SLEP																																																																																						
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																																																																																										
<div>Characteristics: Air Cushion</div> <div>Length Overall 91.8 ft (on cushion)</div> <div>Beam 49.2 ft (on cushion)</div> <div>Displacement 106 tons</div> <div>Draft None (air cushion)</div> <div><div>Production Status:</div><table><tr><td>Contract Award Date</td><td>LCAC ESLEP 31</td><td>LCAC ESLEP 48</td><td>LCAC ESLEP 62</td><td>LCAC ESLEP 90</td><td>LCAC ESLEP 81</td><td>LCAC ESLEP 76</td></tr><tr><td>Months to Completion</td><td>Feb 2021</td><td>Feb 2021</td><td>Jul 2022</td><td>Apr 2023</td><td>Apr 2023</td><td>Jan 2024</td></tr><tr><td> a) Award to Delivery</td><td>29 months</td><td>33 months</td><td>26 months</td><td>22 months</td><td>27 months</td><td>25 months</td></tr><tr><td> b) Construction Start to Delivery</td><td>20 months</td><td>20 months</td><td>18 months</td><td>18 months</td><td>18 months</td><td>16 months</td></tr><tr><td>Delivery Date</td><td>Jul 2023</td><td>Nov 2023</td><td>Sep 2024</td><td>Feb 2025</td><td>Jul 2025</td><td>Feb 2026</td></tr><tr><td>Completion Of Fitting Out</td><td>Aug 2023</td><td>Dec 2023</td><td>Oct 2024</td><td>Mar 2025</td><td>Aug 2025</td><td>Mar 2026</td></tr><tr><td>Obligation Work Limit Date</td><td>Jul 2024</td><td>Nov 2024</td><td>Sep 2025</td><td>Feb 2026</td><td>Jul 2026</td><td>Feb 2027</td></tr></table></div> <div><div>Design Schedule</div><table><tr><td>Issue Date for TLR</td><td>Start / Issue</td><td>Complete / Response</td><td>Reissue</td><td>Reissue Complete / Response</td></tr><tr><td>Issue Date for TLS</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Preliminary Design</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Contract Design</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Detail Design</td><td>N/A</td><td>N/A</td><td></td><td></td></tr><tr><td>Request for Proposals</td><td>May 2020</td><td>Jul 2020</td><td></td><td></td></tr><tr><td>Design Agent</td><td>Landing Craft Planning Yard</td><td></td><td></td><td></td></tr></table></div> <div>Classification of Cost Estimate: N/A</div>							Contract Award Date	LCAC ESLEP 31	LCAC ESLEP 48	LCAC ESLEP 62	LCAC ESLEP 90	LCAC ESLEP 81	LCAC ESLEP 76	Months to Completion	Feb 2021	Feb 2021	Jul 2022	Apr 2023	Apr 2023	Jan 2024	a) Award to Delivery	29 months	33 months	26 months	22 months	27 months	25 months	b) Construction Start to Delivery	20 months	20 months	18 months	18 months	18 months	16 months	Delivery Date	Jul 2023	Nov 2023	Sep 2024	Feb 2025	Jul 2025	Feb 2026	Completion Of Fitting Out	Aug 2023	Dec 2023	Oct 2024	Mar 2025	Aug 2025	Mar 2026	Obligation Work Limit Date	Jul 2024	Nov 2024	Sep 2025	Feb 2026	Jul 2026	Feb 2027	Issue Date for TLR	Start / Issue	Complete / Response	Reissue	Reissue Complete / Response	Issue Date for TLS	N/A	N/A			Preliminary Design	N/A	N/A			Contract Design	N/A	N/A			Detail Design	N/A	N/A			Request for Proposals	May 2020	Jul 2020			Design Agent	Landing Craft Planning Yard			
Contract Award Date	LCAC ESLEP 31	LCAC ESLEP 48	LCAC ESLEP 62	LCAC ESLEP 90	LCAC ESLEP 81	LCAC ESLEP 76																																																																																				
Months to Completion	Feb 2021	Feb 2021	Jul 2022	Apr 2023	Apr 2023	Jan 2024																																																																																				
a) Award to Delivery	29 months	33 months	26 months	22 months	27 months	25 months																																																																																				
b) Construction Start to Delivery	20 months	20 months	18 months	18 months	18 months	16 months																																																																																				
Delivery Date	Jul 2023	Nov 2023	Sep 2024	Feb 2025	Jul 2025	Feb 2026																																																																																				
Completion Of Fitting Out	Aug 2023	Dec 2023	Oct 2024	Mar 2025	Aug 2025	Mar 2026																																																																																				
Obligation Work Limit Date	Jul 2024	Nov 2024	Sep 2025	Feb 2026	Jul 2026	Feb 2027																																																																																				
Issue Date for TLR	Start / Issue	Complete / Response	Reissue	Reissue Complete / Response																																																																																						
Issue Date for TLS	N/A	N/A																																																																																								
Preliminary Design	N/A	N/A																																																																																								
Contract Design	N/A	N/A																																																																																								
Detail Design	N/A	N/A																																																																																								
Request for Proposals	May 2020	Jul 2020																																																																																								
Design Agent	Landing Craft Planning Yard																																																																																									

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy						Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1				P-1 Line Item Number / Title: 5139 / LCAC SLEP				
Cost Categories	FY 2021		FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs	3		1		2		1	
Basic Construction/Conversion		30.216		9.477		20.470		8.502
Electronics		2.225		0.708		1.655		0.651
Hull, Mechanical, and Electrical (HM&E)		17.515		5.491		12.323		5.483
Other Cost		6.505		2.036		1.853		0.650
Total Ship Estimate		56.461		17.712		36.301		15.286
Net P-1 Funding		56.461		17.712		36.301		15.286

Remarks:
FY21 is the first year of LCAC ESLEP. LCAC ESLEPs are structured to cost effectively gain more service life out of existing LCAC SLEP craft.

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5139 / LCAC SLEP		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
LCAC ESLEP 31	Walashek	2021	Feb 2021	Nov 2021	Jul 2023
LCAC ESLEP 48	Walashek	2021	Feb 2021	Mar 2022	Nov 2023
LCAC ESLEP 62	Walashek	2022	Jul 2022	Mar 2023	Sep 2024
LCAC ESLEP 90	Walashek	2023	Apr 2023	Aug 2023	Feb 2025
LCAC ESLEP 81	Walashek	2023	Apr 2023	Jan 2024	Jul 2025
LCAC ESLEP 76	Walashek	2024	Jan 2024	Oct 2024	Feb 2026
LCAC ESLEP TBD25A	TBD	2025	Jan 2025	Mar 2025	Jul 2026
LCAC ESLEP TBD25B	TBD	2025	Jan 2025	Aug 2025	Dec 2026
LCAC ESLEP TBD25C	TBD	2025	Jan 2025	Jan 2026	May 2027
LCAC ESLEP TBD26A	TBD	2026	Jan 2026	Jun 2026	Oct 2027
LCAC ESLEP TBD26B	TBD	2026	Jan 2026	Nov 2026	Mar 2028
LCAC ESLEP TBD26C	TBD	2026	Jan 2026	Apr 2027	Aug 2028
LCAC ESLEP TBD27A	TBD	2027	Jan 2027	Sep 2027	Jan 2029
LCAC ESLEP TBD27B	TBD	2027	Jan 2027	Feb 2028	Jun 2029
LCAC ESLEP TBD27C	TBD	2027	Jan 2027	Jul 2028	Nov 2029
LCAC ESLEP TBD28A	TBD	2028	Jan 2028	Dec 2028	Apr 2030
LCAC ESLEP TBD28B	TBD	2028	Jan 2028	May 2029	Sep 2030
LCAC ESLEP TBD28C	TBD	2028	Jan 2028	Oct 2029	Feb 2031

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost

P-1 Line Item Number / Title:
5201 / Auxiliary Vessels (Used Sealift)

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: 0208036N

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)	2	5	2	2	-	2	2	2	2	2	-	19
Gross/Weapon System Cost (\$ in Millions)	60.000	299.900	133.000	142.008	0.000	142.008	148.839	152.419	157.868	161.649	-	1,255.683
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	60.000	299.900	133.000	142.008	0.000	142.008	148.839	152.419	157.868	161.649	-	1,255.683
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	60.000	299.900	133.000	142.008	0.000	142.008	148.839	152.419	157.868	161.649	-	1,255.683
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Total (\$ in Millions)	60.000	299.900	133.000	142.008	-	142.008	148.839	152.419	157.868	161.649	-	1,255.683
Gross/Weapon System Unit Cost (\$ in Millions)	30.000	59.980	66.500	71.004	-	71.004	74.420	76.210	78.934	80.825	-	66.089

Description:

This funding is required to recapitalize the U.S. surge sealift fleet. The principal enabler for recapitalizing the U.S. surge sealift fleet is through ship procurements and upgrades of used commercial vessels via the RRF Recapitalization program.

Strategic sealift is a key enabler of U.S. power projection and supports the afloat movement of equipment and supplies for major ground combat operations. During surge deployments, approximately 90 percent of Marine Corps and Army combat equipment is transported by sea, under the operation of U.S. Transportation Command (USTRANSCOM). The Ready Reserve Force (RRF), managed by the U.S. Department of Transportation's (DOT) Maritime Administration (MARAD), is the primary force of the surge sealift fleet.

As a key element of strategic sealift, the RRF is specifically structured to transport military unit equipment and supplies during the initial surge of U.S. combat forces deploying anywhere in the world. This fleet consists of 41 government-owned ships with an average age of 46 years; a majority of these ships have already exceeded their expected service life, limiting their supportability and adding significant risk to their operational readiness. As a result, the Joint Force requires 18 ships over the next 5 years to replace anticipated sealift capacity losses.

Characteristics:

-

Length Overall850 ft

-

Beam-

-

Displacement-

-

Draft-

Production Status:	AUX 2201 ⁽¹⁾	AUX 2202	AUX 2203	AUX 2301	AUX 2302	AUX 2401	AUX 2402
Contract Award Date	Feb 2023	Feb 2023	Feb 2023	Nov 2023	Nov 2023	Nov 2023	Nov 2023
Months to Completion							
a) Award to Delivery	2 months	4 months	7 months	1 months	4 months	3 months	5 months
b) Construction Start to Delivery	0 months	0 months	0 months	0 months	0 months	0 months	0 months
Delivery Date	Apr 2023	Jun 2023	Sep 2023	Dec 2023	Mar 2024	Feb 2024	Apr 2024
Completion Of Fitting Out							
Obligation Work Limit Date							

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5201 / Auxiliary Vessels (Used Sealift)		
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: 0208036N		Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A				
<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>
Issue Date for TLR	N/A	N/A		
Issue Date for TLS	N/A	N/A		
Preliminary Design	N/A	N/A		
Contract Design	N/A	N/A		
Detail Design	N/A	N/A		
Request for Proposals	N/A	N/A		
Design Agent				
<u>Classification of Cost Estimate:</u>				
Justification: FY 2024 requests funding for 2 used sealift vessel in the RRF recapitalization program and program management support services.				
Footnotes: (1) Program awarded contract to purchase 3 used sealift vessels in February 2023. These vessels are 10 years old and provide 660,000 square feet of cargo space. These 3 vessels exceed the intent of the cargo capacity and expected ship life of the originally planned 5 vessels.				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy				Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5201 / Auxiliary Vessels (Used Sealift)			
Cost Categories	FY 2022		FY 2023		FY 2024	
	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Plan Costs						
Basic Construction/Conversion	5	299.900	2	133.000	2	142.008
Change Orders						
Electronics						
Technology Insertion						
Propulsion Equipment						
Hull, Mechanical, and Electrical (HM&E)						
Ordnance						
Total Ship Estimate		299.900		133.000		142.008
Net P-1 Funding		299.900		133.000		142.008
Remarks: Program awarded contract to purchase 3 used sealift vessels in February 2023. These vessels are 10 years old and provide 660,000 square feet of cargo space. These 3 vessels exceed the intent of the cargo capacity and expected ship life of the originally planned 5 vessels.						

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy	Date: March 2023
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Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1	P-1 Line Item Number / Title: 5201 / Auxiliary Vessels (Used Sealift)
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Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
AUX 2201 ⁽¹⁾	Crowley	2022	Feb 2023	Apr 2023	Apr 2023
AUX 2202	Crowley	2022	Feb 2023	Jun 2023	Jun 2023
AUX 2203	Crowley	2022	Feb 2023	Sep 2023	Sep 2023
AUX 2301	TBD	2023	Nov 2023	Dec 2023	Dec 2023
AUX 2302	TBD	2023	Nov 2023	Mar 2024	Mar 2024
AUX 2401	TBD	2024	Nov 2023	Feb 2024	Feb 2024
AUX 2402	TBD	2024	Nov 2023	Apr 2024	Apr 2024
AUX 2501	TBD	2025	Nov 2024	Dec 2024	Dec 2024
AUX 2502	TBD	2025	Mar 2025	Apr 2025	Apr 2025
AUX 2601	TBD	2026	Nov 2025	Dec 2025	Dec 2025
AUX 2602	TBD	2026	Nov 2025	Feb 2026	Feb 2026
AUX 2701	TBD	2027	Nov 2026	Dec 2026	Dec 2026
AUX 2702	TBD	2027	Nov 2026	Feb 2027	Feb 2027
AUX 2801	TBD	2028	Jul 2028	Jul 2028	Jul 2028
AUX 2802	TBD	2028	Jul 2028	Jul 2028	Jul 2028

Footnotes:

⁽¹⁾ Program awarded contract to purchase 3 used sealift vessels in February 2023. These vessels are 10 years old and provide 660,000 square feet of cargo space. These 3 vessels exceed the intent of the cargo capacity and expected ship life of the originally planned 5 vessels.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost							P-1 Line Item Number / Title: 5300 / Completion of PY Shpbldg Progr					
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 (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	407.312	0.000	0.000	1,648.559	0.000	1,648.559	687.005	259.586	526.895	294.434	-	3,823.791
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	407.312	0.000	0.000	1,648.559	0.000	1,648.559	687.005	259.586	526.895	294.434	-	3,823.791
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
LPD 17 Class (<i>\$ in Millions</i>)	-	-	-	16.520	-	16.520	-	-	-	-	-	16.520
LPD 17 FLT II (<i>\$ in Millions</i>)	-	-	-	-	-	-	22.200	20.000	1.800	-	-	44.000
TAGS Class (<i>\$ in Millions</i>)	-	-	-	-	-	-	11.500	-	-	-	-	11.500
TAGOS Class (<i>\$ in Millions</i>)	-	-	-	355.166	-	355.166	-	-	-	-	-	355.166
SSN (<i>\$ in Millions</i>)	-	-	-	168.180	-	168.180	200.078	69.292	394.183	135.750	-	967.483
Navy Fleet Auxiliary Force (<i>\$ in Millions</i>)	-	-	-	26.259	-	26.259	10.200	-	-	-	-	36.459
LCS (<i>\$ in Millions</i>)	-	-	-	23.000	-	23.000	-	-	-	-	-	23.000
CVN (<i>\$ in Millions</i>)	71.000	-	-	624.600	-	624.600	-	-	-	-	-	695.600
CVN RCOH (<i>\$ in Millions</i>)	186.200	-	-	42.422	-	42.422	169.171	-	-	-	-	397.793
EPF (<i>\$ in Millions</i>)	50.000	-	-	-	-	-	-	-	-	-	-	50.000
DDG-51 (<i>\$ in Millions</i>)	-	-	-	225.917	-	225.917	114.695	149.446	130.912	158.684	-	779.654
LHA (<i>\$ in Millions</i>)	-	-	-	-	-	-	71.700	-	-	-	-	71.700
LCAC (<i>\$ in Millions</i>)	-	-	-	43.600	-	43.600	50.421	13.098	-	-	-	107.119
TAO Fleet Oiler (<i>\$ in Millions</i>)	59.900	-	-	122.895	-	122.895	37.040	7.750	-	-	-	227.585
Total Obligation Authority (<i>\$ in Millions</i>)	407.312	0.000	0.000	1,648.559	0.000	1,648.559	687.005	259.586	526.895	294.434	-	3,823.791
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total (<i>\$ in Millions</i>)	407.312	-	-	1,648.559	-	1,648.559	687.005	259.586	526.895	294.434	-	3,823.791
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-

Description:
 Note: General Provision Section 8074 of the Department of Defense Appropriations Act, 2023 directs that of the funds appropriated in this act under the heading "Shipbuilding and Conversion, Navy" \$1,312.646 million shall be available to fund prior year shipbuilding cost increases as specified in the general provision.

[P5 / [2013] SSN Virginia Class]: Funds in FY 2024 are for Government responsible portion of the shipbuilding construction contract overruns for FY 2015 SSN 795 (\$43.4M), FY 2016 SSN 796/SSN 797 (\$100.1), and FY 2017 SSN 798 (\$24.6M).

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5300 / Completion of PY Shpbldg Progr
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>[P5 / [2127] Littoral Combat Ship (LCS)]: Funds in FY 2024 are for the Combining Gear repairs on LCS 31 (\$4.0M), crypto modernization efforts for LCS 31 and LCS 38 (\$1.1M), and Shipyard rate impacts on LCS 36 and LCS 38 (\$17.9M).</p> <p>[P5 / [2001] CVN - Carrier Replacement]: Funds in FY 2024 are for the Government responsible portion of the CVN 79 shipbuilding construction contract overrun (\$505.7M), to incorporate Joint Strike Fighter (JSF) into CVN 79 as mandated by the FY 2020 National Defense Authorization Act Section 124 (\$27.1M), and CVN 79 single phase delivery, which includes integration and installation of GFE systems previously identified as Phase II systems and time related services (\$91.8M).</p> <p>[P5 / [2086] CVN RCOH]: Funds in FY 2024 are to Properly Price CVN 74 RCOH and will be used to finance critical propulsion plant work already contracted with the Shipbuilder (\$42.4M).</p> <p>[P5 / [2122] DDG-51]: Funds in FY 2024 are for the Government responsible portion of shipbuilding construction contract overruns for DDG 123/124/127 (\$104.1M), DDG 125/126 (\$118.8M), and Bridge System Modifications for DDG 125/126 (\$3.0M).</p> <p>[P5 / [3036] LPD 17 Class]: Funds in FY 2024 are for the economic price adjustment for LPD 29 (\$16.5M).</p> <p>[P5 / [5030] T-AGOS]: Funds in FY 2024 are for increased lead ship cost estimate for T-AGOS 25 due to several factors affecting shipbuilding prices, such as inflation of direct material, supply chain challenges, and increased non-recurring engineering costs (\$355.2M).</p> <p>[P5 / [5035] Navy Fleet Auxiliary Force]: Funds in FY 2024 are for the Government contractually required Bollinger economic price adjustment for T-ATS 9 (\$1.0M) and additional H,M&E for oversight for T-ATS 9/T-ATS 10 (\$0.2M). Funds in FY 2024 are also for the Government responsible portion of the shipbuilding construction contract overrun to ceiling price on T-ATS 11 (\$14.2M), and estimated Austal request for equitable adjustment for T-ATS 11 (\$7.0M), and additional H,M&E for oversight on T-ATS 11/T-ATS 12 (\$0.6M). Lastly, FY 2024 funds are to finance T-ATS 13/T-ATS 14 delivery incentives with Austal (\$3.3M).</p> <p>[P5 / [5112] Ship to Shore Connector]: Funds for FY 2024 are for the Government responsible portion of the shipbuilding construction contract overruns for LCAC 110 through LCAC 116 (\$43.6M).</p> <p>[P5 / [5025] TAO Fleet Oiler]: Funds in FY 2024 are for the economic price adjustment (EPA) for T-AO 207/T-AO 208 (\$24.9M) and to fund the Government responsible portion of the shipbuilding construction contract overrun for T-AO 208 (\$2.2M). Funds in FY 2024 are also for T-AO 209 EPA (\$9.0M), T-AO 209/T-AO 210 Government furnished equipment (Electronics) increases (\$18.0M), and to fund the Government responsible portion of the shipbuilding construction contract overrun for T-AO 209/210 (\$66.3M). Lastly, funds in FY 2024 are to properly price the T-AO 211/212 basic construction contract for higher shipbuilding contract costs at award (\$2.6M).</p>		

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy								Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost						P-1 Line Item Number / Title: 5300 / Completion of PY Shpbldg Progr				
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	Ship Estimate				- / 407.312	- / 0.000	- / 0.000	- / 1,648.559	- / 0.000	- / 1,648.559
P-40	Total Gross/Weapon System Cost				- / 407.312	- / 0.000	- / 0.000	- / 1,648.559	- / 0.000	- / 1,648.559
*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.										

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Exhibit P-5, Cost Analysis: PB 2024 Navy														Date: March 2023							
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1						P-1 Line Item Number / Title: 5300 / Completion of PY Shpbldg Progr								Item Number / Title [DODIC]: Ship Estimate							
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)				407.312			0.000			0.000			1,648.559			0.000			1,648.559		
Less PY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Net Procurement (P-1) (\$ in Millions)				407.312			0.000			0.000			1,648.559			0.000			1,648.559		
Plus CY Advance Procurement (\$ in Millions)				-			-			-			-			-			-		
Total Obligation Authority (\$ in Millions)				407.312			0.000			0.000			1,648.559			0.000			1,648.559		
(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 Millions)				-			-			-			-			-			-		
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 (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)			
Completion of PY Shipbuilding Programs - [3043] Expeditionary Fast Transport (EPF) Cost																					
1.1) Unmanned logistics prototype conversion of EPF 13	-	-	50.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Subtotal: Completion of PY Shipbuilding Programs - [3043] Expeditionary Fast Transport (EPF) Cost	-	-	50.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Completion of PY Shipbuilding Programs - [2013] SSN Virginia Class Cost																					
2.1) Government respon. portion of shipbuild. const. contract overrun SSN 795/796/797/798	-	-	-	-	-	-	-	-	-	-	-	168.180	-	-	-	-	-	168.180			
Subtotal: Completion of PY Shipbuilding Programs - [2013] SSN Virginia Class Cost	-	-	-	-	-	-	-	-	-	-	-	168.180	-	-	-	-	-	168.180			
Completion of PY Shipbuilding Programs - [2127] Littoral Combat Ship (LCS) Cost																					
3.1) Combining Gear repairs for LCS 31	-	-	-	-	-	-	-	-	-	-	-	4.000	-	-	-	-	-	4.000			
3.2) Crypto Modernization on LCS 31 and LCS 38	-	-	-	-	-	-	-	-	-	-	-	1.100	-	-	-	-	-	1.100			
3.3) Shipyard Rate impacts on LCS 36 and LCS 38	-	-	-	-	-	-	-	-	-	-	-	17.900	-	-	-	-	-	17.900			
Subtotal: Completion of PY Shipbuilding Programs -	-	-	-	-	-	-	-	-	-	-	-	23.000	-	-	-	-	-	23.000			

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Exhibit P-5, Cost Analysis: PB 2024 Navy													Date: March 2023					
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1							P-1 Line Item Number / Title: 5300 / Completion of PY Shpbldg Progr						Item Number / Title [DODIC]: Ship Estimate					
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 (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
[2127] Littoral Combat Ship (LCS) Cost																		
Completion of PY Shipbuilding Programs - [2001] CVN - Carrier Replacement Cost																		
4.1) CVN 78 Advanced Weapons Elevator efforts, Degaussing corrections, trial card resolution	-	-	71.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.2) Govt responsible portion of shpbldg contract overrun for CVN 79	-	-	-	-	-	-	-	-	-	-	-	505.743	-	-	-	-	-	505.743
4.3) Incorporate Joint Strike Fighter into CVN 79 as mandated by the FY 2020 NDAA	-	-	-	-	-	-	-	-	-	-	-	27.100	-	-	-	-	-	27.100
4.4) CVN79 Single Phase Delivery	-	-	-	-	-	-	-	-	-	-	-	91.757	-	-	-	-	-	91.757
Subtotal: Completion of PY Shipbuilding Programs - [2001] CVN - Carrier Replacement Cost	-	-	71.000	-	-	-	-	-	-	-	-	624.600	-	-	-	-	-	624.600
Completion of PY Shipbuilding Programs - [2086] CVN RCOH Cost																		
5.1) Fund GFE cost increases	-	-	28.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.2) Government responsible portion of the shipbuilding contract overrun for CVN 73 RCOH	-	-	158.200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.3) CVN 74 propulsion plant work	-	-	-	-	-	-	-	-	-	-	-	42.422	-	-	-	-	-	42.422
Subtotal: Completion of PY Shipbuilding Programs - [2086] CVN RCOH Cost	-	-	186.200	-	-	-	-	-	-	-	-	42.422	-	-	-	-	-	42.422
Completion of PY Shipbuilding Programs - [2122] DDG-51 Cost																		
6.1) Govt portion of shipbuilding contract overrun for DDG 123/124/127	-	-	-	-	-	-	-	-	-	-	-	104.090	-	-	-	-	-	104.090
6.2) Govt portion of shipbuilding contract overrun and Bridge Mods DDG 125/126	-	-	-	-	-	-	-	-	-	-	-	121.827	-	-	-	-	-	121.827

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Exhibit P-5, Cost Analysis: PB 2024 Navy													Date: March 2023					
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1						P-1 Line Item Number / Title: 5300 / Completion of PY Shpbldg Progr							Item Number / Title [DODIC]: Ship Estimate					
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 (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Subtotal: Completion of PY Shipbuilding Programs - [2122] DDG-51 Cost	-	-	-	-	-	-	-	-	-	-	-	225.917	-	-	-	-	-	225.917
Completion of PY Shipbuilding Programs - [3036] LPD 17 Class Cost																		
7.1) Avondale Deferred Restructuring Cost contract clause for LPD 28	-	-	5.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.2) Rolling Airframe Missile and SEWIP Block 2 for LPD 28	-	-	14.578	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.3) Cost Increases to Ship Self Defense System for LPD 28	-	-	10.300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.4) Economic price adjustment for LPD 29	-	-	-	-	-	-	-	-	-	-	-	16.520	-	-	-	-	-	16.520
Subtotal: Completion of PY Shipbuilding Programs - [3036] LPD 17 Class Cost	-	-	30.578	-	-	-	-	-	-	-	-	16.520	-	-	-	-	-	16.520
Completion of PY Shipbuilding Programs - [5030] T-AGOS Cost																		
9.1) Lead ship T-AGOS 25 cost growth due to inflation/non-recurring engineering growth	-	-	-	-	-	-	-	-	-	-	-	355.166	-	-	-	-	-	355.166
Subtotal: Completion of PY Shipbuilding Programs - [5030] T-AGOS Cost	-	-	-	-	-	-	-	-	-	-	-	355.166	-	-	-	-	-	355.166
Completion of PY Shipbuilding Programs - [5035] Navy Fleet Auxiliary Force Cost																		
11.1) T-ATS 13/T-ATS 14 delivery incentives for Austal	-	-	-	-	-	-	-	-	-	-	-	3.300	-	-	-	-	-	3.300
11.2) Government portion of shipbuilding construction cost overrun on T-ATS 11	-	-	-	-	-	-	-	-	-	-	-	14.209	-	-	-	-	-	14.209
11.3) Estimated Austal Request for Equitable Adjustment on T-ATS 11	-	-	-	-	-	-	-	-	-	-	-	7.000	-	-	-	-	-	7.000
11.4) Economic Price Adjustment (EPA) for Bollinger for T-ATS 9	-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.000
11.5) Additional H,M&E oversight for T-ATS 9/ T-ATS 10	-	-	-	-	-	-	-	-	-	-	-	0.150	-	-	-	-	-	0.150

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Exhibit P-5, Cost Analysis: PB 2024 Navy													Date: March 2023					
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1							P-1 Line Item Number / Title: 5300 / Completion of PY Shpbldg Progr						Item Number / Title [DODIC]: Ship Estimate					
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 (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
11.6) Additional H,M&E oversight for T-ATS 11/ T-ATS 12	-	-	-	-	-	-	-	-	-	-	-	0.600	-	-	-	-	-	0.600
Subtotal: Completion of PY Shipbuilding Programs - [5035] Navy Fleet Auxiliary Force Cost	-	-	-	-	-	-	-	-	-	-	-	26.259	-	-	-	-	-	26.259
Completion of PY Shipbuilding Programs - [5112] Ship to Shore Connector Cost																		
13.1) Government resp. portion of shipbuilding contract overruns for LCAC 110-LCAC 116	-	-	-	-	-	-	-	-	-	-	-	43.600	-	-	-	-	-	43.600
Subtotal: Completion of PY Shipbuilding Programs - [5112] Ship to Shore Connector Cost	-	-	-	-	-	-	-	-	-	-	-	43.600	-	-	-	-	-	43.600
Completion of PY Shipbuilding Programs - [5025] TAO Fleet Oiler Cost																		
14.1) Gov. resp. portion of shipbuilding contract overrun and EPA bills for T-AO 205	-	-	41.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.2) Gov. resp. portion of shipbuilding contract overrun and EPA bills for T-AO 206	-	-	17.400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.3) Electronics and H,M&E GFE increases for T-AO 205	-	-	1.500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14.4) Economic price adjustment for T-AO 207/ T-AO 208	-	-	-	-	-	-	-	-	-	-	-	24.850	-	-	-	-	-	24.850
14.5) Government responsible portion of shipbuilding const. contract overrun for T-AO 208	-	-	-	-	-	-	-	-	-	-	-	2.210	-	-	-	-	-	2.210
14.6) Government responsible portion of shipbuilding construct contract overrun for T-AO 209/210	-	-	-	-	-	-	-	-	-	-	-	66.300	-	-	-	-	-	66.300
14.7) Economic price adjustment for T-AO 209	-	-	-	-	-	-	-	-	-	-	-	9.000	-	-	-	-	-	9.000
14.8) Government furnished equipment	-	-	-	-	-	-	-	-	-	-	-	17.950	-	-	-	-	-	17.950

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Exhibit P-5, Cost Analysis: PB 2024 Navy													Date: March 2023					
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1							P-1 Line Item Number / Title: 5300 / Completion of PY Shpbldg Progr						Item Number / Title [DODIC]: Ship Estimate					
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 (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
(Electronics) increases for T-AO 209/T-AO 210																		
14.12) Properly price T-AO 211/212 for higher shipbuilding contract costs at award	-	-	-	-	-	-	-	-	-	-	-	2.585	-	-	-	-	-	2.585
Subtotal: Completion of PY Shipbuilding Programs - [5025] TAO Fleet Oiler Cost	-	-	59.900	-	-	-	-	-	-	-	-	122.895	-	-	-	-	-	122.895
Gross/Weapon System Cost	-	-	407.312	-	-	0.000	-	-	0.000	-	-	1,648.559	-	-	0.000	-	-	1,648.559

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2024 Navy										Date: March 2023		
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost							P-1 Line Item Number / Title: 5087 / Oceanographic Ships					
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 (<i>Units in Each</i>)	4	-	-	-	-	-	-	-	-	-	-	4
Gross/Weapon System Cost (<i>\$ in Millions</i>)	482.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	482.328
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Less Cost To Complete (<i>\$ in Millions</i>)	11.500	-	-	-	-	-	-	-	-	-	-	11.500
Net Procurement (P-1) (<i>\$ in Millions</i>)	470.828	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	470.828
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Plus Cost To Complete (<i>\$ in Millions</i>)	-	-	-	-	-	-	11.500	-	-	-	-	11.500
Total Obligation Authority (<i>\$ in Millions</i>)	470.828	0.000	0.000	0.000	0.000	0.000	11.500	0.000	0.000	0.000	-	482.328
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Plus Outfitting and Post Delivery (<i>\$ in Millions</i>)	14.862	-	-	5.978	-	5.978	6.600	-	-	-	-	27.440
Total (<i>\$ in Millions</i>)	485.690	-	-	5.978	-	5.978	18.100	-	-	-	-	509.768
Gross/Weapon System Unit Cost (<i>\$ in Millions</i>)	120.582	-	-	-	-	-	-	-	-	-	-	120.582

Description:
 The FY 2018 Omnibus Appropriations Act included a Congressional add for Detail Design and Construction (DD&C) efforts for one T-AGS 60 vessel. T-AGS 67 is a repeat platform of T-AGS 66 and includes the Moon Pool Launch and Recovery System. The TAGS 67 will be capable of deep ocean and coastal surveys, oceanographic sampling and data collections of surface, midwater and ocean floor parameters, shipboard oceanographic data processing and sample analysis, and operation of remotely operated vehicles and hydrographic survey launches.

Note:
 The Department is requesting \$1.5 million in FY 2023 funds to reflect revised economic assumptions in accordance with the General Provision Section 8121 of the Department of Defense Appropriations Act, 2023.

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy		Date: March 2023																																								
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5087 / Oceanographic Ships																																								
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																																										
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Characteristics:</p> <p>Length Overall 353 ft</p> <p>Beam 58 ft</p> <p>Displacement 4,888 Long Tons</p> <p>Draft 19 ft</p> </div> <div style="width: 45%;"> <p>T-AGS</p> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Production Status:</p> <p>Contract Award Date Jun 2021</p> <p>Months to Completion</p> <p> a) Award to Delivery 60 months</p> <p> b) Construction Start to Delivery 49 months</p> <p>Delivery Date Jun 2026</p> <p>Completion Of Fitting Out Sep 2026</p> <p>Obligation Work Limit Date Aug 2027</p> </div> <div style="width: 45%;"> <p>T-AGS 67 ⁽¹⁾</p> </div> </div> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Design Schedule</u></th> <th style="text-align: left;"><u>Start / Issue</u></th> <th style="text-align: left;"><u>Complete / Response</u></th> <th style="text-align: left;"><u>Reissue</u></th> <th style="text-align: left;"><u>Reissue Complete / Response</u></th> </tr> </thead> <tbody> <tr> <td>Issue Date for TLR</td> <td>Aug 1993</td> <td>N/A</td> <td></td> <td></td> </tr> <tr> <td>Issue Date for TLS</td> <td>N/A</td> <td>N/A</td> <td></td> <td></td> </tr> <tr> <td>Preliminary Design</td> <td>N/A</td> <td>N/A</td> <td></td> <td></td> </tr> <tr> <td>Contract Design</td> <td>N/A</td> <td>N/A</td> <td></td> <td></td> </tr> <tr> <td>Detail Design</td> <td>Jun 2021</td> <td>N/A</td> <td></td> <td></td> </tr> <tr> <td>Request for Proposals</td> <td>Aug 2018</td> <td>N/A</td> <td></td> <td></td> </tr> <tr> <td>Design Agent</td> <td>N/A</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><u>Classification of Cost Estimate:</u> N/A</p>			<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>	Issue Date for TLR	Aug 1993	N/A			Issue Date for TLS	N/A	N/A			Preliminary Design	N/A	N/A			Contract Design	N/A	N/A			Detail Design	Jun 2021	N/A			Request for Proposals	Aug 2018	N/A			Design Agent	N/A			
<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>																																						
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Request for Proposals	Aug 2018	N/A																																								
Design Agent	N/A																																									
<p>Footnotes:</p> <p>⁽¹⁾ Undefined Contract Action (UCA) awarded in November 2018 with limited ship construction beginning in March 2019. DD&C contract awarded in June 2021. Bollinger Shipyards purchased VT Halter Marine Inc. in November 2022. Delivery shifted 12 months due to combination of delays in production design and supply chain impacts.</p>																																										

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1		P-1 Line Item Number / Title: 5087 / Oceanographic Ships	
Cost Categories	FY 2018		
	Qty (Each)	Total Cost (\$ M)	
Plan Costs	1		
Basic Construction/Conversion		157.464	
Change Orders		3.992	
Electronics		19.500	
Hull, Mechanical, and Electrical (HM&E)		10.176	
Other Cost			
Total Ship Estimate		191.132	
Less Cost to Complete FY 2025		11.500	
Net P-1 Funding		179.632	
Remarks: The Department added additional \$7.2 million FY 2025 Completion of Prior Year Shipbuilding Programs funding to finance the Government responsible portion of the shipbuilding construction contract overrun (\$6.4 million) and additional HM&E funds for shipyard oversight due to program delays (\$0.8 million). Previous programmed FY 2024 Completion of Prior Year Shipbuilding Programs funding (\$0.6 million) was rephased to FY 2025. The remaining FY 2025 Completion of Prior Year Shipbuilding Programs funding total of \$4.3 million is to finance change orders, electronics, and HM&E requirements that were previously realigned to support additional basic construction costs.			

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5087 / Oceanographic Ships		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
T-AGS 67 ⁽¹⁾	Bollinger Mississippi Shipbuilding	2018	Jun 2021	May 2022	Jun 2026
Footnotes: ⁽¹⁾ Undefinitized Contract Action (UCA) awarded in November 2018 with limited ship construction beginning in March 2019. DD&C contract awarded in June 2021. Bollinger Shipyards purchased VT Halter Marine Inc. in November 2022. Delivery shifted 12 months due to combination of delays in production design and supply chain impacts.					

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy

Date: March 2023

Appropriation / Budget Activity / Budget Sub Activity:
1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost

P-1 Line Item Number / Title:
5212 / YP Craft Maintenance/ROH/SLEP

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)	12	-	-	-	-	-	-	-	-	-	-	12
Gross/Weapon System Cost (\$ in Millions)	43.126	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	43.126
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	43.126	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	43.126
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	43.126	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	43.126
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Plus Outfitting and Post Delivery (\$ in Millions)	0.571	-	-	-	-	-	-	-	-	-	-	0.571
Total (\$ in Millions)	43.697	-	-	-	-	-	-	-	-	-	-	43.697
Gross/Weapon System Unit Cost (\$ in Millions)	3.594	-	-	-	-	-	-	-	-	-	-	3.594

Description:

Naval Academy YP (Yard Patrol) craft are utilized to train midshipmen on piloting, seamanship, navigation, and engineering. The YP Service Life Extension Program (SLEP) extends the YP 676 Class service life approximately 10 years beyond the current average vessel age of 27 years. YP SLEP work items include but are not limited to the following: hull fendering, electronic navigation system components, paint and non-skid, damaged hull sections, hatches and deck planking, various pumps (bilge, seawater cooling, fire), and galley appliances. The SLEP will also include the overhaul of the engines and transformers, and propeller repair. The required repairs will vary by craft and will be conducted at both the U.S. Coast Guard Yard in Baltimore and private small business shipyards.

Characteristics:

YP 676 Class

Length Overall108 ft

Beam24 ft

Displacement173 tons

Draft6 ft

Production Status:

YP SLEP 700

Contract Award DateJun 2021

Months to Completion

a) Award to Delivery21 months

b) Construction Start to Delivery18 months

Delivery DateMar 2023

Completion Of Fitting OutJun 2023

Obligation Work Limit DateMay 2024

Design Schedule

Start / Issue

Complete / Response

Reissue

Reissue Complete / Response

Issue Date for TLRN/A

Issue Date for TLSN/A

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Exhibit P-40, Budget Line Item Justification: PB 2024 Navy			Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 05: Auxiliaries, Craft, and Prior-Year Program Costs / BSA 1: Auxiliaries, Craft and Prior Yr Program Cost		P-1 Line Item Number / Title: 5212 / YP Craft Maintenance/ROH/SLEP		
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				
<u>Design Schedule</u>	<u>Start / Issue</u>	<u>Complete / Response</u>	<u>Reissue</u>	<u>Reissue Complete / Response</u>
Preliminary Design	N/A	N/A		
Contract Design	N/A	N/A		
Detail Design	N/A	N/A		
Request for Proposals	Jun 2016	Sep 2017		
Design Agent	PEO SHIPS, PMS 300 Detachment Boston			
Classification of Cost Estimate: N/A				

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Exhibit P-5c, Ship Cost Analysis: PB 2024 Navy		Date: March 2023
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1		P-1 Line Item Number / Title: 5212 / YP Craft Maintenance/ROH/SLEP
Cost Categories	FY 2017	
	Qty (Each)	Total Cost (\$ M)
Basic Construction/Conversion	6	17.936
Change Orders		0.469
Electronics		1.422
Hull, Mechanical, and Electrical (HM&E)		1.461
Total Ship Estimate		21.288
Net P-1 Funding		21.288

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Exhibit P-27, Ship Production Schedule: PB 2024 Navy				Date: March 2023	
Appropriation / Budget Activity / Budget Sub Activity: 1611N / 05 / 1			P-1 Line Item Number / Title: 5212 / YP Craft Maintenance/ROH/SLEP		
Ship	Shipbuilder	Fiscal Year	Contract Award	Start of Construction	Delivery Date
YP SLEP 700	USCG YARD	2017	Jun 2021	Sep 2021	Mar 2023