



epont

OFFICE OF THE INSPECTOR GENERAL

PIONEER UNMANNED AERIAL VEHICLE PROGRAM

Report No. 98-053

January 22, 1998

Department of Defense

Additional Copies

To obtain additional copies of this audit report, contact the Secondary Reports Distribution Unit of the Analysis, Planning, and Technical Support Directorate at (703) 604-8937 (DSN 664-8939) or FAX (703) 604-8932.

Suggestions for Future Audits

To suggest ideas for or to request future audits, contact the Planning and Coordination Branch of the Analysis, Planning, and Technical Support Directorate at (703) 604-8908 (DSN 664-8908) or FAX (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: APTS Audit Suggestions) Inspector General, Department of Defense 400 Army Navy Drive (Room 801) Arlington, Virginia 22202-2884

Defense Hotline

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to Hotline@DODIG.OSD.MIL; or by writing the Defense Hotline, The Pentagon, Washington, D.C. 20301-1900. The identity of each caller and writer is fully protected.

Acronyms

DCAA	Defense Contract Audit Agency
DCMC	Defense Contract Management Command
NAWC	Naval Air Warfare Center
PUI	Pioneer UAV, Incorporated
UAV	Unmanned Aerial Vehicle



INSPECTOR GENERAL

DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202-2884



January 22, 1998

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND TECHNOLOGY

ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT AND COMPTROLLER)

DIRECTOR, DEFENSE AIRBORNE RECONNAISSANCE OFFICE

PROGRAM EXECUTIVE FOR CRUISE MISSILES AND UNMANNED AERIAL VEHICLES

SUBJECT: Audit Report on Pioneer Unmanned Aerial Vehicle Program (Report No. 98-053)

We are providing this report for information and use. The audit was requested by Congressman Peter DeFazio to evaluate pricing for selected spare parts procured for the Pioneer Unmanned Aerial Vehicle program. Because this report contains no findings or recommendations, no written comments were required, and none were received.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. Garold E. Stephenson, Audit Program Director, at (703) 604-9332 (DSN 664-9332) or Mr. Charles M. Hanshaw, Audit Project Manager, at (703) 604-9256 (DSN 664-9256). See Appendix E for the report distribution. The audit team members are listed inside the back cover.

Robert J. Lieberman Assistant Inspector General for Auditing

Office of the Inspector General, DoD

Report No. 98-053 (Project No. 7CH-5035)

January 22, 1998

Pioneer Unmanned Aerial Vehicle Program

Executive Summary

Introduction. This audit was requested by Congressman Peter A. DeFazio because of concerns that contractors may have overcharged the Navy for spare parts procured for the Pioneer Unmanned Aerial Vehicle program. This issue was investigated by the Naval Inspector General in 1995 in response to a complaint to the Defense Hotline, but Congressman DeFazio was not satisfied that the issue had been adequately reviewed. The Pioneer Unmanned Aerial Vehicle program is managed by the Program Executive Office for Cruise Missiles and Unmanned Aerial Vehicles, Naval Air Systems Command.

Audit Objectives. The audit objective was to evaluate contract pricing for selected parts in the Pioneer Unmanned Aerial Vehicle program. The audit also evaluated portions of the Naval Air Systems Command management control program as it applied to the audit objective. See Appendix A for a discussion of the audit process and Appendix B for prior coverage.

Audit Results. A contracting officer at Naval Air Warfare Center, Point Mugu, California, issued 13 purchase orders between July 29, and August 28, 1992, for 32 different spare parts, totaling about \$296,000, that were overpriced. The overpricing occurred because the orders were based on contractor proposed prices without a price analysis and resulted in \$78,000 of unnecessary costs. Contracting officials took effective measures to prevent further overpricing. The audit identified no additional overpricing for procurements of the 48 Pioneer Unmanned Aerial Vehicle spare parts reviewed. See Part I for a discussion of the audit results.

Management Comments: We provided a draft of this report on November 28, 1997. Because the report contains no findings or recommendations, written comments were not required, and none were received. Therefore we are publishing the report in final form.

Table of Contents

Executive Summary						
Part I - Audit Results						
Audit Background Audit Objectives Spare Parts Pricing Part II - Additional Information	2 3 4					
Appendix A. Audit Process Appendix B. Summary of Prior Audits and Other Reviews	10 12					
Appendix C. Details on Pioneer UAV Spare Parts Reviewed	14					
Appendix D. Purchase Orders Evaluated	17					
Appendix E. Report Distribution	18					

Part I - Audit Results

Audit Background

Congressman Peter A. DeFazio requested the audit in January 1997 because of concerns that contractors may have overcharged for spare parts that Navy procured for the Pioneer Unmanned Aerial Vehicle (UAV) program. This issue was part of an allegation to the DoD Hotline that was investigated and reported on by the Naval Inspector General in September 1995. Congressman DeFazio believed the Naval Inspector General did not fully investigate the issue. Therefore, he requested that the Navy reopen the investigation and the Inspector General, DoD, also review the issue. He asserted that the DoD should demand reimbursement for any overcharging and should not make major new expenditures on the program "until all significant procurement problems are resolved."

Pioneer UAV Program. The Pioneer UAV program began in 1985 in response to requirements for real-time reconnaissance, surveillance, target acquisition, battle damage assessment, and battlefield management. Each Pioneer UAV system consists of five air vehicles, a ground based data system, a tracking control unit consisting of a communications link, a launch and recovery subsystem, and a support subsystem. The system is transportable by either land- or ship-based military vehicles. Apart from conventional runway launch and recovery, the system includes rocket assisted take-off launching stands, truck mounted pneumatic launchers, runway mounted arresting gear systems, and the Shipboard Pioneer Arresting Recovery net retrieval system. The Pioneer UAV operates at altitudes of up to 12,000 feet with a range approaching 100 nautical miles and has supported contingency deployments since 1986, including Operation Desert Storm in Saudi Arabia, Operation Restore Hope in Somalia, and Operation Joint Endeavor in Bosnia.

The Pioneer UAV program is managed by the Naval Air Systems Command through the Program Executive Office for Cruise Missiles and Unmanned Aerial Vehicles. The Navy purchased the Pioneer UAV system as an "off-the-shelf" interim package for use over a 3-year period pending development of the Hunter UAV system. Due to the cancellation of the Hunter UAV program in January 1996 by the Under Secretary of Defense for Acquisition and Technology, the Navy extended the Pioneer UAV program until FY 2003 to allow for the development and fielding of a replacement UAV system. The Navy plans to sustain nine Pioneer UAV systems and procure attrition spares and air vehicles. The projected life-cycle costs for the Pioneer UAV program are \$657.1 million. The Navy spent about \$464.6 million on the program during FYs 1985 through 1997 and budgeted about \$31.2 million for spare parts procurements during FYs 1997 through 2003.

Audit Objectives

The audit objective was to evaluate contract pricing for selected parts in the Pioneer UAV program. We also evaluated the Naval Air Systems Command management control program applicable to the audit objective. See Appendix A for a discussion of the audit process and Appendix B for a summary of prior coverage related to the audit objective.

Spare Parts Pricing

A contracting officer at Naval Air Warfare Center (NAWC), Point Mugu, California, issued 13 purchase orders between July 29, and August 28, 1992, for 32 different Pioneer UAV spare parts, totaling about \$296,000, that were overpriced. The overpricing occurred because the orders were based on contractor-proposed prices without a price analysis and resulted in \$78,000 of unnecessary costs. This issue was investigated and reported by the Naval Inspector General in September 1995 in response to a complaint to the Defense Hotline and contracting officials took effective measures to prevent further overpricing. The audit identified no additional overpricing for procurements of 48 Pioneer UAV spare parts reviewed, no basis for requesting further consideration from the contractor, and no grounds for deferring further execution of the program.

Overpricing Concern. The spare parts pricing that concerned Congressman DeFazio involved 13 fixed-price purchase orders issued by the NAWC contracting officer in July and August 1992, as detailed in Appendix C. The contracting officer priced the orders based on procurement proposals submitted by Pioneer UAV, Incorporated (PUI), without performing a price analysis as required by the Federal Acquisition Regulation.

Price Analysis. Federal Acquisition Regulation 15.805-2, "Price Analysis," states the contracting officer is responsible for selecting and using whatever price analysis techniques ensure an overall fair and reasonable price for the Government. A price analysis is the process of examining and evaluating a proposal price without evaluating its separate cost elements and proposed profit. A price analysis should be performed on all contractual actions, even those actions where a cost analysis is required. When cost or pricing data are not required, a price analysis is mandatory. The contracting officer avoided the price analysis by splitting the spare parts orders into amounts below the \$25,000 small purchase ceiling. The lack of price analysis resulted in overpricing the 13 orders by \$78,000, which the Navy requested in a voluntary refund from PUI. PUI declined the refund request, stating that the prices were based on firm-fixed price contracts and the procurements violated no law or regulation. PUI also stated that it performed efforts at no cost in the Pioneer UAV program that allowed the Government to avoid costs or receive benefits that offset the amount of voluntary refund sought by the Navy. The efforts included reviews and studies in eight technical areas. The Navy accepted the studies performed by PUI as full consideration for the excessive costs.

Congressman DeFazio provided the following examples of Pioneer UAV spare parts that he believed Navy procured at overpriced amounts, prices Navy supposedly paid for the parts, and prices of similar parts that could possibly be obtained from commercial establishments.

Table. Examples of Pioneer UAV Spare Parts Believed Overpriced											
	Prices Cited by	Price of Similar									
Description	Congressman DeFazio	Commercial Parts	Actual Price								
Washer	\$ 127.46	\$ 10.50	\$127.46								
Bolt	31.56	0.61	31.57								
Paw Attachment	110.64	6.50	N/P ¹								
Gas Bottle	1,975.00	103.00	N/P ¹								
Spark Plug Connector	544.09	12.17	N/P ¹								
¹ N/P Not Procured											

Washer. The Navy procured 120 of the washers, part number 63551-40026-1, at \$127.46 per unit in a one-time buy in FY 1992. Navy Price Fighters analysis. adjusted for general and administrative expense and profit, determined that each washer should have cost \$35.43. The NAWC contracting officer procured the washers at an excessive price because the price was based on a PUI proposal without a price analysis. The commercial version of the washer, estimated at \$10.50, was not suited for Pioneer UAV application because the washer required additional manufacturing processes, which included machining to stringent tolerances, deburring, plating, anodizing, and buffing, to satisfy requirements. The processes were critical because the washer is the uppermost portion of the shock absorber assembly and designed to maximize the ability of the assembly to reduce vibrational impact while keeping the engine mounted in a level position. This level mounting is important since skewered mounting would cause significant change in the flight capability and could lead to irreparable damage. The domed aspect of the washer was particularly designed to assure balanced mounting of the engine during flight and all high vibration situations. The vibration, if not properly attenuated and distributed, could lead to cracking in the fuselage, which is a primary cause of air vehicle disintegration during flight. If Navy had used the commercial washer, it would have voided the Pioneer UAV warranty. The Navy received consideration for the excessive price paid for the washer through Pioneer UAV program efforts that the contractor performed at no cost to the Government.

Bolt. The Navy procured 50 of the bolts, part number NA0045-080066, at \$31.57 per unit and a Navy inventory control point contractor for the Pioneer UAV

5

¹ See page 7 for a discussion of Navy Price Fighters program.

procured an additional 100 of the bolts at \$0.61 per unit. A Navy Price Fighters cost analysis, adjusted for general and administrative expense and profit, established the unit price at \$1.99. The excessive amount paid by the Navy resulted from procurement by the NAWC contracting officer at a price proposed by the contractor without a price analysis. The contractor rectified the excessive cost by performing Pioneer UAV program efforts at no cost to the Government.

Paw Attachment. The contractor proposed the paw attachment, part number 40157-43396, at \$110.64 per unit in July 1992 but the Navy did not procure the paw attachment based on the proposal. The Navy procured 550 paw attachments, part number 40157-43396, in FYs 1995 and 1996 at prices ranging from \$23.73 to \$34.49 and averaging \$29.88 per unit.

Gas Bottle. PUI proposed the gas bottle, part number 2958-90920, at \$1,975 per unit but the Navy did not procure the gas bottle based on the proposal. The only recorded purchases that Navy made were for 4 gas bottles, part number 2958-90920, and 10 gas bottles, part number 125-1, in FY 1990 as part of Pioneer UAV buildup kits. Contract documentation reviewed did not show a separate unit price for components in the buildup kits. As a result, we were unable to determine the unit price or price reasonableness of the bottles.

Spark Plug Connector. PUI proposed the spark plug connector, part number 3265 006 000, at \$544.10 per unit in July 1992. According to contract documentation reviewed, the Navy never procured the connector.

Investigation of Overpricing. The spare parts overpricing issue was included in allegations to the Defense Hotline and investigated by the Naval Inspector General. Naval Inspector General Report of Investigation, "Pioneer UAV," Case No. 940646, September 1995 substantiated overpricing and attributed it to the failure to follow proper procurement procedures. Contracting officials took measures to prevent further overpricing.

Measures to Prevent Spare Parts Overpricing. Measures established by Naval Air Systems Command contracting officials to prevent or detect overpricing of Pioneer UAV spare parts included increased reliance on support provided by the Defense Contract Management Command (DCMC), Defense Contract Audit Agency (DCAA), and Navy Price Fighters to establish negotiations for spare parts procurements.

DCMC Analyses. DCMC analyzed technical aspects of contractor-proposed spare parts requirements and the labor hours required to develop the spares.

DCAA Proposal Reviews. DCAA evaluated contractor procedures, controls, and actual performance; analyzed financial information and effectiveness, efficiency, and economy of operations and subcontractor proposals; and verified material costs, labor rates, other direct costs, and overhead rates.

DCAA Post-Award Audits. DCAA conducted eight post-award audits of Navy procurements from the Pioneer UAV contractor. The audits determined that the excessive pricing was isolated to procurements by NAWC, Point Mugu,

California. The audits also detected another instance of overpricing, which was addressed in DCAA audit report 6141-94J42040001-S1, "Supplement to Report on Post-Award Audit of Cost or Pricing Data under Contract No. N00019-92-C-0094," September 17, 1996. The report stated that the subcontractor, Israeli Aircraft Industries, submitted cost or pricing data that were not accurate, current, or complete as of the date of price agreement. The report recommended a \$42,152 price adjustment on the contract price of \$5,029,519. Israeli Aircraft Industries concurred with the recommendation with minor corrections and reimbursed the Government \$40,631 in November 1996.

Price Fighters Reviews. The Navy Price Fighters program was established in 1983 by Naval Supply Systems Command and is administered by the Navy Fitting Out and Supply Support Assistance Center. The Price Fighters perform engineering-based cost analyses, technical analyses, and contract negotiation for spare parts or weapon systems procurements. Price Fighters reviews have resulted in more than \$1.3 billion savings to DoD since 1983.

Price Fighters staff uses an "Alpha Acquisition Method," which enables the Price Fighters to work parallel with a contractor team of industrial engineers and planners to evaluate and negotiate a proposed labor hour mix for formal contractor proposals. The method includes spare parts labor hours for the prime contractor and subcontractors.

The Naval Air Systems Command contracting officer used Price Fighters recommendations to establish price negotiations for Pioneer UAV spare parts procurements in FYs 1995 and 1996. The Price Fighters developed negotiated labor hours from comprehensive reviews of spare parts manufactured by subcontractors on contract N00019-95-C-0157. In performing the reviews, the Price Fighters evaluated the contractor's actual labor hours expended for past performance, historical information regarding process improvements, improvement projections, and spare parts manufacturing processes.

Price Decreases. The measures taken by the Navy to prevent or detect spare parts overpricing generally resulted in significant decreases in unit prices for Pioneer UAV spare part procurements, as shown in Appendix C. The Navy fully justified and documented price increases for particular procurements in Appendix C.

Summary

The overpricing of Pioneer UAV spare parts was limited to 13 purchase orders placed between July 29, and August 28, 1992, by a contracting officer assigned to NAWC, Point Mugu, California. The Naval Inspector General substantiated the overpricing and attributed it to failure to follow proper procurement procedures, which consisted of the lack of contracting officer price analysis and splitting orders to amounts below the \$25,000 small purchase ceiling. The Navy took effective measures, which consisted of greater reliance on assistance from DCMC, DCAA, and Navy Price Fighters for price negotiations. The measures taken by Naval Air Systems Command contracting officials resulted in subsequent Pioneer UAV spare part procurements at fair and reasonable prices. We found no basis for requesting additional consideration from the contractor or for deferring further execution of the program.

Part II - Additional Information

Appendix A. Audit Process

Scope and Methodology

Work Performed. We reviewed official contract records and documentation supporting the procurement and pricing of 48 spare parts for the Pioneer UAV program, including spare parts that were the subject of a Naval Inspector General investigation and report in September 1995. The analysis included an examination of contract documents and field pricing analyses on spare parts procured for the Pioneer UAV program from FYs 1988 through 1996. We also examined the Naval Inspector General and Army Criminal Investigation Command case records related to investigations of the Pioneer UAV program.

Interviews. We interviewed Pioneer UAV contracting and program personnel; Naval Inspector General representatives; and Army criminal investigators.

Computer-Processed Data and Technical Experts. We did not use computer-processed data in performing this audit. However, the Technical Assessment Division provided assistance in review of Pioneer UAV spare parts drawings.

Organizations Visited or Contacted. We visited or contacted individuals and organizations within DoD. Further details are available on request.

Audit Period and Standards. We performed this economy and efficiency audit from March 1997 through November 1997 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls considered necessary.

Management Control Program

DoD Directive 5010.38, "Management Control (MC) Program," dated August 26, 1996, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of the Management Control Program. We reviewed the adequacy of Naval Air Systems Command management controls over contracting for the Pioneer UAV program. We did not review management's self assessments because they were outside the scope of the request and we found no material control weaknesses.

Adequacy of Management Controls. Management controls were adequate in that we did not identify any material management control weaknesses.

Appendix B. Summary of Prior Audits and Other Reviews

Naval Inspector General

Report of Investigation, "Pioneer UAV," Case No. 940646, September 8, 1995. The report stated that the NAWC contracting office failed to properly review contractor proposals, conduct price comparisons and negotiate costs. The report also criticized the way small purchases were made, particularly splitting orders to remain below the small purchase threshold. The report recommended that the contracting office ensure that contracting officers perform independent Government cost estimates and improve price analysis on competitive procurements. The report did not require management comments and none were provided.

Inspector General, Naval Air Systems Command

"Report of Command Inspection of the Pioneer UAV Program, PMA-263, and Naval Air Warfare Center-Weapons Division Point Mugu, Pioneer Fleet Support Activities," October 31, 1994. The report concluded that the overall Pioneer UAV program was satisfactory and made no recommendations. The report did not require management comments and none were provided.

Assistant Secretary of the Navy (Research, Development, and Acquisition)

"Report of Procurement Management Review of Naval Air Warfare Center, Weapons Division," June 1994. The review recommended that NAWC, Point Mugu, improve price analysis for competitive procurements, prepare independent government cost estimates, and require legal counsel to review all significant contractual documents. The review also recommended that NAWC prepare business clearance memorandums in accordance with regulatory guidance. The report did not require management comments and none were provided.

Program Executive Officer, Cruise Missiles Project and Unmanned Aerial Vehicles Joint Project

"Final Report of Pioneer Field Logistics Activity Fact Finding and Review," May 20, 1994. The fact finding review resulted from congressional concerns about the Pioneer UAV program. The congressional concerns centered on potential payment of excessive prices for Pioneer spare and repair parts, acceptance of defective repair parts, and inadequate auditing of Pioneer procurements. The review indicated that excessive or unreasonable prices were paid by NAWC Point Mugu for Pioneer spare parts. The review determined the following:

- No procurements of any of the parts listed in the PUI July 13, 1992 proposal had been made by NAWC, Point Mugu.
- The thirteen purchase orders represent the total procurement history between PUI and NAWC, Point Mugu.
- NAWC, Point Mugu did not challenge or negotiate the thirteen purchase orders.

The review indicated that excessive prices resulted from the NAWC, Point Mugu, request that PUI propose prices for each spare part item as if each part would be a stand-alone purchase. The fact finding review specifically determined that four spare parts (spark plug connector, paw attachment, nitrogen cylinder, and nitrogen charging system) have never been procured by NAWC, Point Mugu from PUI. However two other parts (washer and quill shaft bolt) were procured by NAWC, Point Mugu. The report recommended that the Inspector General, Naval Air Systems Command conduct an independent follow-on inspection of all Pioneer program activities. The report also recommended that Naval Air Systems Command review procurement practices at NAWC, Point Mugu, to ensure proper procurement regulations are implemented and followed consistently. The report did not require management comments and none were provided.

Appendix C. Details on Pioneer UAV Spare Parts Reviewed

Purchased Spare Parts

Part	Alternate		Pure	O2 NAWC ch Order Unit	92-0	FY 92 C-0094 ¹ Unit	93-	FY 93 C-0050 ¹ Unit	<u>94-C</u>	Y 95 2-0249 ¹ Unit	95- <u>D</u> O	Y 96 G-0122 D 0005 ¹ Unit	FY 9 Purchase NAWC Pa	Order <u>x River</u> Unit	95-0	Y 96 C-0157 ¹ Unit
<u>Number</u>	Part Number	<u>Nomenclature</u>	Oty	Price	<u>Oty</u>	Price	<u>Oty</u>	Price	<u>Qty</u>	Price	<u>Oty</u>	Price	<u>Oty</u>	<u>Price</u>	<u>Oty</u>	Price
63551-40019-1	HL1151212-001	Plate Assy, Adapte	ег 40	\$ 289.60							14	\$187.89			40	\$ 426.50
63551-40025-1	HL1151222-001	Washer	120	108.62												
NA0069-05001	6 50301-90052-29	Screw Hex	100	29.02												
TC5141		Mount Base	40	28.86									107	\$ 0.14		
0240-091-002		Screw Hex	80	5.19												
0246-001-001		Key(3x5)	21	29.04												
5300-90043-5	F404A 3/32	Plastic Tube	140	5.03												
63551-40083-1	HL1151211-001	Quill Shaft	36	470.53							13	298.75			100	590.75
NA0045-06002	2 5301-90053-38	Screw, ADPT	160	8.00												
NA0045-08006	6 5301-90053 -7 2	Bolt, Quill Shaft ²	50	31.57												
WB4-150		Isolator	60	20.49												
WR4-150		Isolator	60	21.96												
63551-40038-1		Bracket, Throttle	40	150.49												
40157-42178	HL1151004-001	Control Arm	40	296.86			10	\$280.00			20	105.27			200	86.25
HL1151500-507	7	Spring Disc Hub	40	137.75												
NA0070-060022	2 5301-90054-33	Screw	160	7.75												
40157-41238	63551-90001-1	Harness	50	394.45	6	\$519.00										
63551-40026-1	HL1151222-005	Washer ²	120	127.46												
3245-001-000		Circlips	160	15.67												
63551-40027-1	HL1151222-003	Bushing	27	96.26									50	16.62		
HL1151507-001	l	Support, Disc Spri	ng 40	429.55												
NA0069H08002	26	Screw, Cap HD	160	15.89												

The footnotes are at the end of this Appendix.

Appendix C. Details on Pioneer UAV Spare Parts Reviewed

Purchased Spare Parts (cont'd)

Part <u>Number</u>	Alternate <u>Part Number</u>	<u>Nomenclature</u>		2 NAWC h Order Unit Price		FY 92 -C-0094 ¹ Unit Price		FY 93 -C-0050 ¹ Unit Price		FY 95 C-0249 ¹ Unit <u>Price</u>	95-G	7 96 G-0122 0005 ¹ Unit <u>Price</u>	Purchas	7 96 se Order <u>Pax River</u> Unit <u>Price</u>	Y 96 C-0157 ¹ Unit <u>Price</u>
63551-40021-1	HL1151018-001	Engine/Gen Mount	10	\$2,455.19					23	\$1175.00					
0242-129-002		Nut, Hex	80	29.84											
3215-001-000		Piston Ring	20	110.91											
3230-001-000	25X52X7	Oil Seal	80	21.88											
3230-002-000	25X47X7	Oil Seal	70	35.92											
3240-003-002		Screw, Hex, FlyWH	20	53.22											
3533-010-000		Washer, Lock	80	4.80											
63551-40001-10	HL1151213-001	Hub, Prop Assy	40	336.65	6	\$1,148.00	6	\$453.00			14	\$617.45			
HL1151907-005	3JE,3J5/8,3J1/2	Sleeve, Coupling	20	47.12									73	\$3.18	
63551-40021-1	HL1151018-001	Engine/Gen Mount	10	2,455.19											
63551-40002-10	HL1151220-501	Engine Mount Assy	6	3,810.49											
63551-40002-10	HL1151220-501	Engine Mount Assy	6	3,810.49											
63551-40021-1	HL1151018-001	Engine/Gen Mount	10	2,455.19											
63551-40021-1	HL1151018-001	Engine/Gen Mount	10	2,455.19											

The footnotes are at the end of this Appendix.

Proposed Spare Parts

Part <u>Number</u>	Alternate <u>Part Number</u>	Nomenclature		Y 92 Proposal Unit Price		<u>094¹</u> Jnit		Y 95 C-0249 ¹ Unit <u>Price</u>	95-0	Y 96 G-0122 0005 ¹ Unit Price	NAWC	Y 96 C Pax River ase Order Unit Price		Y 96 C-0157 ¹ Unit <u>Price</u>
50301-90054-23	22182BE050022L	Screw Gen Mt to Ad	80	\$ 118.91										
63551-40111		Screw, Self Adj	80	179.05		2	268	\$66.75					460	\$ 9.25
40157-40511	HL1151917-003	Starter Lug	40	441.72							35	\$125.00	100	84.50
40157-43397	HL1151223-001	Stud	160	115.64		1	100	67.51	50	\$ 47.20			400	58.25
40157-43396	RM2-521-89-02	Paw Attachment ²	160	110.64		1	100	34.49	50	23.73			400	29.50
40157-42921-10		Exhaust Stacks	10	1,202.83									100	175.25
N673		Spark Plug Gasket	40	No Bid										
40157-44049-10		Clips, Spark Plug	90	187.10					50	94.46			100	68.75
50300-90043-10		Plastic Tubing	140^{3}	69.99										
40157-43920-10	HL1151008-505	Throttle Cable	50	864.77			21	562.00						
3265 006 000		Spark Plug Conn ²	20	544.10										
50301-90055-2	5PH35M	Nut, Gen Mt to Ad	80	118.30							24	4.95		
50301-90053-14		Screw Hex HD	40 ³	241.87										
63551-40020-10	HL1151500-507	Prop Hub Assy	40	1,046.28					12	1,152.46			100 1	1,913.50
40157-44230-10	HL1151218-505	Left Shroud	40	689.56	15	\$726.00								
40157-44240-10	HL1151217-505	Right Shroud	40	615.31	15	597.00	17	650.00						

 $^{^{1}\!\}mathrm{Subsequently}$ purchased by Naval Air Systems Command Contracting Office through PUI.

²Identified in Congressman DeFazio's audit request.

³Plastic Tubing purchased through Systems Application and Technology, Incorporated on October 26, 1992, at a cost of \$0.74 per unit. The Screw Hex HD purchased through the same contractor on January 8, 1993, cost \$0.138 per unit.

⁴PUI proposed each nut at \$118.30. NAWC purchased 2 packages that contained 100 nuts each at a package price of \$4.95.

Appendix D. Purchase Orders Evaluated

Purchase Order No.	Award <u>Amount</u>
N0429A-92-M-4030	\$ 24,619
N0429A-92-M-3851	4,056
N0429A-92-M-4041	24,073
N0429A-92-M-3844	24,644
N0429A-92-M-3998	24,654
N0429A-92-M-4087	24,831
N0429A-92-M-4103	24,552
N0429A-92-M-4223	24,727
N0429A-92-M-4236	24,552
N0429A-92-M-4238	22,863
N0429A-92-M-4239	22,863
N0429A-92-M-4267	24,552
N0429A-M-92-4272	24,552
Total	\$295,538

Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
Deputy Under Secretary of Defense (Acquisition Reform)
Director, Defense Airborne Reconnaissance Office
Director of Defense Procurement
Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Public Affairs)

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Assistant Secretary of the Navy (Research, Development, and Acquisition)
Auditor General, Department of the Navy
Program Executive for Cruise Missiles and Unmanned Aerial Vehicles

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller) Auditor General, Department of the Air Force

Other Defense Agencies

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Director, National Security Agency
Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency

Non-Defense Organizations and Individuals

Office of Management and Budget

Technical Information Center, National Security and International Affairs Division, General Accounting Office

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations House Subcommittee on National Security, Committee on Appropriations

House Committee on Government Reform and Oversight

House Subcommittee on Government Management, Information, and Technology,

Committee on Government Reform and Oversight

House Subcommittee on National Security, International Affairs, and Criminal Justice, Committee on Government Reform and Oversight

House Committee on National Security

Honorable Peter A. DeFazio, U.S. House of Representatives

Audit Team Members

The Contract Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, produced this report.

Paul J. Granetto
Garold E. Stephenson
Charles M. Hanshaw
Arthur M. Hainer
Shirley Willard
Cheryl C. Henderson
Cole M.Cox
Chandra P. Sankhla