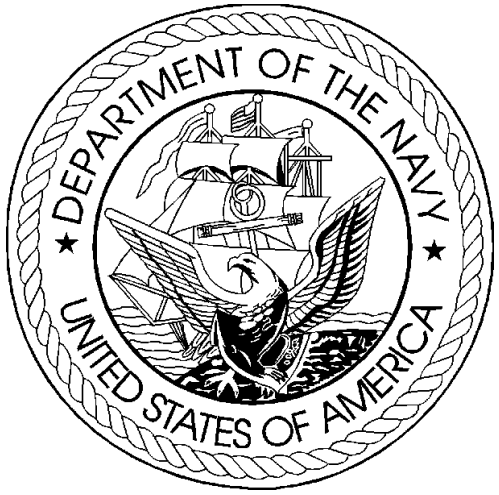
DEPARTMENT OF THE NAVY
FY 1999 AMENDED BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 1998

OTHER PROCURMENT, NAVY
BUDGET ACTIVITY 1

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1999 UNIT COST	TOA, $ IN MILLIONS FY 1997 QUANTITY	FY 1997 COST	FY 1998 QUANTITY	FY 1998 COST	FY 1999 QUANTITY	FY 1999 COST	SEC
	BUDGET ACTIVITY 01: Ships Support Equipment									
	Ship Propulsion Equipment									
1	0110 LM-2500 Gas Turbine	A			7.9		5.4		8.7	U
2	0120 Allison 501K Gas Turbine	A			3.4		5.8		6.7	U
3	0157 Steam Propulsion Improvement	A			.2		.5		.6	U
4	0180 Other Propulsion Equipment	A			7.7		11.8		10.3	U
	Generators									
5	0260 Other Generators	A			-		1.8		9.6	U
	Pumps									
6	0320 Other Pumps	A			.2		.4		1.0	U
	Propellers									
7	0510 Submarine Propellers	A			31.9		-		7.9	U
8	0540 Other Propellers and Shafts	A			3.5		1.5		2.5	U
	Navigation Equipment									
9	0670 Other Navigation Equipment	A			26.2		42.7		45.3	U
	Underway Replenishment Equipment									
10	0740 Underway Replenishment Equipment	A			9.3		8.0		7.7	U
	Periscopes									
11	0831 Sub Periscopes & Imaging Equip	A			31.2		28.3		31.9	U
	Other Shipboard Equipment									
12	0910 Firefighting Equipment	A			8.2		18.6		10.1	U
13	0925 Command and Control Switchboard	A			6.8		5.1		9.8	U

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1999 UNIT COST	TOA, $ IN MILLIONS FY 1997 QUANTITY	FY 1997 COST	FY 1998 QUANTITY	FY 1998 COST	FY 1999 QUANTITY	FY 1999 COST	S E C
14 0935	Pollution Control Equipment	B			126.5		126.5		149.7	U
15 0940	Submarine Silencing Equipment	A			3.9		4.2		3.5	U
16 0945	Submarine Batteries	A			8.9		8.2		8.7	U
17 0949	SSN21 Class Support Equipment	A			18.9		6.3		15.5	U
18 0950	Strategic Platform Support Equip	A			13.4		20.9		10.3	U
19 0955	DSSP Equipment	A			5.0		7.1		10.5	U
20 0975	Minesweeping Equipment	A			3.9		4.8		.4	U
21 0980	HM&E Items Under $2 Million	A			29.9		49.9		58.1	U
22 0983	Surface IMA	A			2.4		.5		.7	U
23 0987	Radiological Controls	A			.2		.2		-	U
24 0988	Mini/Micromini Electronic Repair	A			.9		.5		.5	U
	Reactor Plant Equipment									
25 1010	Reactor Power Units	A			189.5		106.0		227.3	U
26 1020	Reactor Components	A			177.8		176.7		211.4	U
	Ocean Engineering									
27 1130	Diving and Salvage Equipment	A			7.4		4.7		5.7	U
28 1140	EOD Underwater Equipment	B			5.2		8.8		8.2	U
	Small Boats									
29 1210	Standard Boats	A			4.4		1.4		1.4	U
	Training Equipment									
30 1320	Other Ships Training Equipment	A			1.4		1.8		1.8	U
	Production Facilities Equipment									

Department of the Navy

FY 1999 Procurement Program — Exhibit P-1

APPROPRIATION: 1810N Other Procurement, Navy — DATE: 01/23/98

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1999 UNIT COST	TOA, $ IN MILLIONS FY 1997 QUANTITY	FY 1997 COST	FY 1998 QUANTITY	FY 1998 COST	FY 1999 QUANTITY	FY 1999 COST	SEC
31	1415 Production Support Facilities	A			1.3		.3		-	U
32	1445 Operating Forces IPE	A			.9		.9		.7	U
	Other Ship Support									
33	1480 Nuclear Alterations	A			66.9		62.2		96.8	U
TOTAL	Ships Support Equipment				805.2		721.8		963.1	

Department of the Navy

FY 1999 Procurement Program - Reserve Component Exhibit P-1R

APPROPRIATION: 1810N Other Procurement, Navy DATE: 01/23/98

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1999 UNIT COST	TOA, $ IN MILLIONS FY 1997 QUANTITY	FY 1997 COST	FY 1998 QUANTITY	FY 1998 COST	FY 1999 QUANTITY	FY 1999 COST	SE C
	BUDGET ACTIVITY 01: Ships Support Equipment									
	Ocean Engineering									
1	1130 Diving and Salvage Equipment(RESERVE)	A			.3		.2		.3	U
	TOTAL Ships Support Equipment				.3		.2		.3	

Other Procurement, Navy
Program and Financing (in Thousands of dollars)

Identification code 17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
	1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Program by activities:						
Direct program:						
00.0101 Ships support equipment	805,171	721,811	963,074	726,987	665,888	852,505
00.0201 Communications and electronics equipment	1,009,472	1,165,616	1,530,802	1,112,627	1,100,628	1,522,885
00.0301 Aviation support equipment	210,756	188,669	245,663	241,254	166,320	221,064
00.0401 Ordnance support equipment	460,886	517,909	674,703	430,909	472,834	593,825
00.0501 Civil engineering support equipment	38,865	46,404	69,902	46,043	39,870	60,686
00.0601 Supply support equipment	67,170	51,902	108,905	84,329	54,112	91,963
00.0701 Personnel and command support equipment	48,732	79,788	65,660	110,527	67,150	61,813
00.0801 Spares and repair parts	196,921	215,975	279,028	188,178	184,644	249,408
00.9101 Total direct program	2,837,973	2,988,074	3,937,737	2,940,854	2,751,446	3,654,149
01.0101 Reimbursable program	53,283	42,000	42,000	50,987	45,439	42,000
10.0001 Total	2,891,256	3,030,074	3,979,737	2,991,841	2,796,885	3,696,149
Financing:						
Offsetting collections from:						
11.0001 Federal funds(-)	-1,014	-42,000	-42,000	3,472	-42,000	-42,000
14.0001 Non-Federal sources(-)	-52,269			-51,869		
17.0001 Recovery of prior year obligations				-56,565		
Unobligated balance available, start of year:						
21.4002 For completion of prior year budget plans				-496,308	-430,674	-663,863
21.4003 Available to finance new budget plans	-17,237	-16,677		-17,237	-16,677	
21.4009 Reprograming from/to prior year budget plan	-16,727					
22.1001 Unobligated balance transferred to other acco	4,200	11,177		4,200	11,177	
Unobligated balance available, end of year:						
24.4002 For completion of prior year budget plans				430,674	663,863	947,451
24.4003 Available to finance subsequent year budget	16,677			16,677		
25.0001 Unobligated balance expiring	9,227			9,227		
39.0001 Budget authority	2,834,113	2,982,574	3,937,737	2,834,113	2,982,574	3,937,737
Budget authority:						
40.0001 Appropriation	3,036,268	3,144,205	3,937,737	3,036,268	3,144,205	3,937,737
40.3601 Appropriation rescinded (unob bal)		-5,500			-5,500	
40.7601 Reduction pursuant to P.L. 105-56 (-), 8035		-56,735			-56,735	
41.0001 Transferred to other accounts (-)	-218,321	-99,396		-218,321	-99,396	
42.0001 Transferred from other accounts	16,166			16,166		
43.0001 Appropriation (adjusted)	2,834,113	2,982,574	3,937,737	2,834,113	2,982,574	3,937,737

Other Procurement, Navy
Program and Financing (in Thousands of dollars)

Identification code 17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
	1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Relation of obligations to outlays:						
71.0001 Obligations incurred				2,943,444	2,754,885	3,654,149
72.1001 Orders on hand, SOY				-86,326	-89,947	-89,947
72.4001 Obligated balance, start of year				3,793,123	3,407,474	3,129,392
74.1001 Orders on hand, EOY				89,947	89,947	89,947
74.4001 Obligated balance, end of year				-3,407,474	-3,129,392	-3,542,101
77.0001 Adjustments in expired accounts (net)				-222,581		
78.0001 Adjustments in unexpired accounts				-56,565		
90.0001 Outlays (net)				3,053,568	3,032,967	3,241,440

Other Procurement, Navy
Object Classification (in Thousands of dollars)

Identification code 17-1810-0-1-051		1997 actual	1998 est.	1999 est.
	Direct obligations:			
122.001	Transportation of things	7,310	3,930	5,043
125.101	Advisory and assistance services	30,999	24,754	27,781
	Purchases goods/services (inter/intra) Fed accounts			
125.303	Purchases from revolving funds	661,438	989,796	1,469,053
126.001	Supplies and materials	403,528	445,181	659,263
131.001	Equipment	1,837,579	1,287,785	1,493,009
199.001	Total Direct obligations	2,940,854	2,751,446	3,654,149
	Reimbursable obligations:			
231.001	Equipment	50,987	45,439	42,000
299.001	Total Reimbursable obligations	50,987	45,439	42,000
999.901	Total obligations	2,991,841	2,796,885	3,696,149

Comparison of FY 1998 Financing as reflected in FY 1998 Budget with 1998 Financing as Shown in the FY 1999 Budget

($ In Thousands)

	Financing Per FY 1998 Budget	**Financing Per FY 1999 Budget**	**Increase (+) or Decrease (-)**
Program Requirements (Total)	$2,867,500	$3,030,074	+$162,574
Program Requirements (Service Account)	($2,825,500)	($2,988,074)	(+162,574)
Program Requirements (Reimbursable)	($42,000)	($42,000)	0
Appropriation (Adjusted)	**$2,825,500**	**$2,982,574**	**+$157,074**

Explanation of Changes in Financing

The Fiscal Year 1998 program has changed since the presentation of the FY 1998 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of +$157,074. This net change is comprised of an increase in program requirements (+$162,574), less rescissions of (-$5,500).

Comparison of FY 1998 program requirements as reflected in the FY 1998 Budget with FY 1998 program requirements as shown in the FY 1999 Budget

Summary of Requirements ($ in Thousands)

	Total Program Requirements per FY 1998 Budget	**Total Program Requirements per FY 1999 Budget**	**Increase (+) or Decrease (-)**
Ships Support Equipment	$771,120	$721,811	-$49,309
Communications and Electronic Equip	925,763	1,165,616	+239,853
Aviation Support Equipment	169,250	188,669	+19,419
Ordnance Support Equipment	539,662	517,909	-21,753
Civil Engineering Support Equip	53,610	46,404	-7,206
Supply Support Equipment	56,528	51,902	-4,626
Personnel and Command Support Equip	60,850	79,788	+18,938
Spares and Repair Parts	248,717	215,975	-32,742
Total Fiscal Year Program	$2,825,500	$2,988,074	+$162,574

Explanation by Budget Activity
($ in Thousands)

1. Ships Support Equipment (-$49,309) - Changes reflect FY 1997 Congressional reductions (-$54,066), Congressional increases (+$30,500), reductions for equipment installation on decommissioned ships (-$6,334), and Department of the Navy (DoN) offsets for higher priority programs (-$19,409).

2. Communications and Electronics Equipment (+$239,853) - Changes reflect FY 1997 Congressional reductions (-$43,141), Congressional increases(+$297,500), and DoN offsets for higher priority programs (-$14,506).

Comparison of FY 1998 program requirements as reflected in the FY 1998 Budget with FY 1998 program requirements as shown in the FY 1999 Budget

Explanation by Budget Activity (Continued)
($ in Thousands)

3. Aviation Support Equipment (+$19,419) - Changes reflect FY 1997 Congressional reductions (-$8,871), Congressional increases(+$40,350), and DoN offsets for higher priority programs (-$12,060).

4. Ordnance Support Equipment (-$21,753) - Changes reflect FY 1997 Congressional reductions (-$24,463), Congressional increases(+$31,000), and DoN offsets for higher priority programs (-$28,290).

5. Civil Engineering Support Equipment (-$7,206) - Changes reflect FY 1997 Congressional reductions (-$4,833), Congressional increases(+$4,500), a below threshold reprogramming (BTR) action (-$4,100), and DoN offsets for higher priority programs (-$2,773) .

6. Supply Support Equipment (-$4,626) - Changes reflect FY 1997 Congressional reductions (-$1,301), minor BTR (-$1,763), and DoN offsets for higher priority programs (-$1,562).

7. Personnel and Command Support (+$18,938) - Changes reflect Congressional reductions (-$1,914), Congressional increases of (+$21,500), and DoN offsets for higher priority programs (-$648).

8. Spare and Repair Parts (-$32,742) - Changes reflect FY 1997 Congressional reductions (-$24,791) and DoN offsets for higher priority programs (-$7,951).

Comparison of FY 1997 Financing as reflected in FY 1998 Budget with 1997 Financing as Shown in the FY 1999 Budget

($ In Thousands)

	Financing Per FY 1998 Budget	**Financing Per FY 1999 Budget**	**Increase (+) or Decrease (-)**
Program Requirements (Total)	$2,934,355	$2,891,256	-$43,099
Program Requirements (Service Account)	($2,892,355)	($2,837,973)	(-54,382)
Program Requirements (Reimbursable)	($42,000)	($53,283)	(+11,283)
Appropriation (Adjusted)	**$2,882,355**	**$2,834,113**	**-$48,242**

Explanation of Changes in Financing

The Fiscal Year 1997 program has changed since the presentation of the FY 1998 budget as noted below:

1. Program Requirements. There has been a net decrease to the appropriation (adjusted) of (-$48,242). This net change is comprised of an decrease in program requirements (-$54,382) partially offset by an increase in reimbursable authority of (+$11,283).

Comparison of FY 1997 program requirements as reflected in the FY 1998 Budget with FY 1997 program requirements as shown in the FY 1999 Budget

Summary of Requirements
($ in Thousands)

	Total Program Requirements per FY 1998 Budget	**Total Program Requirements per FY 1999 Budget**	**Increase (+) or Decrease (-)**
Ships Support Equipment	$815,611	$805,171	-$10,440
Communications and Electronic Equip	1,044,672	1,009,472	-35,200
Aviation Support Equipment	249,793	210,756	-39,037
Ordnance Support Equipment	468,410	460,886	-7,524
Civil Engineering Support Equip	43,943	38,865	-5,078
Supply Support Equipment	67,709	67,170	-539
Personnel and Command Support Equip	0	48,732	+48,732
Spares and Repair Parts	202,217	196,921	-5,296
Total Fiscal Year Program	$2,892,355	$2,837,973	-$54,382

Explanation by Budget Activity

($ In Thousands)

1. SHIP SUPPORT EQUIPMENT (-$10,440) - Net decrease reflecting (-$1,061) offset for MPN prior approval reprogramming action, FY 1997 Supplemental Appropriation adjustment for revised economic assumptions (-$2,556), and below threshold reprogramming (BTR) actions (-$6,823) including (-$3,338) to finance unfunded Investment/expense items in Budget Activity (BA) Seven, Personnel and Command Support.

Explanation by Budget Activity (Continued)
($ In Thousands)

2. COMMUNICATIONS & ELECTRONIC EQUIPMENT (-$35,200) - Net decrease reflecting (-$9,732) offset for MPN prior approval reprogramming action, FY 1997 Supplemental Appropriation adjustment for revised economic assumptions (-$2,555), increase of (+$1,166) for Counter Drug Interdiction, Congressional rescission of SHINCOM (-$2,200), transfer of NSIPS (-$24,477) to BA-7, Personnel and Command Support, transfer for AEGIS, TBMD, CEC (-$6,202), and net BTR actions of (+$8,800).

3. AVIATION SUPPORT EQUIPMENT (-$39,037) - Net decrease reflecting (-$1,424) offset for MPN prior approval reprogramming action, FY 1997 Supplemental Appropriation adjustment for revised economic assumptions (-$590), Omnibus Reprogramming Action offsets (-$29,239), transfer for AEGIS, TBMD, CEC (-$3,700), and net BTR reductions of (-$4,084).

4. ORDNANCE SUPPORT EQUIPMENT (-$7,524) - Net decrease reflecting (-$4,389) offset for MPN prior approval reprogramming action, FY 1997 Supplemental Appropriation adjustment for revised economic assumptions (-$1,370), and net BTR reductions of (-$1,765).

5. CIVIL ENGINEERING SUPPORT (-$5,078) - Net decrease reflecting (-$4,000) offset for MPN prior approval reprogramming action, FY 1997 Supplemental Appropriation adjustment for revised economic assumptions (-$950), and minor BTR reductions of (-$128).

6. SUPPLY SUPPORT EQUIPMENT (-$539) - Net decrease reflecting (-$500) offset for MPN prior approval reprogramming action, FY 1997 Supplemental Appropriation adjustment for revised economic assumptions (-$204), and minor BTR increases of (+$165).

7. PERSONNEL & COMMAND SUPPORT (+$48,732) - Increase reflecting transfer of NSIPS (+$24,477) from BA-2, Communications and Electronic Equipment, and funding increases for Investment/Expense items (+$24,255).

8. SPARES & REPAIR PARTS (-$5,296) - Net decrease reflecting (-$1,083) offset for MPN prior approval reprogramming action, FY 1997 Supplemental Appropriation adjustment for revised economic assumptions (-$614), transfer for AEGIS, TBMD, CEC (-$1,275), and net BTR reductions of (-$2,324).

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # LM2500 GAS TURBINE (81GA) (0110)
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$7.9	$5.4	$8.7	$8.5	$8.6	$8.8	$9.0		$56.9
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

The LM2500 Marine Gas Turbine and associated Engineering Control Systems provide main propulsion for the FFG 7, CG 47, DDG 51, and AOE 6 ship classes. Procurement of improved hardware developed as a result of the Component Improvement Program (CIP) will facilitate projected MTBR growth and reduce life cycle costs. The LM2500 is composed of two major subassemblies, the gas generator and power turbine. In order to maintain the capability to provide replacement subassemblies a sufficient spare inventory of gas generators and power turbines in containers must be on hand. As new ships and differently configured LM2500 engines enter the Fleet, additional spare gas generators need to be procured in order to maintain a minimum inventory. Marine Gas Turbine Special Support Equipment (SSE) is required to provide increased depot and intermediate repair capability. Procurement of this SSE for depot repair will enable timely processing of the single shank turbine gas generator and other new configurations. Procurement of intermediate level SSE will enable repairs that would otherwise result in engine changeouts.

Unit Costs are not applicable since several items are being procured.

A. Modification Program (GA009)

1. Procurement of improved hardware for installation in LM2500 gas generators, power turbines, and related equipment is essential to obtain the projected growth in the mean time between removals (MTBRs) and thus increase the reliability of fleet installed engines. These engines and associated control systems will provide main propulsion for the FFG 7, CG 47, DDG 51, and AOE 6 Classes.

2. Failure to procure improved hardware developed as a result of the Component Improvement Program (CIP) will prevent achievement of the projected MTBR growth and significantly increase the LM2500 life cycle costs. These costs include:
a. Increased requirements for spare gas generators, power turbines and containers
b. Increased requirements for depot repair facility special support equipment
c. Increased repair and transportation costs (as engines will need to be processed through the repair facility at an increased frequency). Inventory Objective not required. Unit cost varies.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # LM2500 GAS TURBINE (81GA) (0110)

B. Gas Generator in Container (GA010)

1. Each LM2500 engine is composed of two major subassemblies, the gas generator and the power turbine.
2. The Stock Rotating Spare Program is based upon a major engine subassembly procurement concept. Differences in projected removal rates of the gas generator and power turbine permit the establishment of separate spare stocking levels for each. The inventory of spare gas generators required during the support period associated with FY 96/97 Procurement is based upon:
a. Minimum quantities required to support projected peacetime operating requirements in the support period
b. Expedited handling and processing pipeline times which reflect NAVSEA actual historical experience
c. Attainment of the gas generator projected mean time between removal (MTBR)
d. Four forward prepositioning points
e. Centralized repair of removed units at one facility
f. A 90% probability of having a spare available when required at a prepositioning point
g. Current ship delivery schedule

3. LM2500 gas generator modifications have been developed for improved reliability and increased power (upgraded). The new upgraded engine will be installed in the DDG 51 Class and AOE 6 Class. The upgraded gas generator will not be interchangeable with the current version, (installed on board, CG 47 - 54), however, the power turbines are interchangeable. As a result, spare gas generator requirements will be determined for each independently.

4. The total lead time for the procurement of these major engine subassemblies is 30 months.

5. Procurement of gas generator as stock rotating spares is required with FY 97 thru FY 03 funds to support fleet installations.

6. Normal peace time operation for installation in the ship classes is projected as: 1380 hours per engine per year for installation in the DDG 51 Class ships and 1740 hours per year for the AOE 6 Class (4 installations per ship both classes). As additional operating experience is obtained, engine operating time will be continually evaluated and support requirement adjusted accordingly.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # LM2500 GAS TURBINE (81GA) (0110)

7. Pipeline segments and their associated realistic time projections for gas generators are: 3 days for removal and preparation for shipment: 18 days to return the unit to the designated repair point: 3 days to induct the unit into rework: 120 days for engine analysis, repair, installation of required modifications, test and preservation: 13 days to move a replacement unit to the prepositioned stocking point from the designated repair point: and 3 days for installation. The total turn-around pipeline time is 160 days for the LM2500 gas generator.

8. During the FY 96 support period, the MTBR is projected to be 25,624 hours. This projection is based on the improved reliability of the new configuration.

9. The attainment of LM2500 gas generator recommended spare engine inventory level of 15 engines through (FY 97 procurement) is considered to represent the minimum requirement based on an evaluation of the risks associated with providing the fleet support.

10. Failure to procure the recommended gas generator classes through FY 97 would severely impact the capability to provide replacement class engines to the DDG 51 and AOE 6 ships.

GA010 - The inventory Objective is 22. 11 units have been procured in prior years, and 2 are budgeted between FY 1997 and FY 1999. Unit cost varies.

C. Engineering Control System Modifications (GA012)

1. The Engineering Control System consists of sensors, data acquisition units, processors, and operator consoles. Peripheral devices include bell and data loggers, printers, tape readers, mass storage devices and tape recorders. These end items are comprised each of printed circuit boards, enclosures, meters, CRTs, indicators/switches, and power supplies. Inventory objectives not required. Unit cost varies for each mod kit procured.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # LM2500 GAS TURBINE (81GA)

D. SPECIAL SUPPORT EQUIPMENT (SSE) (GA014)

1. Procurement of Marine Gas Turbine SSE is required to provide increased depot repair capability to support the FFG 7, DDG 51, AOE 6 and CG 47 class ships. This is accomplished by:
a. Increasing the capacity of the Depot Repair Point (DRP) (i.e., Increase the number of gas turbines that can be simultaneously processed) and by providing the equipment necessary to support the single shank turbine engine for the DDG 51 Class and by providing the equipment necessary to incorporate new modifications. This SSE is also necessary for repair of single shank engines on the CG 53 and out;
b. Providing the SIMAs with special support equipment necessary to alleviate engine changeouts.

2. Failure to fund this requirement would cause queuing of repairable assemblies at the DRP. This would increase the repairable pipeline, which would jeopardize the capability of providing, when required, a replacement assemble (gas generator power turbine to the fleet). Reduced operating capabilities or delays in mission essential operation would result from an inability to provide a spare assembly when required. Inventory objective not required. Unit cost varies when procuring mod kits.

PRODUCTION ENGINEERING - (GA830):

The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical Manuals, signal flow diagrams, PMS, Level III production drawings, Provisioning Technical Documentation (PTD() Program Support Data (PSD) and Allowance Parts Lists (APL's) and engineering in support of final design reviews. This work can be accomplished by NSWC,PHILA as the in service Engineering agent, other Naval activities or contractors as appropriate.

WEAPONS SYSTEM COST ANALYSIS P-5 PROGRAM COST BREAKDOWN			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA1: SHIPS SUPPORT EQUIPMENT		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD LM2500 GAS TURBINE (81GA) (0110)	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N86 SURFACE WARFARE													
GA009	MODIFICATION PROGRAM	A						3,541			3,657			4,305
GA010	GAS GENERATOR	A				1	2,699	2,699			0	1	2,466	2,466
GA012	ENGINEERING SYSTEM MOD	A						1,055			1,153			1,366
GA014	SPECIAL SUPPORT EQUIPMENT	A						67			66			47
GA830	PRODUCTION ENGINEERING							580			543			516
	GRAND TOTAL				**0**			**7,942**			**5,419**			**8,700**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	LM2500 GAS TURBINE (0110)	81GA

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 97										
(GA010)	1	2,699	NAVSEA	Oct-96	SS/BASIC	General Elec Cinn, Ohio	Oct-97	Oct-99	YES	
FY99										
(GA010)	1	2,466	NAVSEA		SS/OPTION	General Elec Cinn,Ohio	Jan-99	Jan-01	YES	

D. REMARKS

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # *Allison 501-K Gas Turbine (81GF) (0120)*
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$3.4	$5.8	$6.7	$6.5	$6.5	$6.6	$6.8		$42.3
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

ALLISON 501-K GAS TURBINE (81GF) (0120)

The 501-K Series gas turbines are used to drive electrical generators. The 501-K17 is used on the CG47 Class ships. The 501-K34 is an upgraded version used on the DDG 51 Class ship and is not interchangeable with the 501-K17. The stock rotating spares program provides an engine as a single assembly for the placement of a removed engine during depot repair. As new DDG 51 Class ships enter the Fleet, additional spare 501-K34 engines need to be procured in order to maintain the minimum inventory. Procurement of improved hardware is essential to maintain the MTBR goals and improve the overall reliability of the 501-K engines. Special Support Equipment (SSE) needs to be procured so that depot and intermediate level repairs can be accomplished efficiently and without interruption. This SSE will enable SIMAs to accomplish repairs to avoid engine changeouts and incorporate modifications. Depot level SSE enable establishing an organic depot for engine overhaul and also to increase capacity. The procurement of Production Engineering technical documentation, e.g., technical manuals, PMS, Level III production drawings, etc. is essential to maintain complete life cycle support for the 501-K17/34 programs.

Unit Costs are not applicable since several items are being procured.

A. 501-K34 Stock Rotating Spares (GF001)

1. The Stock Rotating Spares Program provides an engine as a single assembly for the replacement of an engine requiring depot repair. The inventory of spare engines required during the support period is based on:
a. Minimum quantitities to support projected peacetime operation of the engine
b. Expedited handling and processing pipeline times which reflect the actual historical 501-K17 experience
c. Attainment of the projected mean-time-between-removals(MTBRs)
d. Prepositioning stocking points: Seven in FY 94 through FY 97
e. Centralized repair of removed units at one depot repair facility
f. A 90% probablity of having a spare available when required at a forward prepositioning point
g. Ship delivery schedule

2. The current 501-K17 engine is being replaced by the upgraded more fuel efficient 501-K34 engine commencing with the DDG 51 Class. Since the 501-K34 upgraded engine can only be replaced with another upgraded engine the two configurations must be initially spared separately and all spares procurements commencing with the FY 87 procurement have been the 501-K34 configuration.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Allison 501-K Gas Turbine (81GF) (0120)*

3. Each DDG 51 will have three 501-K34 installations. Each installation will drive an electrical generator. A minimum of two installations will be on the line when a ship is operating, and one installation will be operated when the ship is in-port where more electrical power and hotel steam are available or when these shore facilities are not utilized because of the short duration of the in-port period. The average level of peacetime operation for each engine installation is projected as 3,000 hours per year. During the support periods the mean-time-between-removal (MTBR) is projected to be approximatedly 14,000 hours. This projection is based on the current 501-K17/34 removal interval and the age distribution. The attainment of 501-K34 recommended spare engine inventory level is considered to represent the minimum requirement based on an evaluation of the risks associated with providing required fleet support.

4. Pipeline segments and their associated realistic time projections for gas generators are: 3 days for removal and preparation for shipment; 18 days to return the unit to the designated repair point; 3 day to induct the unit into rework; 58 days for engine analysis, repair, installation of required modifications, test and preservation; 13 days to move a replacement unit to the prepositioned stocking point from the designated repair point: and 3 days for installation. The total turn around pipeline time is 98 days for the 501-K Gas Turbine.

The Inventory objective is 19. Five (5) units have been procured in prior years, and 3 are included in the budget from FY 1997 - FY 1999.
.

B. Modification Program (GF007)

1. Procurement of improved hardware for installation in the 501-K17 engine is essential to maintain, at a minimum, the 14,000 hour MTBR of the engine. Modifications are also essential for components whose failure would not necessitate engine removal, in order to increase the overall reliability of the fleet installed engines. I/O not required. Unit Cost varies.

C. Special Support Equipment (GF009)

1. Procurement of Marine Gas Turbine SSE is required to provide increased SIMA and depot repair capability to support the DD, DDG, and CG Class ships. SIMA support is accomplished by providing the SIMAs with special support equipment necessary to alleviate engine changeouts and also SSE equipment required to incorporate new modifications that will enhance the life expectancy of the engines. Depot support is accomplished by increasing the capacity of the Depot Repair Point (DRP) (i.e., increase the number of gas turbines that can be simultaneously processed) by providing the necessary equipment required to accomplish this task. I/O not

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Allison 501-K Gas Turbine (81GF) (0120)*

D. Production Engineering (GF830)

1. During the production phase of the equipment production engineering supports the review and approval of any production contract technical documentation, or the separate procurement of this documentation to include: Technical manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD) Program Support Data (PSD), Allowance Parts Lists (APL's) and Engineering in support of final design reviews. This work can be accomplished by NSWC, Phila as the in-service Engineering agent and other Naval activities or contractors as appropriate.

2. Carderock Division, Naval Surface Warfare Center Philadelphia provides engineering services to NAVSEA in support of the 501-K17/34 Modification Program. Support services include technical evaluation of Engineering Change Proposals (ECPs), review of the ECP maintenance engineering elements and determination of ECP impact on repair processing and supply support.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-1: Ships Support Equipment**		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **Allison 501-K Gas Turbine (81GF) (0120)**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N86 SURFACE WARFARE													
GF001	501-K34					1	1,002	1,002	1	1,029	1,029	1	1,050	1,050
GF007	MODIFICATION PROGRAM							2,148			4,535			5,489
GF009	SPECIAL SUPPORT EQUIP (SSE)							150			157			164
GF830	PRODUCTION ENGINEERING							74			38			30
GF51N	INSTALLATION													4
	GRAND TOTAL							**3,374**			**5,759**			**6,737**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE		SUBHEAD
Other Procurement, Navy BA-1: Ships Support Equipment	*Allison 501-K Marine Gas Turbine*	0120	81GF

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 97										
GF001	1	1,002	NAVSEA		*SS/OPTION	Allison Indianapolis, IN	Dec-96	Jan-98	YES	
FY 98										
GF001	1	1,029	NAVSEA		*SS/OPTION	Allison Indianapolis, IN	May-98	Nov-00	YES	
FY 99										
GF001	1	1,050	NAVSEA		*SS/OPTION	Allison Indianapolis, IN	May-99	Nov-01	YES	

D. REMARKS

*Sole Source Justification: Original Equipment Manufacturer (OEM)

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # STEAM PROPULSION IMPROVEMENT 81KQ/0157
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$0.2	$0.5	$0.6	$1.4	$0.3	$0.2	$0.2		$3.4
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

The Steam Propulsion Improvement program provides for ship movement through the water and in addition provides power to ships combat and habitability systems, whether electrical or steam dependent. At any given time, due to propulsion plant casualties ship propulsion systems may be operating at reduced capability, adversely affecting the ship's mission(s). The Steam Propulsion Improvement program encompasses steam and diesel propulsion surface ships in the fleet, Provides for material upgrades to propulsion systems resulting in increased readiness, safety and reliability. Items can be installed during a Regular Overhaul, Selected Restricted Availability, Restricted availability by a shipyard, tender/Intermediate Maintenance Activity or Alteration Installation Team.

PROPULSION PLANT INSPECTION TOOLING - (KQ052):

The tooling currently in use by Steam Generating Plant Inspectors (SGPI) for inspection of boiler tubes is inefficient and antiquated. Funds will be utilized to procure latest technology inspection system tooling, I.e., laser-optic, ultrasonic, fiber-optic and electro-optic inspection systems. The inspection tooling will be placed at TYCOM designated Intermediate Maintenance Activities. There is no specific Inventory Objective for this project.

BOILER HYDRO STATIC TEST KITS - (KQ062):
This tooling will enable facilities/shore IMA units to leak boiler tube joints individually vice having to completely fill, hydro test, and drain boiler when trying to locate leaking tube joints. The IO is 163. 38 units have been procured in prior years. 14 kits are included in the budget leaving 111 to be procured in subsequent years. The unit cost for this item varies.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # STEAM PROPULSION IMPROVEMENT 81KQ/0157

HYDRAULIC EXPANSION EQUIPMENT FOR LARGER BOILER TUBES - (KQ065): Convention tube installation involves expanding the tube into a tubesheet using cage assembly containing roller pins and a tapered mandrel. Hydraulic tube installation is accomplished using uniform water pressure. Water is forced into a mandrel, which is placed into the tube hole/tube sheet at a preset pressure. A complete tube joint expansion can be done in 5-10 seconds compared to the preset method of up to five minutes. There is no specific Inventory Objective for this project.

PRODUCTION ENGINEERING - (KQ830): The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical manuals, PMS, Level III production drawings, Provisioning Technical documentation (PTD) Program Support Data (PSD) and Allowance Parts List (APL's); Engineering in support of the final design reviews. This work can be accomplished by NSWC, PHILA as the in service Engineering agent, other Naval activities or contractors as appropriate.

LHA BOILER DESUPERHEATER - (KQ067): Because the LHA boiler desuperheater is so large, it prevents access to the boiler tubes from the water drum. Leaking boiler tube therefore requires about five days to repair, considering that a 2700 lb. desuperheater must be removed and replaced. The capability to quickly plug a leaking tube is vital for meeting commitments. A new desuperheater has been designed that permits access, and SHIPALT number LHA 660 has been assigned. Installation of this SHIPALT will also help resolve water drum blind flange leakage which has occurred on various LHA.

INSTALLATION OF EQUIPMENT (KQ5IN)

Funding is for installation of equipment including Fleet Modernization Program Installation, Installation of training equipment, and installation of equipment in other shore facilities

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998

APPROPRIATION/BUDGET ACTIVITY	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD
Other Procurement, Navy **BA 1: SHIPS SUPPORT EQUIPMENT**		**STEAM PROPULSION IMPROVEMENT (81KQ) (0157)**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N86 SURFACE WARFARE													
KQ052	PROPULSION PLANT INSPECTION										20			31
KQ062	BOILER HYDROSTATIC TEST KITS	A						24						
KQ830	PRODUCTION ENGINEERING	A						5			14			6
	SUBTOTAL N86							29			34			37
	~~N88 AIRCRAFT WARFARE~~													
KQ052	PROPULSION PLANT INSPECTION							87			66			105
KQ062	BOILER HYDROSTATIC TEST KITS	A												
KQ065	HYDRAULIC EXPANSION BOIP LARGER BOILER TUBES							29			29			32
KQ830	PRODUCTION ENGINEERING	A						11			17			6
	SUBTOTAL N88							127			112			143
	N85 EXPEDITIONARY WARFARE													
KQ067	BOILER LOW PROFILE DESUPERHEATERS								2	191,500	383	2	195,500	391
	SUBTOTAL N85										383			391
	GRAND TOTAL EQUIPMENT							156			529			571
KQ5IN	INSTALLATION													
	N85 EXPENDITIONARY WARFARE													46
	N86 SURFACE WARFARE													
	GRAND TOTAL INSTALLATION													46
	GRAND TOTAL							**156**			**529**			**617**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	STEAM PROPULSION IMPROVEMENT 0157	81KQ

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1998										
KQ067	2	191.5	NAVSEA		RCP	NSWC, PHILA, PA	FEB 98	FEB 99	YES	
FY 1999										
KQ067	2	195.5	NAVSEA		WR	NSWC, PHILA, PA	DEC 98	DEC 99	YES	

D. REMARKS

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: MAIN FEED PUMP L.O. SYSTEM TYPE MODIFICATION: MODIFICATION TITLE: STEAM PROPULSION IMPROVEMENT

DESCRIPTION/JUSTIFICATION:

I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A**

FINANCIAL PLAN (TOA, $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT			2	0.4																			2	0.4
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						0.3																		0.3
TOTAL PROCUREMENT			2	0.4		0.3																	2	0.7

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: LHA MID LIFE DESUPERHEATER TYPE MODIFICATION: MODIFICATION TITLE: STEAM PROPULSION IMPROVEMENT

DESCRIPTION/JUSTIFICATION:

The capability to quickly plug a lacking tube is vital for meeting commitments. A new desuperheater has been designed that permits access. Installation of this ShipAlt will also help resolve water drum blind Flange leakage which has occurred on various LHA.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A** **FINANCIAL PLAN (TOA, $ IN MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT									2	0.4	2	0.4	6	1.2									10	2.0
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST												0.046	AP	0.059		0.084								0.189
TOTAL PROCUREMENT									2	0.4	2	0.4	6	1.3		0.1							10	2.25

P-1 SHOPPING LIST CLASSIFICATION:

* LHA 3 require logistic due to Installation Planning for SASEBO Japan.

UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FOB STANDARD L.O. SYSTEM TYPE MODIFICATION: MODIFICATION TITLE: STEAM PROPULSION IMPROVEMENT

DESCRIPTION/JUSTIFICATION:

I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A** **FINANCIAL PLAN (TOA, $ IN MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT			1	0.4																			1	0.4
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						0.5																		0.5
TOTAL PROCUREMENT			1	0.4		0.5																	1	0.9

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

February 1998

MODELS OF SYSTEMS AFFECTED: **MAIN FEED PUMP P.O. SYSTEM** MODIFICATION TITLE: STEAM PROPULSION IMPROVEMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIPYARD**
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT					2	0.3																	2	0.3
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Out	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

February 1998

MODELS OF SYSTEMS AFFECTED: **LHA MID DESUPERHEATER** MODIFICATION TITLE: STEAM PROPULSION IMPROVEMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIPYARD**
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: FY 1998: Dec-97 FY 1999: Dec-98
DELIVERY DATE: FY 1997: FY 1998: Dec-98 FY 1999: Dec-99

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT											2	0.046											2	0.046
FY 1999 EQUIPMENT													2	0.059									2	0.059
FY 2000 EQUIPMENT															6	0.084							6	0.084
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	10
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2	4	0	0	0	0	0	0	0	10

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

February 1998

MODELS OF SYSTEMS AFFECTED: **FOB STANDARD L.O. SYSTEM** MODIFICATION TITLE: STEAM PROPULSION IMPROVEMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIPYARD**
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS					1	0.5																	1	0.5
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Out	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # OTHER PROPULSION EQUIPMENT (81GG) (0180)
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)				$8.9	$7.7	$11.8	$10.3	$9.1	$4.5	$4.6	$1.7		$58.6
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

OTHER PROPULSION EQUIPMENT (81GG):
Other Propulsion Equipment includes: Solar Marine Gas Turbine (MGT) Modification Program (GG024/GG025) for improvements to T1302S gas turbine engines used for driving electric pulse generators on MCM Class ships; DD 963/DDG 993 SSS clutches (GG034); MHC Diesel Engines (GG040) used for propulsion and electrical power generation; MCM Diesel Engines (GG051) used for propulsion and electrical power generation; MCM/MHC Diesel Engine Improvement Program (GG052) to improve reliability and maintainability of installed MCM and MHC diesel engines; Integrated Ship Control System (ISCS) to replace the existing MCM Machinery Control System (MCS) and implement condition-based maintenance; and Installation of Equipment (GG5IN) to support fleet modernization. Procurement of improved hardware, including modification kits as a result of Product Improvement Programs, is essential for maintaining/increasing engine reliability. Procurement of special tooling and support equipment is required to facilitate incorporation of modifications as well as enable routine and expanded repair of equipment to improve life cycle support. The procurement of technical documentation, e.g., technical manuals, PMS, Level III production drawings, etc., is essential to maintain complete life cycle support for these engines and related equipment.

SOLAR MARINE GAS TURBINE (MGT) MODIFICATION MCM (GG024):
Provides a standardized engine configuration, introduces reliability/maintainability improvements, and implements an effective Integrated Logistics Support (ILS) program realizing fleet mission readiness improvements while supporting the operation of the Regional Repair Center.

SOLAR MGT MODIFICATION PROGRAM (GG025):
Procurement of improved hardware for installation in T1302S engines to maintain an acceptable mean-time-between-engine-removals. Modifications are essential for selected components to increase the overall reliability of the installed engines aboard MCM Class ships.

DD 963 SS CLUTCH RETROFIT (GG034):
The DD 963 ships are being retrofitted with the SSS Clutch. Procurement of one shipset of SSS Clutches and associated material is required for each of the 35 ships in the DD 963 class (K-ALTS). The Inventory Objective is 26. Twenty-four (24) units have been procured in prior years, with two funded in FY 1998.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # OTHER PROPULSION EQUIPMENT (81GG) (0180)

MHC DIESEL ENGINE (GG040):
The Isotta Fraschini ID 36SS8V-AM non-magnetic diesel engine is installed in the MHC 51 Class ships (5 per hull) for main propulsion and ship's service diesel generators. A total of 5 spare engines are being procured to support 60 installations in 12 ships.

MCM DIESEL ENGINES (GG051):
The Isotta Fraschini ID 36SS6V-AM non-magnetic diesel engine is installed on the MCM 1 Class ships (7 per hull) for main propulsion and ship's service diesel generators. Procurement of 5 MCM IF diesel engines is required to complete the inventory objective of 24 engines.

MCM/MHC DIESEL ENGINE PROGRAM (GG052):
Isotta Fraschini (I-F) diesel engines installed in MCM/MHC Class Ships have design deficiencies that significantly effect reliability and maintainability, and severely undermine the ability to operate and maintain the ship as designed with reduced manning. This program is critical to correct design deficiencies and improve the Mean-Time-Between-Failure for increased ship operational availability. MCM and MHC class ships are minimally-manned, and four ships have been forward deployed since FY96, providing valuable operational experience for the identification of required system improvements. Increased reliability and maintainability is achieved through the implementation of engineering changes such as MACHALTs and associated engineering; ILS; improved spare parts support; correction of cooling system design deficiencies; improvements to the fuel system, lube oil system, drive train, and main bearings; reduction of sea water corrosion; configuration control, and increased spare parts sourcing/availability.

INTEGRATED SHIP CONTROL SYSTEM (ISCS) (GG053):
Funds the MCM Integrated Ship Control System (ISCS) to implement condition-based maintenance, reduce shipboard preventive maintenance, improve equipment reliability (by detecting changes in equipment performance prior to catastrophic failure), and permit shipboard training, while also replacing the existing MCM Machinery Control System (MCS). The MCS replacement will bring all MCM ships to a common configuration.

INSTALLATION OF EQUIPMENT (GG5IN):
Funds the installation of equipment, including Fleet Modernization Program (FMP) installations.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-1: Ships Support Equipment**	ID Code	**P-1 ITEM NOMENCLATURE/SUBHEAD** **OTHER PROPULSION EQUIPMENT (81GG) (0180)**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	FY 1996 QTY	FY 1996 UNIT COST	FY 1996 TOTAL COST	FY 1997 QTY	FY 1997 UNIT COST	FY 1997 TOTAL COST	FY 1998 QTY	FY 1998 UNIT COST	FY 1998 TOTAL COST	FY 1999 QTY	FY 1999 UNIT COST	FY 1999 TOTAL COST
	N85 EXPEDITIONARY WAREFARE													
GG024	SOLAR MGT MOD PROGRAM	A									1,720			1,050
GG051	MCM DIESEL ENGINE	A				5	326	1,634						
GG052	MCM/MHC DIESEL ENGINE PROGRAM	A						5,259			1,555			590
GG053	INTEGRATED SHIP CONTROL SYSTEM (ISCS) *	A									6,075			8,271
	SUBTOTAL (N85)							**6,893**			**9,350**			**9,911**
	N86 SURFACE WARFARE													
GG025	SOLAR MGT MOD PROGRAM	A						126						
GG034	SSS CLUTCH	A							2	984	1,968			
GG040	MHC DIESEL ENGINE	A				2	344	687	1		354			
	SUBTOTAL (N86)							**813**			**2,322**			**0**
	EQUIPMENT TOTAL							**7,706**			**11,672**			**9,911**
GG5IN	INSTALLATION													
	N86 SURFACE WARFARE										123			425
	TOTAL INSTALLATION										**123**			**425**
	*PEO MINE WARFARE													
GRAND TOTAL								**7,706**			**11,795**			**10,336**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-1: Ships Support Equipment	OTHER PROPULSION EQUIPMENT 0180	81GG

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 96										
GG034	1	954	NAVSEA		SS/FP	WESTINGHOUSE, CA	Feb-96	Aug-97	YES	
FY 97										
GG040	2	343.5	NAVSEA		OPT/SS/FP	ISOTTA FRASCHINI, ITALY	Oct-96	Oct-97	YES	
GG051	5	326	NAVSEA		SS/FP	Fincantieri Trieste, Italy	Mar-97	Mar-98	YES	
FY 98										
GG034	2	984	NAVSEA		SS/FP	WESTINGHOUSE, CA	Apr-98	Apr-99	YES	
GG040	1	354	NAVSEA		OPT/SS/FP	ISOTTA FRASCHINI, ITALY	Dec-97	Dec-98	YES	

D. REMARKS

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SSS CLUTCH TYPE MODIFICATION: MODIFICATION TITLE: OTHER PROPULSION EQPT

DESCRIPTION/JUSTIFICATION:

The DD 963 ships are to be retrofitted with SSS Clutch. Funds are required to procure one shipset of SSS Clutches and associated material for each of the 26 ships in the DD 963 class (K-ALTS).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A** **Financial Plan: (TOA, $ in Millions)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	21	21.9	2	2.5	1	1.0			2	2.0	0	0.0	0	0.0			0	0.0					26	27.4
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						1.2				0.1		0.4		0.0		0.0		0.0		0.0				1.7
TOTAL PROCUREMENT	21	21.9	2	2.5	1	2.2			2	2.1	0	0.4	0	0.0		0.0	0	0.0		0.0			26	29.1

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **SSS CLUTCH** MODIFICATION TITLE: OTHER PROPULSION EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 9-18 Months
CONTRACT DATES: FY 1997: FY 1998: 1Apr 99 FY 1999:
DELIVERY DATE: FY 1997: FY 1998: 1Apr 99 FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	**21**	###																					21	11.5
FY 1995 EQUIPMENT					2	1.2																	2	1.2
FY 1996 EQUIPMENT									1	*													1	0.5
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT									AP	0.1	2	0.4											2	0.5
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	24	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		26
Out	24	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		26

* BEING FUNDED IN FY 96

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA-1: Ships Support Equipment				B. P-1 ITEM NOMENCLATURE: GG034/SSS CLUTCH				C. DATE: Feburary 1998															
		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ACTIVE FORCE INVENTORY	(P)														1	1									
	(P)																								
SCHOOLS/OTHER TRAINING	(P)																								
OTHER AIT	(P)																								
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
ASSETS ON HAND	(BP)																								
DELIVERY FY 96 & PRIOR	(P)																								
FY 96 & PRIOR	(P)																								
FY 97	(P)																								
FY 98	(P)											C				2									
FY 99	(P)																								
FY 00	(P)																								
FY 01	(P)																								
FY 02	(P)																								
FY 03	(P)																								
To Complete	(P)																								
TOTAL ASSETS	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF Jun-97	FY 99 & PRIOR UNDELIVERED	UNFUNDED
		26	24	0	2	0
	1. APPN - OPN					
	2. APPN - OTHER					
	3. PROCUREMENT LEADTIME: 12	ADMIN: 6 MONTHS	INITIAL ORDER: 18 MONTHS		REORDER: 12	

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P-1 SHOPPING LIST

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CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT GG034/SSS CLUTCH								DATE **February 1998**
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment								Installing Agent N/A								
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR		
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	
FY 1996								FY 1997								
FY 1998								FY 1999								
										DD 975	1	DD 978	1			

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1998
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA-1: Ships Support Equipment**	P-1 ITEM NOMENCLATURE/LINE ITEM # **OTHER GENERATORS (81G6) (0260)**
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)					$0.0	$1.8	$9.6	$1.4	$2.2	$0.0	$0.0		$15.0
SPARES COST (In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

SHIP ALTERATIONS: To replace obsolete, unsupportable and in some cases, underpowered equipment now in use. This program is applicable to all ship types. Installation agents and types of availabilities required vary with ship and equipment type. This is a continuing program composed of both maintenance items and newly developed improvements.

G65IN - EQUIPMENT INSTALLATION - Funding for the installation of equipment including Fleet Modernization Program Installations. Funding for the installation of Joint Fleet Priority #20C Solid Frequency Converter.

GG DSA - The Budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.

G6023 - MACHALTs - The machinery Alteration Program (MACHALT) is a program that permits changes to Other Generator equipment and systems where the changes are contained within the boundaries of the individual equipment's or systems and have limited system ramifications. The MACHALT program enables change to be accomplished in a more expeditious manner and eliminates candidates from the formal SHIPALT process. MACHALTs are most effective for multi-class alterations. One MACHALT can replace several SHIPALTs in the system no I/O required.

G6024 - LHA MID LIFE - This program supports material procurement and installation of engineering solutions developed as part of the LHA Mid-Life Maintenance Upgrade Program (Joint Fleet Priority #20C assigned by OPNAV, NAVSEA, Type Commanders LHA Mid-Life Management Team.

G6035 COMMAND & CONTROL UPGRADE - The navy has four flagships or command ships: one for each of the three numbered fleets and one for the Middle East Forces in the Persian Gulf. These ships serve as headquarters for the numbered fleet commanders and provide extensive communications, support and berthing for embarked staff. Their mission is to provide command and control centers.

Commander, Second Fleet	USS MOUNT WHITNEY (LCC 20)
Commander, Third Fleet	USS CORONADO (AGF 11)
Commander, Sixth Fleet	USS LASALLE (AGF 3)
Commander, Seventh Fleet	USS BLUE RIDGE (LCC 19)

G6DSA DESIGN SERVICES ALLOCATION - Design Agent transferred from O&M,N FY98 and out.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System		DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment			ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD OTHER GENERATORS (81G6) (0260)	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	(N85)													
G6024	LHA Mid-Life Upgrade (Solid State Frequency Changer)											15	402	6,026
	SUBTOTAL (N85)													**6,026**
G6035	Command & Control Upgrade								2	884	1,768			
G6023	MACHALTS													
	SUBTOTAL (N86)										**1,768**			**0**
	TOTAL EQUIPMENT										**1,768**			**6,026**
G65IN	Installation of Equipment													
	N85													1,159
	N86													2,452
	N87													
	TOTAL INSTALLATION													**3,611**
GRAND TOTAL								**$0**			**$1,768**			**$9,637**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment	C. P-1 ITEM NOMENCLATURE OTHER GENERATORS	SUBHEAD 81G6/0260

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 98										
G6035 Command and Control Upgrade	2	884,000	NAVSEA		C/FP	UNKNOWN	May-98	Nov-98	YES	
FY 99										
GG024 Solid State Frequency Changers	15	401,733	NAVSEA		C/FP/OPT	UNKNOWN	Jan-99	Jan-00	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SOLID STATE FREQUENCY CHANGERS LHA MIDLIFE TYPE MODIFICATION: MODIFICATION TITLE: OTHER GENERATORS

DESCRIPTION/JUSTIFICATION:

Solid frequency Changers priority #20C.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING											15	6.0												6.0
EQUIPMENT																								0.0
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST											3	1.2	3	1.4	9	2.2								4.8
TOTAL PROCUREMENT																								0.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **SOLID STATE FREQUENCY CHANGERS** MODIFICATION TITLE: OTHER GENERATORS
LHA MIDLIFE

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999: Nov-98
DELIVERY DATE: FY 1997: FY 1998: FY 1999: Nov-99

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT											3	1.2	3	1.4	9	2.2								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	6	3	0	0	0	0	0	0	0	0	0	0	15
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	6	0	3	0	0	0	0	0	15

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 1000KW GENERATORS AIT TYPE MODIFICATION: MODIFICATION TITLE: COMMAND & CONTROL UPGRADE

DESCRIPTION/JUSTIFICATION:

Required dedicated power for I. Also relieves shortage of available power.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT									2	1.8														1.8
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST											2	2.5												2.5
TOTAL PROCUREMENT																								0.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **1000 KW GENERATORS AIT** MODIFICATION TITLE: OTHER GENERATORS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 6 Months
CONTRACT DATES: FY 1997: FY 1998: May-98 FY 1999:
DELIVERY DATE: FY 1997: FY 1998: Nov-98 FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT											2	2.5												
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Out	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # OTHER PUMPS (81GP) (0320)
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)					$0.2	$0.4	$1.0	$2.7	$1.2	$1.9	$1.1		$8.5
SPARES COST (In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

OTHER PUMPS -

Purchases various machinery pumps used in shipboard fluid systems such as fireman, fuel oil, potable water, lube oil, waste and drain.

MACHALTS - GP211

The Machinery Alteration Program (MACHALT) is a program that permits changes to HM&E equipment and systems where the changes are contained within the boundaries of the individual equipments or systems and have limited system ramifications. The MACHALT program enables changes to be accomplished in a more expeditious manner and eliminated them from the formal SHIPALT process. MACHALTS are mostly for multi-class alterations.

PRODUCTION ENGINEERING - GP830

The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical Manuals, PMS Level III production drawings, Provisioning Technical Documentation (PTD), Program Support Data (PSD) and Allowance Parts Lists (APL's); Engineering in support of final design reviews. This work can be accomplished by NSWC Philadelphia as the In Service Engineering Agent, other Naval activities or contractors as appropriate.

EQUIPMENT INSTALLATION - (GP5IN)

Funding is for the installation of equipment including Fleet Modernization Program Installation, installation of training equipment and installation of equipment in other shore facilities.

GPDSA - The budget reflects the transfer of design services into the appropriate equipment P-1 item in accordance with full funding policy FY 98 & out.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: FEBRUARY 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OTHER PUMPS (81GP)(0320)

GP213 FLUID SYSTEM

Fluid Systems on board navy surface ships and submarines consist of any distributed piping system carrying freshwater, saltwater, steam, fuel, lube oil or air and all of the ancillary hardware that supports the system, such as pumps, pipe hangers, turbines, motors, etc. These systems suffer abuse and degradation by virtue of the operating conditions within the conduit, (ie Piping), and the equipment transporting the fluid. The maintenance and upkeep of these systems and associated support equipment are the biggest life cycle cost drivers for HM&E equipment in the operating navy. Proper investigation and utilization of commercially available state of the art technology can drastically reduce maintenance costs, extend the operating life of the equipment and increases the operational availability and reliability of the equipment.

GP212 LHA MIDLIFE UPGRADE (FIRE PUMPS)

This program supports material procurement and installation of engineering solutions developed as part of the LHA Mid-Life Maintenance Upgrade Program. This program is a joint OPNAV, CINCLANTFLT, SURFLANT, CINCPACFLT, and SURFPAC initiative to resolve maintenance deficiencies, increase readiness and reduce future maintenance costs enabling the ships to reach their service life. Joint Fleet Priority #600 as assigned by OPNAV; NAVSEA; TYPE COMMANDERS and LHA Mid Life Management team, will procure and install GPR Fire Pumps.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998

APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy
BA 1: SHIPS SUPPORT EQUIPMENT

ID Code

P-1 ITEM NOMENCLATURE/SUBHEAD
OTHER PUMPS (81GP)

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N87 SUBMARINES													
GP211	MACHALT													
GP830	PRODUCTION ENGINEERING													
	SUBTOTAL N87													
	N85 EXPEDITIONARY WARFARE													
GP212	LHA MIDLIFE GPM FIRE PUMPS	A				1	151	151	1	150	150	2	150	300
GP213	FLUID SYSTEMS IMPROVEMENT	A										N/A		323
GP214	PUMP ROTATABLES	A												0
	SUBTOTAL N85							151			150			623
	TOTAL EQUIPMENT							**151**			**150**			**623**
GP5IN	INSTALLATION OF EQUIPMENT N85										285			394
	TOTAL INSTALLATION							0			285			394
GRAND TOTAL								**$151**			**$435**			**$1,017**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	OTHER PUMPS	81GP/0320

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1997										
GP212										
LHA MID-LIFE										
GPM FIRE PUMP	1	151,000	NAVSEA		RCP/WR	PUGET NSY	JUL 97	JUL 98	YES	
FY 1998										
GP212										
LHA MID-LIFE										
GPM FIRE PUMP	1	150,000	NAVSEA		RCP/WR	PUGET NSY	FEB 98	FEB 99	YES	
FY 1999										
GP212										
LHA MID-LIFE										
GPM FIRE PUMP	2	150,000	NAVSEA		RCP/WR	PUGET NSY	FEB 99	FEB 00	YES	
GP213										
FLUID SYSTEMS		323,000	NSWC PHILA		WR	NSWC PHILA, PA	OCT 98	SEP 99		

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 2000 GPM FIRE PUMP TYPE MODIFICATION: MODIFICATION TITLE: LHA MID-LIFE UPGRADE

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT							1	0.2	1	0.2	2	0.3	1	0.2										0.9
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST									1	0.3	1	0.4	1	0.4	2	0.3								1.4
TOTAL PROCUREMENT							1	0.2	1	0.2	2	0.3	1	0.2										0.9

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **2000 GPM FIRE PUMP** MODIFICATION TITLE: LHA MID-LIFE UPGRADE

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 10 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: Jul-97 FY 1998: Feb-98 FY 1999: Feb-99
DELIVERY DATE: FY 1997: Jul-98 FY 1998: Feb-99 FY 1999: Feb-00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT									1	0.3														
FY 1998 EQUIPMENT											1	0.4												
FY 1999 EQUIPMENT													1	0.4										
FY 2000 EQUIPMENT															2	0.3								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0		5
Out	0	0	0	0	0	0	0	0	0	0	0	1		0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0		5

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: LHD 2000 GPM PUMP TYPE MODIFICATION: MODIFICATION TITLE: LHD 2000 GPM PUMP

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT																	4	0.4	4	0.4				0.8
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST																			4	0.3	4	0.3		0.6
TOTAL PROCUREMENT																	4	0.4	4	0.4				0.8

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **LHD 2000 GPM PUMP** MODIFICATION TITLE: LHD 2000 GPM PUMP

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																			4	0.3				
FY 2003 EQUIPMENT																					4	0.3		
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	8
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	8

BUDGET ITEM JUSTIFICATION SHEET P-40													DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment								P-1 ITEM NOMENCLATURE/LINE ITEM # *SUBMARINE PROPELLERS (0510)*					
Program Element for Code B Items: N/A								OTHER RELATED PROGRAM ELEMENTS N/A					
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)		A			$31.9	$0.0	$7.9	$18.5	$0.0	$0.0	$0.0	$0.0	58.4
SPARES COST (In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

GQ012 - SSN 21 PROPULSOR - Quantity represents one complete propulsor spare and one additional rotor assembly. Based on experience gained from other submarine classes, there will be failures of critical propulsor components. The SEAWOLF unique propulsor major subassemblies procured with OPN funds will be available in the event of equipment failure which cannot be fixed through piece part repair. The SEAWOLF propulsor is a new complex design with operational failure experience factors based on equivalent failures in the fleet. There are no spares or assets to draw from in the event of a failure. Maintaining critical propulsor components will improve the operational availability of the class. Without spares, the lengthy procurement lead times and propulsor component refurbishment will adversely impact SEAWOLF's operational capability.

In order to minimize any ship delay, sufficient spares of the latest model propellers must be procured and placed in storage to be available for timely changeout. All items included in this P-1 line can be installed during a dry-dock, Restricted Availability or Regular Overhaul availability.

The inventory objective (IO) for propellers is a numerical quantity referred to as the "Maintenance Stock Objective" (MSO) which is established for each propeller after considering:

(1) the average annual demand
(2) repair lead time
(3) safety level or the quantity required to be on hand to support unpredictable fluctuations in demand or delays in the normal refit cycle
(4) transportability considerations, and
(5) Type Commanders annual review and recommendations.

For ships entering the fleet from the shipbuilding programs, the I.O.'s annual demand is based upon experience with similar type propellers for which supply/demand experience has been gained.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment		ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE PROPELLERS (0510)	81GQ

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	Submarines (N87)													
GQ012	SSN 21 Propulsor	A												
	Propulsor Rotating Assembly				0	1	11,950	11,950			0	1	7,937	7,937
	Propulsor Aft Fixed Assembly				0	1	19,980	19,980			0			0
	Propulsor Fwd Fixed Assembly				0			0			0			0
TOTAL					**0**			**31,930**			**0**			**7,937**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment	C. P-1 ITEM NOMENCLATURE SUBMARINE PROPELLERS, 0510	SUBHEAD 81GQ

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR (97)										
GQ012										
Propulsor Rotating Assy	1	11,950	NAVSEA	N/A	WR*	NFPC, PHILADELPHIA PA	3/97	9/99	YES	
Propulsor Aft Fixed Assy	1	19,980	NAVSEA	2/97	FPI	UNITED DEFENSE, MINN MN	4/97	11/99	YES	
FISCAL YEAR (99)										
GQ012										
Propulsor Rotating Assy	1	7,937	NAVSEA	N/A	WR*	NFPC, PHILADELPHIA PA	10/98	4/01	YES	

D. REMARKS

* All work to be performed in house by the Naval Foundry and Propeller Center in Philadelphia, PA.

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead 81GQ		Date: February 1998		
P-1 Line Item Nomenclature Submarine Propellers			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 30 months		
Project Unit/Item **Propulsor Rotating Assembly**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY			1		1				
Unit Cost			11950		7937				
Total Cost		0	11950	0	7937	0	0	0	0
Asset Dynamics						0	0	0	0
Beginning Asset Position		0	0	0	0	1	1	2	2
Deliveries from all prior year funding									
Deliveries from FY 1997 funding					1				
Deliveries from FY 1998 funding						0			
Deliveries from FY 1999 funding							1		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	1	1	2	2	2
Inventory Objective/Current Authorized Allowance									
Propulsor Rotating Assembly: 2									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 7

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead 81GQ		Date: February 1998		
P-1 Line Item Nomenclature Submarine Propellers			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 36 months		
Project Unit/Item **Propulsor Aft Fixed Assembly**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY			1	0	0	0	0	0	0
Unit Cost			19980	0	0	0	0	0	0
Total Cost		0	19980	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	1	1	1
Deliveries from all prior year funding									
Deliveries from FY 1997 funding						1			
Deliveries from FY 1998 funding							0	0	0
Deliveries from FY 1999 funding							0	0	0
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	1	1	1	1
Inventory Objective/Current Authorized Allowance									
Propulsor Aft Fixed Assembly: 1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 7

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA-1: Ships Support Equipment**	**P-1 ITEM NOMENCLATURE/LINE ITEM #** OTHER PROPELLERS AND SHAFTS/0540(81GR)
Program Element for Code B Items:	**OTHER RELATED PROGRAM ELEMENTS**

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					**$3.5**	**$1.5**	**$2.5**	**$1.2**	**$1.1**	**$1.2**	**$1.2**		**$12.2**
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

This Line Item supports all "S" cognizance Ships Propellers and Shafts which are not listed as separate P-1 Items. A ship's operating ability is directly related to the condition of its propellers and shafts. A malfunctioning propeller or shaft can result in excessive vibration, noise, loss of speed or possible loss of motion. In addition, these items are susceptible to damage, have long repair lead time, and due to their increased size and weight, are becoming more difficult to transport. As a result of these conditions, it is mandatory to store propellers/shafts at sufficient locations to avoid delaying ship's deployments. It should be noted that in addition to new propellers and shafts required to support active fleet ships, planning for spares to support ship classes still under construction such as CG-47 and AOE-6 and new ship classes being introduced such as DDG-51, must be accommodated with this P-1 line item. These propellers and shafts can be installed during drydocking, Selected Restricted Availability or Regular Overhaul and in the event of a casualty, propellers can be waterborne installed alongside a tender.

The Inventory Objective (I.O.) for propellers and shafts is a numerical quantity referred to as the "Maintenance Stock Objectives" (MSO). The MSO is a numerical quantity established for each propeller and shaft after considering: (1) the average annual demand, (2) Repair lead time, (3) safety level or the quantity required to be on hand to support unpredictable fluctuations in demand or delays in the normal refit cycle, (4) transportability considerations, and (5) Type Commanders review and recommendations. For ships entering the Fleet from the shipbuilding programs, the I.O.'s annual demand is based upon experience with similar type propellers and shafts for which supply/demand experience has been gained.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OTHER PROPELLERS AND SHAFTS/0540

INTERMEDIATE SHAFT CG-47 CL; (GR022)
The Maintenance Stock Objective (MSO) for Intermediate Shaft CG-47 CL is four. One is in use in active fleet. One unit has been procured in prior years. Two are included in budget years. Unit Cost is estimated at $213K.

BLADE SET, PORT/STDB DDG-51 CL; (GR044)
The Maintenance Stock Objective (MSO) for Blade Set, Port/STBD DDG 51 CL is 11 to support the DDG 51 CL ships. One Shipset is being procured by SCN. One unit has been procured in Prior years. Three are included in the Budget years. Six are to be procured in subsequent years. Unit cost is estimated at $900K.

HUB SET PORTSTBD DDG-51 CL; (GR045)
The Maintenance Stock Objective (MSO) for DDG 51 CL Hub Sets is 9 to support the DDG 51 Cl ships. One shipset is being procured by SCN. One is included in budget year. Seven to be procured in subsequent years. Unit Cost is estimated at $900K.

PROP SHAFT DDG-51 CL; (GR046)
The Maintenance Stock Objective (MSO) for Prop Shaft DDG 51 CL is 12 to support DDG-51 CL ships. Two shipsets are being procured by SCN. One is included in budget year. Nine to be procured in subsequent years. Unit cost is estimated at $494K.

SSN 688 IPMP; (GR055)
The Main Propulsion Propeller Shaft for the four SSN 688 Class ships being built with the Improved Performance Machinery Propulsion (IPMP) system is a different configuration and is not interchangeable with the standard SSN 688 Class propeller shaft. The inventory objective is two. One unit has been procured in prior years. one unit to be included in the Budget year. None to be procured in subsequent years. Unit cost $631K.

OD BOXES PORT/STBD CG-47 CL; (GR060)
The Maintenance Stock Objective (MSO) for OD Boxes, Port/STBD CG-47 (GR060) is four. One unit has been procured in prior years. One unit to be included in the budget years. Two units to be procured in subsequent years. Unit cost is estimated at $190K.

OD BOXES PORT/STBD DDG-51CL; (GR065)
The Maintenance Stock Objective (MSO) for OD Boxes, Port/STBD DDG-51 (GR065) is 6. One unit has been procured in prior years. Two units are included in the budget years. Three units to be bought in subsequent years. Unit cost is $225K.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OTHER PROPELLERS AND SHAFTS/0540

PROPELLERS, AOE-CL (GR056); (INTERMEDIATE SHAFT PORT, AOE 6 CL (GR061) AND INTERMEDIATE SHAFT STBD, AOE 6 CL (GR062)
The AOE 6 Class propeller is the largest propeller in U.S. Navy service and can be only transported via water vice over the road or by the air. Accordingly, spare propellers should be positioned on the East and West coasts and in WESTPAC to preclude lengthy ship down-time if propeller replacement is required and the spare propeller must be shipped via water from one coast to the other or to WESTPAC. One shipset each of spare propellers and the propeller shafts have been funded by the shipbuilding program with SCN funds. The following items and quantities remain to be procured to meet the Inventory Objective for support of the Class; Propeller shipsets - 1; Intermediate Shaft shipset - 2; Stern Tube Shaft shipset - 2. Originally, it was planned to procure the AOE 6 CL propellers from commercial sources. However, due to the decrease in submarine propeller manufacturing requirements, caused primarily by the significant reduction in the planned number of SEAWOLF Class submarines to be built, the AOE 6 CL propellers will be manufactured by the Propeller Center at the Philadelphia Naval Shipyard (PNSY). The PNSY propeller Center and Foundry were found to be core logistic facilities within the meaning of 10 U.S.C. 2464. Workload at the PNSY Propeller Center is currently below capacity and will continue to diminish due to the decreased submarine propeller manufacturing requirements.

To maintain the PNSY Propeller manufacturing facility, future procurements of selected surface ship monobloc propellers and controllable pitch propeller blades will be directed to the Propeller Center.

GR067 SHAFTING ROTATABLES
LHA1 Class Mid-Life Maintenance Program identified a maintenance problem directly related to excessive turn-around time for repair of certain equipments. This resulted in decreased system readiness and decreased ship operational availability. For ships in depot availabilities, these delays resulted in increased overall maintenance costs. The cost effective solution is procurement of selected equipments for use in a rotatable pool, which will decrease system repair time, reduce overall maintenance costs and improve ship operational availability.

GR830 PRODUCTION ENGINEERING
The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD), Program Support Data (PSD) and Allowance Parts Lists (APL's) Engineering in support of final design reviews. This work can be accomplished by NSWC, Philadelphia, as the in service Engineering agent, other Naval Activities or contractors as appropriate.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998

APPROPRIATION/BUDGET ACTIVITY	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD
Other Procurement, Navy **OPN BA 1: SHIPS SUPPORT EQUIPMENT**		**OTHER PROPELLERS AND SHAFTS (81GR) 0540**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SUBMARINES N87													
GR055	SSN 688 IPMP Shaft	A				1	631	631						
	SUBTOTAL N87							631						
	SURFACE SHIPS N85/N86													
GR022	Intermediate Shaft, CG-47 CL	A				2	213	426						
GR044	Blade Set Port/STBD, DDG-51 CL	A				2	779	1,558	1	968	968			
GR045	Hub Set Port/STBD, DDG-51 CL	A										1	900	900
GR046	Prop Shaft DDG-51 CL	A							1	494	494			
GR056	Propellers, AOE-6 CL	A												
GR060	OD Boxes, Port/STBD CG-47 CL	A				1	190	190						
GR061	Intermediate Shaft, Port AOE-6 CL	A										1	186	186
GR062	Intermediate Shaft, STBD, AOE-6 CL	A				2	174	348						
GR066	Hub Set, Port/STBD, CG-66-73	A												
GR830	Production Engineering	A						326						46
GR067	LHA Shafting Rotatables													1,328
	SUBTOTAL N85/N86							2,848			1,462			
	TOTAL EQUIPMENT							3,479			1,462			2,460
	GRAND TOTAL							**3,479**			**1,462**			**2,460**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE OTHER PROPS & SHAFTS/0540	SUBHEAD 81GR

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1997										
GR022	2	213	SPCC MECH		RCP/FP	ERIE FORGE, PA	FEB 97	AUG 98	YES	
GR044	2	779	SPCC MECH		RCP/FP	BIRD JOHNSON, MA	OCT 97	APR 99	YES	
GR055	1	631	SPCC MECH		RCP/FP	JORGENSON, WA	FEB 97	FEB 99	YES	
GR060	1	190	SPCC MECH		RCP/FP	BIRD JOHNSON, MA	JUN 97	DEC 99	YES	
GR062	2	174	SPCC MECH		RCP/FP	ERIE FORGE, PA	DEC 96	JAN 99	YES	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE OTHER PROPS & SHAFTS/0540	SUBHEAD 81GR

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1998										
GR044	1	968	SPCC MECH		RCP/FP/POT	UNKNOWN	MAR 98	MAY 99	YES	
GR046	1	494	SPCC MECH		RCP/FP	UNKNOWN	MAY 98	NOV 99	YES	
FY 1999										
GR045	1	900	SPCC MECH		RCP/FP	UNKNOWN	MAY 99	NOV 00	YES	
GR061	1	186	SPCC MECH		RCP/FP	UNKNOWN	MAY 99	MAY 01	YES	

D. REMARKS

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **OPN/BA-1: SHIPS SUPPORT EQUIPMENT**	**P-1 ITEM NOMENCLATURE/LINE ITEM #** ***OTHER NAVIGATION EQUIPMENT/067000***
Program Element for Code B Items:	**OTHER RELATED PROGRAM ELEMENTS** **N/A**

	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													**0**
EQUIPMENT COST (In Millions)		A			**$26.2**	**$42.7**	**$45.3**	**$64.1**	**$37.1**	**$54.9**	**$19.2**		**$289.4**
SPARES COST (In Millions)													**0**

PROGRAM DESCRIPTION/JUSTIFICATION:

Unit costs are various.

This is a continuing program composed of both maintenance equipment and newly developed improvements required for maintenance, shipalts, and training; including a cross section of navigation type equipment as follows:

GW006: FY 1997 and outyear maintenance component funds will satisfy depot and organizational maintenance requirements of existing AN/WSN-2 and AN/WSN-5 navigation systems during transition to AN/WSN-7 Ring Laser Gyro Navigator (replacement for AN/WSN-5). Specifically, these funds cover the procurement of major components such as Inertial Measuring Units (IMUs), gyroscopes, accelerometers, and depot test equipment. Procurement of major components is required to support the pipeline requirements of AN/WSN-2/5 navigation systems given the Fleet population and usage rates. The depot test equipment is required to support checkout and testing of these major components in a system configuration to verify performance prior to being dubbed "ready for issue." These components are essential to operation and performance of AN/WSN-2/5 navigation systems. Procurements associated with these components would aid to ensure the operational availability and performance of the navigation systems to support ship and combat system mission requirements.

GW013: FY 1997 and outyear funds for Navigation Field Change Kits will procure reliability and maintainability improvements and corrections for various equipment - Dead Reckoning Analyzer Indicator (DRAI), plotters, gyro compasses, Electromagnetic Log (EM Log), Doppler Sonar Velocity Log (DSVL), Multi-Speed Repeaters (MSR), and Ship's Inertial Navigation System (SINS) MK 3 MOD 6. These changes are required to keep Fleet-installed equipment operating to a basic level.

GW014: FY 1997 and outyear funds are required for replacement of the AN/WSN-5 Input/Output Console currently installed in various surface combatants (OA-7984 and OL-267) with the OL-405/WSN-5. This replacement is required to improve the current operational availability and life cycle cost and ensure the navigation system is in a state of operational readiness. NAVSEA will procure 11 units for backfit on CG 49 Class ships, one unit per ship, at an estimated total cost of $1M. Units willl be procured as follows: FY97 & prior = 9 units; FY98 = 2 units. SPAWAR (Norfolk) will be the installing agent.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY OPN/BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *OTHER NAVIGATION EQUIPMENT/067000*

GW029: FY 1997 and outyear funds are required for AN/WSN-2, AN/WSN-5 and CVNS Engineering Change Proposals (ECPs)/Field Change (FC) Kits which will procure reliability and maintainability improvements, corrections and upgrades for various navigation systems. This includes AN/WSN-2/-5 product improvements, Global Positioning System (GPS), Aircraft Inertial Alignment System (AIAS), MK 70 Mod 6 Switchboard Ordalt and CA-64(XN-1)/U shipalt, and changes to the navigation suite as required to integrate with Ring Laser Gyro Navigator.

- AN/WSN-2 and Product Improvement (Field Change #1) will provide changes and additions to the basic system equipment which will improve retainability, maintainability and sustainability of the hardware.
- AN/WSN-2/2A Directional Gyro (Field Change #2) incorporates operational engineering changes to correct for deficiencies in the gyro mode of operation.
- Output Only (Field Change #2) converts input/output configured AN/WSN-5 systems into an output only configuration, to meet the requirements for navigation data placed on the AN/WSN-5 by individual platform combat weapon systems.
- Global Positioning System (GPS) (Field Change #4) provides a software and firmware change along with increased memory capability to the AN/WSN-5, which facilitates the direct interface of the AN/WRN-6 GPS User Equipment. GPS will provide extremely accurate position and altitude updates to the AN/WSN-5.
- Aircraft Inertial Alignment System (Field Change #6) provides changes and additions to the software, firmware, and hardware of the AN/WSN-5 which will allow it to transmit position and attitude information to the AV-8B and rotary wind aircraft attached to LHD/LHA class ships.
- Field Change #7 to the AN/WSN-5 incorporates engineering changes for product improvement and reliability enhancements. The primary change modifies the control monitor circuit card in order to avoid premature IMU failures and Inverter failures. In addition, modifications are made to the NTDS Type D High Level Serial sections to alleviate improper fault indications and maintain data integrity.
- AN/WSN-5 Field Change #8 provides changes and additions to the software and hardware of the AN/WSN-5, specifically, Low Level Serial firmware.
- The MK 70 Mod 6 Switchboard Ordalt allows constant monitoring of SINS synchro data transmission thereby increasing the integrity of and confidence in SINS attitude and velocity data.
- CA-64(XN-1)/U shipalt will replace the out of production OA-7984 thereby improving the current operational availability and life cycle cost and ensuring that the navigation system is in a state of operational readiness.
- CDU shipalt will replace the Input/Output console on RLGN backfitted ships.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY OPN/BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *OTHER NAVIGATION EQUIPMENT/067000*

GW031: FY 1997 and outyear Dual Miniature Navigation System (DMINS) ECP/documentation funds are required to procure DMINS field changes, replacement of obsolete automated test equipment/computer at the DMINS Repair Depot, Inertial Measuring Unit (IMU) reliability improvements and update of technical documentation.

GW035: FY 1997 and out year Ring Laser Gyro Navigator (RLGN) funds are required to support the acquisition and implementation of Ring Laser Gyro (RLG) technology for Fleet shipboard use. Congress has mandated that the Navy competitively procure a single RLGN system for both surface and submarine applications (backfit/forward fit). RLG technology is less expensive, more reliable and has lower cost of ownership. Advantages of the RLG are improved reliability, based on experience from military and commercial applications, longer life cycle support costs and extended endurance. Basic RDT&E efforts were funded FY94 under P.E. 0604562N, Project Number 00236. The Development Test and Evaluation Schedule was as follows: DT-IIa=1/96; DT-IIb=4/96; DT-IIc=6/96; DT-IId=1/97; OA=11/96; OT&E=7/97. Milestone III was achieved 10/97 and a re-validated ORD was signed 12/97. NAVSEA will procure a total of 149 shipsets (2 systems per shipset) for backfit on 49 submarines (AN/WSN-3), 88 surface combatants (AN/WSN-5) 9 carriers (CVNS) and 3 LBTFs at an estimated total cost (including installation) of $195M. Procurement began in FY95, using FY95 and prior AN/WSN-2/5 Field Change funds (GW029). Procurement is as follows: FY96 and prior=14 shipsets; FY97=13 shipsets; FY98=22 shipsets; FY99=26 shipsets; FY00=38 shipsets; FY01=13 shipsets; FY02=14 shipsets. SPAWAR, Norfolk will be the installing agent and began in FY97 with installation aboard 4 CG 47 Class combatants. The remaining shipsets will be installed as shown on the P-3A.

GW830: FY 1997 and outyear funds are required for AN/WSN-2/5/7 and Aircraft Carrier Navigation System (CVNS) production engineering to provide the necessary management/technical support for hardware procurements and system integration. Funds cover value engineering; review and evaluation of production design data and documentation; production configuration control; maintenance engineering and logistic supportability efforts designed and incorporated into the production manufacturing process.

GW5IN: FY 1997 and outyear Installation funding identified supports installation of OL-405 I/O Consoles (Shipalt 370) aboard CG 47 Class ships and installation of RLGN system aboard surface combatants (CG47 and DDG 51 Classes), submarine platforms (SSN 688) and aircraft carriers.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **OPN/BA-1: SHIPS SUPPORT EQUIPMENT**		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **OTHER NAVIGATION EQUIPMENT/067000**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SUBMARINES - N87													
GW006	AN/WSN-2 MAINTENANCE COMPONENTS							150			133			166
GW013	NORFOLK NAVIGATION FC KITS							0			0			151
GW029	AN/WSN-2/7 ECP/FC KITS							323			5,346			1,050
GW031	DMINS							62			67			0
GW035	RING LASER GYRO NAVIGATOR (AN/WSN-7	A						0	3	785	2,355	4	776	3,104
GW830	PROD ENGINEERING FOR AN/WSN-2/7							64			365			390
	PROCUREMENT SUB-TOTAL							599			8,266			4,861
GW5IN	INSTALLATION OF EQUIPMENT (FMP)							0			2,262			0
	INSTALLATION SUB-TOTAL							0			2,262			0
	TOTAL - N87							599			10,528			4,861
	SURFACE SHIPS - N86													
GW006	AN/WSN-2/5 MAINTENANCE COMPONENTS							2,131			5,486			4,874
GW013	NORFOLK NAVIGATION FC KITS							250			258			266
GW014	AN/WSN-5 I/O CONSOLE	A				2	71	142	2	73	146			0
GW029	AN/WSN-2/5/7 ECP/FC KITS							8,959			5,924			7,826
GW035	RING LASER GYRO NAVIGATOR (AN/WSN-7	A				12	803	9,633	15	747	11,207	19	830	15,765
GW830	PROD ENGINEERING FOR AN/WSN-2/5/7							846			884			871
	PROCUREMENT SUB-TOTAL							21,961			23,905			29,602
GW5IN	INSTALLATION OF EQUIPMENT (FMP)							1,217			793			4,660
	INSTALLATION SUB-TOTAL							1,217			793			4,660
	TOTAL - N86							23,178			24,698			34,262

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN/BA-1: SHIPS SUPPORT EQUIPMENT		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD OTHER NAVIGATION EQUIPMENT/067000	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	AIRCRAFT CARRIERS - N88													
GW029	CVNS/WSN-7 ECP/FC KITS							1,114			3,231			2,224
GW031	DMINS ECP/DOCUMENTATION							124			124			99
GW035	RING LASER GYRO NAVIGATOR (AN/WSN-7	A				1	820	820	4	933	3,732	3	1,032	3,095
GW830	PROD ENGINEERING FOR CVNS/AN/WSN-7							336			368			331
	PROCUREMENT SUB-TOTAL							2,394			7,455			5,749
GW5IN	INSTALLATION OF EQUIPMENT (FMP)							0			0			387
	INSTALLATION SUB-TOTAL							0			0			387
	TOTAL - N88							2,394			7,455			6,136
	TOTAL - PROCUREMENT							24,954			39,626			40,212
	TOTAL - INSTALLATION							1,217			3,055			5,047
	GRAND TOTAL							26,171			42,681			45,259

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN/BA-1: SHIPS SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE OTHER NAVIGATION EQUIPMENT/067000	SUBHEAD 81GW

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
1997										
GW014 - OL-405	2	71	SPAWAR, Norfolk VA	--	WR	SPAWAR, Norfolk VA	02/98	09/98	YES	
GW035 - RLGN										
Surface	12	802.8	NAVSEA, Arlington VA	--	FPI	Sperry, Charlottesville VA	05/97	11/98	YES	
Carrier	1	820	NAVSEA, Arlington VA	--	FPI	Sperry, Charlottesville VA	05/97	11/98	YES	
1998										
GW014 - OL-405	2	73	SPAWAR, Norfolk VA	--	WR	SPAWAR, Norfolk VA	02/98	09/98	YES	
GW035 - RLGN										
Submarine	3	785.0	NAVSEA, Arlington VA	12/97	FFP	Sperry, Charlottesville VA	04/98	10/99	YES	
Surface	15	747.1	NAVSEA, Arlington VA	12/97	FFP	Sperry, Charlottesville VA	04/98	10/99	YES	
Carrier	4	933.0	NAVSEA, Arlington VA	12/97	FFP	Sperry, Charlottesville VA	04/98	10/99	YES	
1999										
GW035 - RLGN										
Submarine	4	776.0	NAVSEA, Arlington VA	12/97	FFP	Sperry, Charlottesville VA	04/99	10/00	YES	
Surface	19	829.7	NAVSEA, Arlington VA	12/97	FFP	Sperry, Charlottesville VA	04/99	10/00	YES	
Carrier	3	1031.7	NAVSEA, Arlington VA	12/97	FFP	Sperry, Charlottesville VA	04/99	10/00	YES	

D. REMARKS

GW035 - Unit cost variances between Surface, Submarine and Carrier configurations are due to additional circuit cards required for aircraft alignment (Carrier system) and for extra cabinetry for the Submarine configuration. Additionally, engineering services provided by the manufacturer included in the RLGN unit cost varies per quantity being installed.
FY96 and FY97 procurements were LRIP. FY98 and out procurements will be under full rate production contract.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/WSN-5 TYPE MODIFICATION: MODIFICATION TITLE: OL-405 INPUT/OUTPUT CONSOLE GW014

DESCRIPTION/JUSTIFICATION:

The AN/WSN-5 Input/Output Console upgrade program is aimed at replacing the existing consoles (OA-7984 and OL-267) currently installed in various surface combatants with the OL-405. This Shipalt must be installed prior to or concurrently with Shipalt 0177 CDS console upgrade. Assets being removed with the installation of OL-405 are required to satisfy hardware requirements of Shipalt 0177.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.000
PROCUREMENT																								
INSTALLATION KITS																							0	0.000
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT	2	0.135			5	0.345	2	0.142	2	0.146													11	0.768
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER																								0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST			2	0.076		0.018	5	0.049	2	0.048	1	0.029	1	0.025										0.245
TOTAL PROCUREMENT	2	0.135	2	0.076	5	0.363	7	0.191	4	0.194	1	0.029	1	0.025	0	0.000	0	0.000	0	0.000	0	0.000	11	1.013

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **AN/WSN-5** MODIFICATION TITLE: OL-405 INPUT/OUTPUT CONSOLE

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **Industrial Facility**
ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 9 Months
CONTRACT DATES: FY 1997: 02/98 FY 1998: 02/98 FY 1999:
DELIVERY DATE: FY 1997: 09/98 FY 1998: 09/98 FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS			**2**	**0.076**																			2	0.076
FY 1995 EQUIPMENT																							0	0.000
FY 1996 EQUIPMENT						0.018	5	0.049															5	0.067
FY 1997 EQUIPMENT									2	0.048													2	0.048
FY 1998 EQUIPMENT											1	0.029	1	0.025									2	0.054
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

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INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	2	1	1	2	1	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Out	2	0	0	3	1	0	1	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/WSN-3, AN/WSN-5 and CVNS TYPE MODIFICATION: MODIFICATION TITLE: RLGN GW035

DESCRIPTION/JUSTIFICATION:

The Ring Laser Gyro Navigator (RLGN) will replace existing inertial navigation systems currently installed in various surface and sub-surface combatants. This system replaces the AN/WSN-1, -3 and -5, providing commonality and correcting existing inadequacies identified in these systems in the areas of maintainability, performance, environmental effects, reliability and ownership costs. RLGN is a passive shipboard navigation system intended to be operable worldwide without the need for external position reference information over the course of its fourteen day reset interval.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.000
PROCUREMENT																								
INSTALLATION KITS																							0	0.000
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT	3*	1.995	2	1.330	9*	12.236	13	10.453	22	17.294	26	21.964	38	33.161	13	11.763	14*	15.933	0	0.000	9	12.015	149	138.144
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER	*NOTE: Includes 1 shipset to be used at the LBTF not requiring install dollars. FY94/95 assets were procured with AN/WSN-2/5 Field Change Dollars (GW029).																							0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST							4	1.194	8	3.007	13	5.018	22	8.688	26	10.205	38	15.727	13	5.515	22	9.598		58.952
TOTAL PROCUREMENT	3	1.995	2	1.330	9	12.236	17	11.647	30	20.301	39	26.982	60	41.849	39	21.968	52	31.660	13	5.515	31	21.613	149	197.096

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **AN/WSN-3, AN/WSN-5 and CVNS** MODIFICATION TITLE: RLGN

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1997: 05/97 FY 1998: 04/98 FY 1999: 04/99
DELIVERY DATE: FY 1997: 11/98 FY 1998: 10/99 FY 1999: 10/00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS							2	0.597															2	0.597
FY 1995 EQUIPMENT							2	0.597															2	0.597
FY 1996 EQUIPMENT									8	3.007													8	3.007
FY 1997 EQUIPMENT											13	5.018											13	5.018
FY 1998 EQUIPMENT													22	8.688									22	8.688
FY 1999 EQUIPMENT															26	10.205							26	10.205
FY 2000 EQUIPMENT																	38	15.727					38	15.727
FY 2001 EQUIPMENT																			13	5.515			13	5.515
FY 2002 EQUIPMENT																					13	5.671	13	5.671
FY 2003 EQUIPMENT																					0	0.000	0	0.000
TO COMPLETE																					9	3.926	9	3.926

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INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	2	1	1	0	4	1	1	2	10	1	1	1	11	6	3	2	5	8	5	8	8	11	10	9	4	5	4	0	22	146
Out	0	0	0	0	4	0	1	0	5	5	1	1	8	0	4	7	7	2	4	6	10	7	1	12	4	12	2	12	2	29	146

BUDGET ITEM JUSTIFICATION SHEET P-40													DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment								P-1 ITEM NOMENCLATURE/LINE ITEM # UNDERWAY REPLENISHMENT EQUIPMENT (81GO) 0740					
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$9.3	$8.0	$7.7	$15.8	$11.1	$5.4	$6.3		$63.6
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

This line item encompasses equipment required to provide the Fleet with a reliable Stream Underway Replenishment capability. The equipment is used to transfer ammunition, missiles, fuel and cargo by alongside replenishment techniques, cranes, and elevators. This new equipment is essential to the Fleet to: (a) enhance personnel equipment safety; (b) reduce maintenance costs; (c) lengthen intervals between equipment failures; (d) allow heavylift transfer (i.e., aircraft engines) and (e) shorten along-side time and, thereby reducing ship vulnerability to enemy action. Installation costs are included. Some of the significant items included are as follows:

STREAM EQUIPMENT MODS (G0011) - This item will support the replacement of Stream Equipment components by mods kits to correct deficiencies. This work will be performed by AIT teams or SHIPALTS. Mods include Sliding Block Limit Switches, NATO kits, One Man Control Station, and Hauling Winch Friction Drums.

AOE STREAM MODERNIZATION (G0043) - This item replaces 25 year old, unreliable STREAM systems with modern, reliable Navy Standard STREAM Systems on AOE 1 Class. SHIPALTS AOE-761K, 762K and 764K apply.

PRODUCTION ENGINEERING (G0830)- The review and approval of any producion contract technical documentation, or the separate development of this documentation to include, Technical Manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD) Program Support Data (PSD) and Allowance Parts List (APL's); Engineering in support of final design reviews. This work can be accomplished by NSWC. PHILA, as the In Service Engineering Agent, other Naval activities or contractors as appropriate.

EQUIPMENT INSTALLATION (GO5IN)- Funding is for the installation of equipment including Fleet Modernization Program installation of training equipment and installation of equipment in other shore facilities.

WEAPONS SYSTEM COST ANALYSIS P-5					Weapon System			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD UNDERWAY REPLENISHMENT EQUIPMENT (81G0/0740)							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS										
			FY 1996			FY 1997			FY 1998			FY 1999	
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N4 DCNO (LOGISTICS)												
GO011	STREAM EQUIPMENT MODS	A							31	39,032	1,210	27	40,740	1,100
GO043	AOE STREAM MODERNIZATION	A							2	1,800	3,600	1	1,400	1,400
GO044	T-AE STREAM MODERNIZATION	A												
GO830	PRODUCTION ENGINEERING	A									767			350
	SUBTOTAL N4										5,577			2,850
	N86 SURFACE WARFARE													
GO011	STREAM EQUIPMENT MODS	A												
GO830	PRODUCTION ENGINEERING	A												
	SUBTOTAL N86													
	N88 AIR WARFARE													
GO011	STREAM EQUIPMENT MODS	A				9	31,777	286				6	6,833	41
	SUBTOTAL N88							286						41
	TOTAL EQUIPMENT							286			5,577			2,891
GO5IN	INSTALLATION*													
	N4 DCNO (LOGISTICS)										2,428			1,628
	N86 SURFACE WARFARE							7,834						3,020
	N88 AIR WARFARE							1,163						119
	TOTAL INSTALLATION							8,997			2,428			4,767
	GRAND TOTAL							9,283			8,005			7,658

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE UNDERWAY REPLENISHMENT EQUIPMENT/0740	SUBHEAD 81G0

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 97										
G0011	9	31,777	NAVSEA		WR	NSWC PHILA, PA	DEC 96	SEP 97	YES	
FY98										
G0011	31	39,032	NAVSEA		WR	NSWC PORT HUENEME, CA	DEC 97	SEP 98	YES	
GO043	2	1,800	PORT HUENEME, CA		RCP	UNKNOWN	FEB 98	AUG 99	YES	
FY 99										
GO011	6	6,833	NAVSEA		WR	NSWC PORT HUENEME, CA	DEC 98	SEP 99	YES	
GO011	27	40,740	NAVSEA		WR	NSWC PORT HUENEME, CA	DEC 98	SEP 99	YES	
GO043	1	1,400	PORT HUEMEME, CA		RCP/OPT	NSWC PORT HUENEME, CA	JAN 99	AUG 00	YES	

D. REMARKS

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: STREAM UNREP MODS EQUIPMENT (G0011) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Various Stream Equipment Mods including limit switches, NATO Kits, and Hauling Winch Friction Drums.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT					42	1.9	9	0.3	31	1.2	33	1.1	52	2.1	50	1.7	2	0.2	2	0.2			221	8.7
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						1.8		3.8		2.1		3.1		1.9		2.8						0.0		15.5
TOTAL PROCUREMENT					42	3.7	9	4.1	31	3.3	33	4.2	52	4.0	50	4.5	2	0.2	2	0.2		0.0	221	24.2

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: STREAM UNREP MOD EQUIPMENT (G0011) MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: 9 Months
CONTRACT DATES: FY 1997: Dec-96 FY 1998: Dec-97 FY 1999: Dec-98
DELIVERY DATE: FY 1997: Sep-97 FY 1998: Sep-98 FY 1999: Sep-99

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT					22	1.8	20	3.0															42	4.8
FY 1997 EQUIPMENT							9	0.8															9	0.8
FY 1998 EQUIPMENT									31	2.1													31	2.1
FY 1999 EQUIPMENT											33	3.1											33	3.1
FY 2000 EQUIPMENT													52	1.9									52	1.9
FY 2001 EQUIPMENT															50	2.8							50	2.8
FY 2002 EQUIPMENT																					2	0.2	2	0.2
FY 2003 EQUIPMENT																					2	0.2	2	0.2
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	22	0	0	29	0	0	0	31	0	0	0	33	0	0	0	52	0	0	0	50	0	0	0	0	0	0	0	0	0	4	221
Out	22	0	0	29	0	0	0	31	0	0	0	33	0	0	0	52	0	0	0	50	0	0	0	0	0	0	0	0	0	4	221

P-3A

* FY 97 (9) KITS REQUIRED NO INSTALL FUNDS.

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: FORK TRUCK GUARD CARGO WPNS ELEV (G0027) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

DESCRIPTION/JUSTIFICATION:

I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT			14	2.0																			14	2.0
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						0.6		3.6																4.2
TOTAL PROCUREMENT			14	2.0		0.6		3.6															14	6.2

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: FORK TRUCK GUARD CARGO WPN ELEV (G0027) MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 15 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT					2	0.6	12	3.6															14	4.2
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	2	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Out	2	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: STREAM SLIDING BLOCK DRIVES & CLUTCHES (G0042) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

DESCRIPTION/JUSTIFICATION:

These mods replace obsolete drives and transfer heads to improve operational safety and performance.

I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	12	2.6	3	0.3																			15	2.9
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						3.1		0.4																3.5
TOTAL PROCUREMENT	12	2.6	3	0.3		3.1		0.4															15	6.4

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: STREAM SLIDING BLOCK DRIVES & CLUTCHES (G0042) MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT					9	3.1	6	0.4															15	3.5
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	9	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Out	7	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: SADDLE WINCH (G0003) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Used to transfer Fuel from one ship to another.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	35	1.5																					35	1.5
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						1.1		0.8										1.2		1.2				4.3
TOTAL PROCUREMENT	35	1.5				1.1		0.8										1.2		1.2			35	5.8

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: SADDLE WINCH (G0003) MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS					12	1.1	11	0.8									6	1.2	6	1.2				4.8
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In	12	0	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	35
Out	12	0	0	0	0	5	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	0	0	35

CLASSIFICATION: UNCLASSIFIED February 1998

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: SLIDING PADEYES (G0012) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Allows safe receipt of heavy cargo loads.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT			5	0.4																			5	0.4
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						0.7		0.4																1.1
TOTAL PROCUREMENT			5	0.4		0.7		0.4															5	1.5

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: SLIDING PADEYES (G0012) MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT					2	0.7	2	0.4															4	1.1
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																					6	1.2	6	1.2

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	10
Out	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	10

CLASSIFICATION: UNCLASSIFIED February 1998

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: AOE STREAM MODERNIZATION (G0043) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Replacement of 25 year old Non-Navy Standard Equipment.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT									2	3.6	1	1.4											3	5.0
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST										0.3		1.6		9.0		4.1								15.0
TOTAL PROCUREMENT									2	3.9		0.3		9.0		4.1							3	17.3

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AOE STREAM MODERNIZATION (G0043) MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1997: FY 1998: JAN 98 FY 1999: JAN 99
DELIVERY DATE: FY 1997: FY 1998: AUG 99 FY 1999: AUG 00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT									AP	0.3	AP	1.6	2	9.0									2	10.9
FY 1999 EQUIPMENT															1	4.1							1	4.1
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: TAE STREAM MODERNIZATION(G0044) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENISHMENT EQUIPMENT

DESCRIPTION/JUSTIFICATION:

I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT													1	2.3	1	2.3					2	5.0	2	9.6
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST																		3.9		4.8		9.0		17.7
TOTAL PROCUREMENT													1	2.3	1	2.3		3.9		4.8	2	14.0	2	27.3

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: T-AE STREAM MODERNIZATION (G0044) MODIFICATION TITLE: UNDERWAY REPLENISHEMENT EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 24 Months
CONTRACT DATES: FY 2000: DEC 99 FY 2001: DEC 01 FY 1999:
DELIVERY DATE: FY 2000: DEC 01 FY 2001: DEC 02 FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																	1	3.9					1	3.9
FY 2001 EQUIPMENT																			1	4.8			1	4.8
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																					2	9.0	2	9.0

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	4
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	4

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23	A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	B. P-1 ITEM NOMENCLATURE (G0027) UNREP FORK TRUCK GUARD/CARGO WPN	C. DATE February 1998

		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)																									
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																									
OTHER AIT	(P)			2		12																				
TOTAL PHASED REQ	(C)	0	0	2	2	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASSETS ON HAND	(BP)	14																								
DELIVERY FY & PRIOR	(P)																									
FY & PRIOR	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
To Complete	(P)																									
TOTAL ASSETS	(C)	14	14	14	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
QTY OVER (+) OR SHORT (-)		+14	+14	+12	+12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF /	FY 99 & PRIOR UNDELIVERED	UNFUNDED
			0		0	0
	1. APPN -	14		14		
	2. APPN -					
	3. PROCUREMENT LEADTIME	ADMIN	INITIAL ORDER 15		REORDER 15	

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT FORK TRUCK GUARDS/CARGO WPNS ELEV (G0027)	DATE February 1998

APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	Installing Agent N/A

1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1996							
				AE-32	2		
FY 1998							

1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997							
AO-177 AOE-6 TAE-26 CLF SHIPS AIT	3 3 1 5						
FY 1999							

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT												B. P-1 ITEM NOMENCLATURE UNREP (SLIDING DRIVES & CLUTCHES) (G0(								C. DATE February 1998				
		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)	7		2					6																	
SCHOOLS/OTHER TRAINING	(P)																									
OTHER	(P)																									
TOTAL PHASED REQ	(C)	7	7	9	9	9	9	9	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASSETS ON HAND	(BP)	15																								
DELIVERY FY & PRIOR	(P)																									
FY & PRIOR	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
To Complete	(P)																									
TOTAL ASSETS	(C)	15	15	15	15	15	15	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
QTY OVER (+) OR SHORT (-)		+8	+8	+6	+6	+6	+6	+6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF / /96	FY 99 & PRIOR UNDELIVERED	UNFUNDED
	1. APPI OPN	15		15	0	0
	2. APPI OTHE					
	3. PROCUREMENT LEADTIME 12	ADMIN 4	INITIAL ORDER 12	REORDER		

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT	DATE
	UNREP (SLIDING DRIVES & CLUTCHES) (G0042)	February 1998

APPROPRIATION/BUDGET ACTIVITY	Installing Agent
Other Procurement, Navy	N/A

1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY								FY 1996							
								AOE-3	7			AO-178	2		
FY 1997								FY 1998							
						AOE-7	6								

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT												B. P-1 ITEM NOMENCLATURE UNREP SADDLE WINCH G0003								C. DATE February 1998				
		FY 1996				FY 1997				FY 1998				FY 1999				FY 2002				FY 2003				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)							5	6										6					6		
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																									
OTHER	(P)																									
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	5	11	11	11	11	11	11	11	11	11	11	17	17	17	17	17	23		
ASSETS ON HAND	(BP)	23																								
DELIVERY FY & PRIOR	(P)																									
FY & PRIOR	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
FY	(P)																									
To Complete	(P)																									
TOTAL ASSETS	(C)	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23		
QTY OVER (+) OR SHORT (-)		+23	+23	+23	+23	+23	+23	+18	+12	+12	+12	+12	+12	+12	+12	+12	+12	+12	+6	+6	+6	+6	+6	0		

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF 1 / 1 /97	FY 99 & PRIOR UNDELIVERED	UNFUNDED
	1. APPI OPN	35	12	23	0	0
	2. APPI OTHE					
	3. PROCUREMENT LEADTIME	ADMIN	INITIAL ORDER	REORDER		
	12	6	12	16		

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT UNREP SADDLE WINCH (G0003)								DATE February 1998	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT								Installing Agent									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR			
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY		
FY 1996								FY 1997									
												CV-63	5	CVN-71	6		
FY 1998								FY 1999									

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT UNREP SADDLE WINCH (G0003)								DATE Sep-97	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT								Installing Agent									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR			
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY		
FY 2000								FY 2001									
FY 2002								FY 2003									
		CV 67	6									CVN 75	6				

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT												B. P-1 ITEM NOMENCLATURE UNREP SLIDING PADEYE (G0012)								C. DATE February 1998				
		FY 1996				FY 1997				FY 1998				FY 2002				FY 2003				LATER				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)				2			2																		
SCHOOLS/OTHER TRAINING	(P)																									
OTHER	(P)																									
TOTAL PHASED REQ	(C)	0	0	0	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
ASSETS ON HAND	(BP)	5																								
DELIVERY FY & PRIOR	(P)																									
FY 96 & PRIOR	(P)																									
FY 97	(P)																									
FY 98	(P)																									
FY 99	(P)																									
FY 00	(P)																									
FY 01	(P)																									
FY 02	(P)																									
FY 03	(P)																									
To Complete	(P)																									
TOTAL ASSETS	(C)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
QTY OVER (+) OR SHORT (-)		+5	+5	+5	+3	+3	+3	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1	+1

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF / /96	FY 99 & PRIOR UNDELIVERED	UNFUNDED
	1. APPI OPN	22	12	5	0	5
	2. APPI OTHE					
	3. PROCUREMENT LEADTIME	ADMIN	INITIAL ORDER	REORDER		
	12	4 MOS	12	12		

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CLASSIFICATION:
UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT UNREP (SLIDING PADEYE G0012)								DATE February 1998	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT								Installing Agent									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR			
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY		
FY 1996								FY 1997									
						CVN-73	2					CV 63	2				
FY 1998								FY 1999									

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT												B. P-1 ITEM NOMENCLATURE AOE STEAM MODERNIZATION G0043								C. DATE February 1998				
		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)																	2				1				
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																									
OTHER	(P)																									
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	3	3	3	3	
ASSETS ON 1	(BP)																									
DELIVERY FY & PRIOR	(P)																									
FY 96 & PRIOR	(P)																									
FY 97	(P)																									
FY 98	(P)										C						1	1								
FY 99	(P)														C						1					
FY 00	(P)																									
FY 01	(P)																									
FY 02	(P)																									
FY 03	(P)																									
To Complete	(P)																									
TOTAL ASSETS	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	3	3				
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+1	0	0	0	+1	0				

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF / /96	FY 99 & PRIOR UNDELIVERED	UNFUNDED
	1. APPI OPN	4	1		3	0
	2. APPI OTHE					
	3. PROCUREMENT LEADTIME	ADMIN	INITIAL ORDER		REORDER	
	18	3	18		18	

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT AOE STREAM MODERNIZATION (G0043)								DATE February 1998	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT								Installing Agent									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR			
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY		
FY 1999								FY 2000									
								AOE-3	2								
FY 2001								FY									
AOE-4	1																

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT												B. P-1 ITEM NOMENCLATURE TAE STEAM MODERNIZATION G0044								C. DATE February 1998				
		FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)																			1				1		2
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																									
OTHER	(P)																									
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2		
ASSETS ON 0	(BP)																									
DELIVERY FY & PRIOR	(P)																									
FY 96 & PRIOR	(P)																									
FY 97	(P)																									
FY 98	(P)																									
FY 99	(P)																									
FY 00	(P)																									
FY 01	(P)									C								1								
FY 02	(P)													C								1				
FY 03	(P)																									
To Complete	(P)																									
TOTAL ASSETS	(C)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2		
QTY OVER (+) OR SHORT (-)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+1	+1	0	0	+1	+1	0		

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF / /96	FY 99 & PRIOR UNDELIVERED	UNFUNDED
	1. APPI OPN	4	0	0	0	4
	2. APPI OTHE					
	3. PROCUREMENT LEA 24	ADMI 6	INITIAL OI 24	REORDER N/A		

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT TAE STREAM MODERNIZATION (G0044)	DATE February 1998

APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT								Installing Agent							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2000								FY 2001							
FY 2002								FY 2003							
				T-AE 32	1							T-AE 34	1		

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	B. P-1 ITEM NOMENCLATURE UNREP (STREAM EQUIP MOD)	C. DATE February 1998

		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)																									
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																			2				2		
OTHER AIT	(P)							29				31				33				50				48		4
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	29	29	29	29	60	60	60	60	93	93	93	93	145	145	145	145	195	195	199
ASSETS ON HAND	20 (BP)																									
DELIVERY FY & PRIOR	(P)																									
FY 96 & PRIOR	(P)																									
FY 97	(P)						C		9																	
FY 98	(P)										C		31													
FY 99	(P)														C		33									
FY 00	(P)																		C		52					
FY 01	(P)																						C		50	
FY 02	(P)																									2
FY 03	(P)																									2
To Complete	(P)																									
TOTAL ASSETS	(C)	20	20	20	20	20	20	20	29	29	29	29	60	60	60	60	93	93	93	93	145	145	145	145	195	199
QTY OVER (+) OR SHORT (-)		+20	+20	+20	+20	+20	+20	-9	0	0	0	-31	0	0	0	-23	0	0	0	-52	0	0	0	-50	0	0

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF / /96	FY 99 & PRIOR UNDELIVERED	UNFUNDED
INSTALLED BY AIT	1. APPIOPN	221	22	20	73	106
	2. APPN -					
	3. PROCUREMENT LEADTIM 24	ADMIN 6	INITIAL ORDER 7	REORDER N/A		

DD for 2447, JUN 86

P-1 SHOPPING LIST
ITEM NO 13 PAGE NO 31

CLASSIFICATION:
UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT UNREP STREAM EQUIP MOD	DATE February 1998

APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy
BA 1: SHIPS SUPPORT EQUIPMENT

Installing Agent

1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1996								FY 1997							
												AOE 1 cl (AIT)	29		
FY 1998								FY 1999							
				AOE cl (AIT)	31							TAO cl CVN-72	27 6		

P-1 SHOPPING LIST
ITEM NO. 13 PAGE NO. 32

CLASSIFICATION:
UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT UNREP STREAM EQUIP MOD								DATE February 1998	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT								Installing Agent									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR			
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY		
FY 2000								FY 2001									
				T-AFS cl CVN 70	36 16							AOE cl NTTC, TI NSWC, PHD	48 1 1					
FY 2002								FY 2003									

BUDGET ITEM JUSTIFICATION SHEET P-40													DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-1 SHIP SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE/LINE ITEM # Submarine Periscopes & Imaging Equipment 083100/083105					
Program Element for Code B Items:								OTHER RELATED PROGRM ELEMENTS N/A					
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)	*N/A*	A			$31.2	$28.3	$31.9	$21.5	$16.4	$14.1	$13.2		156.6
SPARES COST (In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

Service Approval - The Type 18 Periscope was approved for service use December 1972.

The Type 18 Periscope contains completely redesigned Electronic Surveillance Measure (ESM) and Optical Subsystems. The ESM provides improved sensitivity, reliability, and maintainability as well as frequency extension. The optical subsystem provides higher power and resolution (optimized for photography) and the eyepiece box is redesigned for built-in-TV. Special electronics for low light level viewing are also provided. Type 18B Periscope Systems are installed on SSN 688 Class.

The Type 18 Periscope Inventory Objective is 65 units: (51 Type 18B). This is the quantity required for ship installation (51), spares (10), trainers (3), and (1) configuration model.

The Type 8B Mod 3 Periscope provides enhanced imaging and communications capabilities. The Type 8B Mod 3 Periscope replaces the Type 2 Periscope on SSN 688 Class Submarines. The Type 8B Mod 3 Periscope inventory objective is 44 units. This is the quantity required for ship installation (37), spares (5), trainers (1), and configuration control model (1).

PL001 - Procurement of Type 8B Mod 3 Periscopes began in FY 1991. The Type 8B Mod 3 replaces the Type 2 Periscope on SSN-688 Class Submarines and provides them with enhanced imaging and communications capabilities. Installations will be accomplished during routine upkeep periods.

PL006 - Imaging components are required to fully support Type 18 TV imaging, photographic, television, and ancillaries and upgrades. These equipments include 35 mm Cameras, High Resolution Video Cameras, Video and Photographic Screening Systems, AR-165B Reader/Printers, equipments that must be replaced and ancillary components. These maintenance items support fleet requirements based on demand history, repair turn-around time, and casualties resulting from non-repairable equipments that must be replaced.

PL007 - Procurement of Type 18 Periscope Automatic Direction Finding (ADF) modifications including integration of ADF with the AN/WLR-8 HPI receiver will provide SSN 688 Class Submarines with an automatic direction finding capability. Installations will be accomplished during routine upkeep periods. Procurement quantities vary year to year based on projected submarine availabilities and availability of funding.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-1 SHIP SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # 083100/083105 Submarine Periscopes & Imaging Equipment

PL011 - FY-1998/99 funding continues procurement of the following Type 18 Field Change Kits: 12 Channel Rotary Joint, Sleeve Antenna Amplifier Limiter Replacement, Outer Head Corrosion Protection, Right Training Handle Magnification Switch, RF improvements, Fairing Hoist Cylinder Dynamic Seal, Heated Head Window replacement, Drip Pan Assembly replacement, Cathodic Rod replacement, Fairing Closure Cap Seal, Hull Fitting Seal, Hoist Rod Cover and Hydraulic Noise Reduction.

PL012 - FY 1998/99 funds procure replacement Special Support Equipment (SSE) for each maintenance level to ensure systems are maintained in a state of operational readiness. Equipment includes dynamic collimator, eyebox/mast test set, and antenna/outer head simulator required due to obsolescence and age of existing Type 8 and 18 Periscope SSE.

PL015 - Funding is for interim contract support provided by the periscope manufacturer including Depot and Intermediate level repair of all types of tactical periscope equipment.

PL016 - Funding is for Type 8 and 18 periscope changes training including curriculum development, training materials, initial factory training pilot course conduct, and instructor advisory services.

PL017 - FY1998/99 funding provides for the repair or replacement of periscope E&E Adapter shipping containers which provide security and protection for the periscope E&E Adapter.

PL018 - FY1998/99 funding provides for the repair or replacement of periscope eyepiece box shipping containers which provide security and protection for the periscope eyepiece box.

PL019 - FY1998/99 funding provides for the repair or replacement of periscope containers which provide security and protection for the periscope.

PL830 - Production Engineering funds provide the following functions: value engineering; review and evaluation of production design data and documentation; production configuration control; maintenance engineering efforts designed and incorporated into the production manufacturing process, and other related engineering functions that are integral to all of the Type 8 and 18 items manufactured.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-1 SHIP SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # 083100/083105 Submarine Periscopes & Imaging Equipment

PLXX1 - Photonics Backfit for Risk Mitigation on SSN 688 Class Submarines.

PL5IN - Funding is for the installation of Fleet Modernization Program Equipment Only.

PL6IN - Funding is for the installation of Non Fleet Modernization Program Equipment Only.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998

APPROPRIATION/BUDGET ACTIVITY	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD
Other Procurement, Navy/BA-1 **SHIP SUPPORT EQUIPMENT**	**A**	**Submarine Periscopes and Imaging Equipment/H1PL**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	(SUBMARINE WARFARE (N87)													
PL001	Type 8B MOD 3 Periscope (SSN)	A				10	1,067.0	10,670.0	7	1,073.0	7,511.0	4	1,074.0	4,296.0
PL5IN	FMP Installation	A				7	444.0	3,108.0	4	439.0	1,756.0	7	383.6	2,685.0
PL006	Type 18 Imaging Components	A						2,187.0			1,517.0			8,007.0
PL007	Type 18 Periscope ADF Mod	A				4	1,164.0	4,656.0	7	1,126.0	7,879.0			0.0
PL5IN	FMP Installation					7	40.0	280.0	6	55.7	334.0	8	53.5	428.0
PL011	Periscope Field Change Kits	A						1,501.0			877.0			1,734.0
	Non-FMP Installation							1,068.0			1,333.0			846.0
PL012	Periscope Special Support Equipment	A						500.0			445.0			452.0
PL015	Periscope Interim Contractor Support	A						3,465.0			3,531.0			3,683.0
PL016	Periscope Training	A						131.0			50.0			137.0
PL017	Periscope E&E Adapt. Ship Containers	A						0.0			38.0			0.0
PL018	Periscope EPB Shipping Containers	A						0.0			9.0			0.0
PL019	Periscope Shipping Containers	A						0.0			63.0			0.0
PLXX1	Photonics Backfit for Risk Mit.	A										1	6,600.0	6,600.0
PL830	Periscope Production Engineering	A						2,966.0			2,285.0			2,321.0
PL900	Consulting Services	A						645.0			663.0			675.0
	Total Equipment				0.0			26,721.0			24,868.0			27,905.0
	Total Install				0.0			4,456.0			3,423.0			3,959.0
TOTAL					**0.0**			**31,177.0**			**28,291.0**			**31,864.0**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/(BA-1) SHIP SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE SUBMARINE PERISCOPES & IMAGING EQUIPMENT	SUBHEAD H1PL

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY97										
PL001										
Type 8B Mod 3 Periscope	10	$1,067.0	NUWC NEWPORT	OPTION	FFP	KOLLMORGEN NORTHAMPTON, MA.	2/97	4/98	YES	N/A
PL007										
Type 18 Periscope ADF	4	$1,164.0	NUWC NEWPORT	OPTION	FFP	KOLLMORGEN NORTHAMPTON, MA.	3/97	3/98	YES	N/A
FY98										
PL001										
Type 8B Mod 3 Periscope	7	$1,073.0	NUWC NEWPORT	OPTION	FFP	KOLLMORGEN NORTHAMPTON, MA.	1/98	3/99	YES	N/A
PL007										
Type 18 Periscope ADF	7	$1,126.0	NUWC NEWPORT	OPTION	FFP	KOLLMORGEN NORTHAMPTON, MA.	3/98	3/99	YES	N/A
FY99										
PL001										
Type 8B Mod 3 Periscope	4	$1,074.0	NUWC NEWPORT	9/98	FFP	KOLLMORGEN NORTHAMPTON, MA.	3/99	5/00	YES	N/A
PLXX1										
Photonics Backfit Rk Mit	1	$6,600.0	NUWC NEWPORT	9/98	FFP	KOLLMORGEN NORTHAMPTON, MA.	3/99	3/01	YES	N/A

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Type 8 Periscope TYPE MODIFICATION: Shipalt MODIFICATION TITLE: Type 8B Mod 3

DESCRIPTION/JUSTIFICATION:

Provides EHF Satellite Communications.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	13	34.9			7	7.7	4	4.3	7	7.5	3	3.2											34.0	57.6
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT*	1	2.7																					1	2.7
SUPPORT EQUIPMENT (Conf. Model)							1	1.1															1.0	1.1
OTHER: Trident Paybacks*			2	2.1							1	1.1											3.0	3.2
OTHER: Spares*							5	5.3															5.0	5.3
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST	2	0.6	5	1.5	6	1.8	7	3.1	4	1.8	7	2.7	3	3.1									34.0	14.5
TOTAL PROCUREMENT	14	37.6	2	2	7	8	10	11	7	8	4	4.3	0	0		0.0		0.0		0.0			44.0	70.0

*A total of 10 systems are land based units and will not be installed on 688 Class Submarines. There is 1 trg. equipment, 1 Configuration Control Model, 3 Trident Paybacks and 5 spares.

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: Type 8B Periscope MODIFICATION TITLE: Type 8B Mod 3

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AITs**
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 14 Months
CONTRACT DATES: FY 1997: 2/97 FY 1998: 2/98 FY 1999: 3/99
DELIVERY DATE: FY 1997: 4/98 FY 1998: 4/99 FY 1999: 5/00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	2	1	5	1.5	5	1.5																	12	3.5
FY 1995 EQUIPMENT					1	0.3	1	0.4															2	0.7
FY 1996 EQUIPMENT							6	2.7															6	2.7
FY 1997 EQUIPMENT									4	1.8													4	1.8
FY 1998 EQUIPMENT											7	3.0											7	3.0
FY 1999 EQUIPMENT													3	3.1									3	3.1
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	13	0	0	2	5	0	0	2	2	0	0	3	4	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Out	13	0	0	2	5	0	0	2	2	0	0	3	4	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Type 18B Periscope TYPE MODIFICATION: Shipalt MODIFICATION TITLE: Type 18 ADF

DESCRIPTION/JUSTIFICATION:

Provides wide band with reception and instantaneous direction finding.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	26	24.1	7	6.8	2	2.3	4	4.7	7	7.9													46	45.7
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT	3	2.8																					3	2.8
SUPPORT EQUIP. (CCM & Swing Sets)	4	3.8																					4	3.8
OTHER: (LBU/GFE)	3	2.8																					3	2.8
OTHER:																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST	27	2.2	8	0.4	7	0.4	7	0.3	6	0.3	8	0.4	2	0.1									65	4.1
TOTAL PROCUREMENT	36	33.6	7	6.8	2	2.3	4	4.7	7	7.9	0	0.0											56	55.2

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: Type 18B Periscope MODIFICATION TITLE: Type 18 ADF

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AITs**
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: 3/97 FY 1998: 3/98 FY 1999:
DELIVERY DATE: FY 1997: 3/98 FY 1998: 3/99 FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	**29**	**2**	**8**	0.4	5	0.3			2	0.1	1	0.0	2	0									47	3.0
FY 1995 EQUIPMENT					2	0.1	5	0.2															7	0.3
FY 1996 EQUIPMENT							2	0.1															2	0.1
FY 1997 EQUIPMENT									4	0.2													4	0.2
FY 1998 EQUIPMENT											7	0.3											7	0.3
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

NOTE: Prior Year Equipment Assets include former GFE units and assets from decommissioning boats.

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	42	0	1	3	3	1	1	2	2	1	1	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
Out	42	0	1	3	3	1	1	2	2	1	1	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Submarine Periscopes & Imaging Equip. TYPE MODIFICATION: Ordalts MODIFICATION TITLE: Field Change

DESCRIPTION/JUSTIFICATION:

Provides obolescence related upgrades for the Submarine Periscopes.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	114	0.4	115	0.4	67	1.3	239	1.5	174	0.9	197	1.7	198	1.3	236	2.0	173	2.3	237	2.5			1750	14.2
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT (Conf. Model)																								
OTHER: (LBU/GFE)																								
OTHER:																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST			114	0.2	115	0.3	67	1.1	239	1.3	174	0.8	197	3.9	198	0.9	236	0.7	173	0.7	237	0.9	1750	10.8
TOTAL PROCUREMENT	114	0.4	115	0.4	67	1.3	239	1.5	174	0.9	197	1.7	198	1.3	236	2.0	173	2.3	237	2.5			1750	14.2

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **Submarine Periscopes & Imaging Equip.** MODIFICATION TITLE: Field Change

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AITs**
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: 2/97 FY 1998: 2/98 FY 1999: 2/99
DELIVERY DATE: FY 1997: 2/98 FY 1998: 2/99 FY 1999: 2/00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS			114	0.15																			114	0.2
FY 1995 EQUIPMENT					115	0.3																	115	0
FY 1996 EQUIPMENT							67	1.1															67	1
FY 1997 EQUIPMENT									239	1.3													239	1
FY 1998 EQUIPMENT											174	0.8											174	1
FY 1999 EQUIPMENT													197	3.9									197	4
FY 2000 EQUIPMENT															198	0.9							198	1
FY 2001 EQUIPMENT																	236	0.7					236	1
FY 2002 EQUIPMENT																			173	0.7			173	1
FY 2003 EQUIPMENT																					237	0.9	237	1
TO COMPLETE																								

NOTE: The total program quantity reflects the inventory objective for this item.

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	229	0	23	22	22	0	79	80	80	0	58	58	58	0	65	66	66	0	66	66	66	0	78	79	79	0	57	58	58	237	1750
Out	229	0	23	22	22	0	79	80	80	0	58	58	58	0	65	66	66	0	66	66	66	0	78	79	79	0	57	58	58	237	1750

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Submarine Periscopes & Imaging Equip. TYPE MODIFICATION: Shipalt MODIFICATION TITLE: Photonics Mast

DESCRIPTION/JUSTIFICATION:

Provides obsolescence related upgrades for the Submarine Periscopes.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT											1	6.6											1	6.6
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT (Conf. Model)																								
OTHER: (LBU/GFE)																								
OTHER:																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST															1	1.3							1	1.3
TOTAL PROCUREMENT											1	6.6											1	6.6

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **Submarine Periscopes & Imaging Equip.** MODIFICATION TITLE: Photonics Mast

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AITs**
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT															1	1.3							1	1
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1

BUDGET ITEM JUSTIFICATION SHEET P-40													DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment								P-1 ITEM NOMENCLATURE/LINE ITEM # Fire Fighting Equpment 81HB/0910					
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$8.2	$18.6	$10.1	$17.2	$9.3	$15.4	$7.7		$86.5
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

CNO, Surface Ship Survivability Flag Level committee, and top echelons of the Navy directed that a number of survivability improvements be incorporated into mission - essential ship and combat systems during their acquisition and modernization. Shipboard fires have emphasized the urgent need to upgrade features and design standards that contribute to survivability.

The Fire Fighters Breathing Apparatus (FFBA) (HB008) is a self-contained, compressed air breathing device compatible with the fire fighter protective wear and helmet, and other damage control equipment. The FFBA is a commercially available device which has been tested and certified by the National Institute for Occupational Safety and Health (NIOSH) and is in accordance with the National Fire Protection Association (NFPA) Standard 1981 for a fire fighter's breathing apparatus.

The FFBA will provide breathable air to the fire fighter for a longer period of time than the OBA, with fewer physical demands on the user. It will provide air at a rate satisfying requirements of the user for duration of up to one hour. Equipment supporting the FFBA includes: booster pumps for ships with HP air system, portable diesel compressors for all ships when ships power is lost and portable electric compressors for recharging purposes for all ships (ships with HP air systems when HP air is down and all other ships are primary source of recharge air) and a filter kit which provides breathing quality air to the booster pumps/compressors for use in recharging the FFBA air cylinders. Inventory objective is 22. Three are included in the Budget Years. Nineteen are to be procured in subsequent years. Unit cost varies.

INSTALLATION OF EQUIPMENT - HB5IN:
Funding is for installation of equipment including Fleet Modernization Program installations, installation of training equipment, and installation of equipment in other shore facilities.

CLASSIFICATION: UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Fire Fighting Equpment 81HB/0910	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N85 EXPEDITIONARY WARFARE													
HB830	PRODUCTION ENGINEERING										174			
	SUBTOTAL (N85)										174			
	N86 SURFACE WARFARE													
HB008	BREATHING APPARATUS								8	319.875	2,559	3	211.666	635
HB830	PRODUCTION ENGINEERING										1,464			375
	SUBTOTAL (N86)										4,023			1,010
	N88 AIR WARFARE													
HB008	BREATHING APPARATUS								1	909.0	909			
	SUBTOTAL (N86)										909			
	TOTAL EQUIPMENT										5,106			1,010
HB5IN	INSTALLATION OF EQUIPMENT													
	N85 EXPEDITIONARY WARFARE							993			243			200
	N86 SURFACE WARFARE							7,247			12,273			7,957
	N87 SUBMARINE WARFARE													900
	N88 AIR WARFARE										1,010			
	TOTAL INSTALLATION							8,240			13,526			9,057
	GRAND TOTAL							8,240			18,632			10,067

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 1998		
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment					C. P-1 ITEM NOMENCLATURE FIRE FIGHTING EQUIPMENT 0910				SUBHEAD 81HB	
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 98										
86 EXPEDITIONARY WARFARE										
HB008										
Fire Fighters Breathing Apparatus	8	319.875	NSWC CSS, FL		RCP	GSA SCHEDULE COTS	Apr-98	Sep-98	YES	
N88 AIR WARFARE										
Fire Fighters Breathing Apparatus	1	909.0	NWSC CSS, FL		RCP	GSA SCHEDULE COTS	Apr-98	Sep-98	YES	
FY 99										
86 EXPEDITIONARY WARFARE										
Fire Fighters Breathing Apparatus	3	211.6	NWSC CSS, FL		RCP	UNKNOWN	Apr-99	Sep-99	YES	

D. REMARKS

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: HALON (HB001) TYPE MODIFICATION: MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Halon 1301 Firefighting systems include new time delays, liquid level indicator Halon/1301 conservation.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN (TOA, $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT		2.6																						2.6
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST		1.2		6.6		7.9		1.2		6.7		1.1		1.0		0.5		0.5		0.5				27.2
TOTAL PROCUREMENT		3.8		6.6		7.9		1.2		6.7		1.1		1.0		0.5		0.5		0.5				29.8

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: HALON (HB001) MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: VAR
ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months
CONTRACT DATES: VAR FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		1.2		6.6		7.9		1.2		6.7		1.1		1.0		0.5		0.5		0.5				27.2
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: AFFF IMPROVED FIREFIGHTING (HB005 TYPE MODIFICATION: _____ MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Hardware such as Manual Hydraulic Control Valve, Verinozzle Bridge Panels and Sanitary Solid Block for storage.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN (TOA, $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT		9.1																						9.1
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST		2.2		4.0		4.2		7.0		3.5		7.2		7.0		3.1		3.2		5.2				46.6
TOTAL PROCUREMENT		11.3		4.0		4.2		7.0		3.5		7.2		7.0		3.1		3.2		5.2				55.7

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AFFF IMPROVED FIREFIGHTING (HB005) MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: VAR
ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months
CONTRACT DATES: VAR FY 1997: FY 1998: FY 1999:
DELIVERY DATE: VAR FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		2.2		4.0		4.2		7.0		3.5		7.2		7.0		3.1		3.2		5.2				46.6
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: HALON (HB001) TYPE MODIFICATION: MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Halon 1301 Firefighting systems include new time delays, liquid level indicator Halon/1301 conservation.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN (TOA, $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT		2.6																						2.6
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST		1.2		6.6		7.9		1.2		6.7		1.1		1.0		0.5		0.5		0.5				27.2
TOTAL PROCUREMENT		3.8		6.6		7.9		1.2		6.7		1.1		1.0		0.5		0.5		0.5				29.8

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: AFFF IMPROVED FIREFIGHTING (HB005 TYPE MODIFICATION: _____ MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Hardware such as Manual Hydraulic Control Valve, Verinozzle Bridge Panels and Sanitary Solid Block for storage.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN (TOA, $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT		9.1																						9.1
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST		2.2		4.0		4.2		7.0		3.5		7.2		7.0		3.1		3.2		5.2				46.6
TOTAL PROCUREMENT		11.3		4.0		4.2		7.0		3.5		7.2		7.0		3.1		3.2		5.2				55.7

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: BREATHING APPARATUS (FFBA HB008) TYPE MODIFICATION: MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

DESCRIPTION/JUSTIFICATION:

The FFBA will provide breathable air to the Fire Fighter for a longer period of time than the OBA with physical demands on the user.
I/O

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN (TOA, $ IN MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT									9	3.5	3	0.6	14	3.5	5	2.4	18	5.0	4	0.8			53	15.8
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST										3.3		0.8		5.2		3.1		6.6		1.2				20.2
TOTAL PROCUREMENT									9	6.8	3	1.4	14	8.7	5	5.5	18	11.6	4	2.0			0	36.0

MODELS OF SYSTEMS AFFECTED: BREATHING APPARATUS (FFBA HB008) MODIFICATION TITLE: FIREFIGHTING EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 3 Months
CONTRACT DATES: VAR FY 1997: FY 1998: Apr 98 FY 1999: Apr 99
DELIVERY DATE: VAR FY 1997: FY 1998: Sep 98 FY 1999: Sep 99

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT									9	3.3													9	3.3
FY 1999 EQUIPMENT											3	0.8											3	0.8
FY 2000 EQUIPMENT													14	5.2									14	5.2
FY 2001 EQUIPMENT															5	3.1							5	3.1
FY 2002 EQUIPMENT																	18	6.6					18	6.6
FY 2003 EQUIPMENT																			4	1.2			4	1.2
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	9	0	0	0	3	0	0	14	0	0	0	5	0	0	0	18	0	0	0	4	0	0	53
Out	0	0	0	0	0	0	0	0	9	0	0	0	3	0	0	14	0	0	0	5	0	0	0	18	0	0	0	4	0	0	53

Exhibit P-20, Requirements Study		Approp Code/BA			Subhead		Date: February 1998		
P-1 Line Item Nomenclature			Admin Leadtime (after Oct 1): 01 month				Prod Leadtime 03 months		
Example:		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY									
Unit Cost				194.7	203.8	248.0	671	677	202.3
Total Cost		0	0	779	3357	3720	2013	2030	1821
Asset Dynamics									
Beginning Asset Position									
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding				4					
Deliveries from FY 1999 funding					15	15	3	3	9
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position									
Inventory Objective/Current Authorized Allowance									
Example: 50									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 12

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy												B. P-1 ITEM NOMENCLATURE BREATHING APPARATUS								C. DATE February 1998				
		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)																									
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																									
OTHER AIT	(P)												9				3				14				5	
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	0	0	0	0	9	9	9	9	12	12	12	12	26	26	26	26	31	
ASSETS ON HAND	(BP)																									
DELIVERY FY 96 & PRIOR	(P)																									
FY 96 & PRIOR	(P)																									
FY 97	(P)																									
FY 98	(P)											C	9													
FY 99	(P)															C	3									
FY 00	(P)																			C	14					
FY 01	(P)																							C	5	
FY 02	(P)																									
FY 03	(P)																									
To Complete	(P)																									
TOTAL ASSETS	(C)	0	0	0	0	0	0	0	0	0	0	0	9	9	9	9	12	12	12	12	26	26	26	26	31	
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF / 1 /98	FY 99 & PRIOR UNDELIVERED	UNFUNDED
	1. APPN -	53			17	41
	2. APPN -					
	3. PROCUREMENT LEADTIME	ADMIN 6	INITIAL ORDER 3 - 6 MOS		REORDER 3 - 6 MOS	

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy												B. P-1 ITEM NOMENCLATURE BREATHING APPARATUS								C. DATE February 1998				
		FY 2002				FY 2003																				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)																									
	(P)																									
SCHOOLS/OTHER TRAINING	(P)																									
OTHER AIT	(P)				18				4																	
TOTAL PHASED REQ	(C)	31	31	31	49	49	49	49	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASSETS ON HAND	(BP)																									
DELIVERY FY 96 & PRIOR	(P)																									
FY 96 & PRIOR	(P)																									
FY 97	(P)																									
FY 98	(P)																									
FY 99	(P)																									
FY 00	(P)																									
FY 01	(P)																									
FY 02	(P)			C	18																					
FY 03	(P)							C	4																	
To Complete	(P)																									
TOTAL ASSETS	(C)	31	31	31	49	49	49	49	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF / 1 /98	FY 99 & PRIOR UNDELIVERED	UNFUNDED
	1. APPN -	53	0	0	12	41
	2. APPN -					
	3. PROCUREMENT LEADTIME	ADMIN 6	INITIAL ORDER 3 - 6 MOS	REORDER 3 - 6 MOS		

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT BREATHING APPARATUS								DATE February 1998	
APPROPRIATION/BUDGET ACTIVITY OPN BA 1: SHIPS SUPPORT EQUIPMENT								Installing Agent N/A									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR			
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY		
FY 1996								FY 1997									
FY 1998								FY 1999									
						CG-47 DDG 51 CV 63 (AIT)	5 3 1							DDG 51 AIT	3		

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA-1: SHIPS SUPPORT EQUIPMENT**	**P-1 ITEM NOMENCLATURE** COMMAND AND CONTROL SWITCHBOARDS 81GE ***BLI: 092500***
Program Element for Code B Items:	**OTHER RELATED PROGRAM ELEMENTS**

	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					**$6.8**	**$5.0**	**$9.8**	**$7.3**	**$5.5**	**$5.1**	**$5.2**		**$44.7**
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

The switchboard program provides mission critical switching capability required to link shipboard combat equipment including weapons, launchers, sensors, computers and navigation equipment. In essence, switchboards serve as the central connection point for most elements of combat and weapon systems, interior communications, data transfer, and command and control systems. They are designed to accommodate either analog or digital interfaces or a combination of both. In total, this budget item supports approximately 161 ships and 1,024 installed switchboards throughout the acquisition life cycle.

Functions include: data routing; action cutout; test and operating mode selection (including casualty back-up modes); power monitoring and control; circuit protection; peripheral equipment isolation; and signal processing, frequency conversion amplification and switching. In summary, the primary purpose is to provide systems intra and interface compatibility.

Changes in other elements of the combat and IC systems will frequently mandate either conjunctive modification to switchboards via ordnance alteration/field change or partial or complete replacement of existing switchboards. Typical switchboard mods include hardware/field change kits, ORDALT instructions, technical manual updates and revisions to other supporting documentation. Such changes are usually required subsequent to the initial installation, either in the same or later ship overhauls or availability. New Switchboards are normally installed during a regular overhaul by a shipyard.

Command and control switchboards are currently installed on and are required for almost all surface combatants and amphibious warfare ships. Individual switchboard unit cost varies from ship to ship, depending upon size, complexity, and whether analog or digital interfaces or some combination thereof are utilized. Modifications to existing switchboards via ORDALTs or Field Changes are quantified by kits or change packages rather than individual units. Switchboard hardware is normally procured by the Invitation for Bids (IFB) process, from manufacturers on Qualified Products List (QPL)-17000. There are currently six companies listed on QPL-17000. All contracts awarded are competitive, fixed price.

PUC GE001 - Reliability, Maintainability, & Availability (RMA): Evaluate product improvement proposals designed to improve switching capability and availability, upgrade unreliable components and replace obsolete parts and items no longer in production.

PUC GE002 - Incorporation of New Switching Technologies/MK 443/MK 70: Incorporation of new switching technologies and techniques that are to be applied to Command and Control & Interior Communications Switchboards and switching control devices. This line will also be used in the procurement of devices, such as the MK 443 touch screen microprocessor based Computer Switching Control Panel (CSCP). It will be used to address NAVSEA affordability issues, an expansion in the use of commercial-off-the-shelf (COTS) non-developmental item (NDI) and a decrease in life cycle costs.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # COMMAND AND CONTROL SWITCHBOARDS 81GE *BLI: 092500*

PUC GE003 - Design, TM & MODs: This line covers the non-recurring costs to modify an existing or prepare a new design drawing and spec package to implement the switching scheme necessary for a ship's switchboard to properly integrate all elements of the Combat System. The design package is used to procure hardware modification kits (ORDALTs or Field Changes) and contains one or more of the following:
- Build-to-print drawings used in the manufacturing of hardware items.
- Installation control drawings .
- System test procedures.
- Technical/tactical operation manuals.

Additionally, design engineering and kit development for unauthorized modifications to switchboard equipment will be covered under this line and will follow the criteria mentioned above to produce a drawing and spec package necessary to document the unauthorized change. The non-recurring costs associated with the design and production of the Microprocessor CSCP is not covered here but rather in PUC GE002.

PUC GE004, GE005, GE006, GE066, GE067, GE068, GE069: Provides for new switching requirements mandated in SHIPALTS, ORDALTS, and/or Warfare Improvement Plan (WIP)/Warfare Improvement Program Execution (WIPE) documents. Procure conjunctive switchboard ORDALTs. Engineering changes and field changes for various combat system element upgrades including ACDS, BFTT, CEC, RAIDS, RAM, SSDS, SPQ-9(B), SLQ 32 upgrade, EHF SATCOM, JTCS-A JOTS II, RADDS, enhanced OBT, C2P/JTIDS, INMARSAT, LAMPS MK III, DDI, NAVSSI and UYK 42 Upgrades. Additionally, this line allows for the procurement of ORDALTs resulting from engineering change proposals to fix equipment modified through unauthorized and/or undocumented switchboard modifications.

PUC GE830 - Production Engineering: Provide quality assurance oversight and burn-in testing of production switchboards and switching equipment. Monitor contractor compliance of manufacturing to as built drawings and delivery schedules.

PUC GE950 - This program supports material procurement of engineering solutions developed as part of the LHA Mid-life maintenance upgrade program. This program is a joint OPNAV, CINCLANTFLT, SURFLANT, CINCPACFLT, and SURFPAC initiative to resolve maintenance deficiencies, increase readiness, and reduce future maintenance costs enabling the ships to reach their service life.

PUC GEINS - Outyear installation funding identified supports installation of ORDALTs/enhancements/upgrades for command and control switchborards and new switchboards installed via ship alternations (SHIPALTs). This program also supports installation of engineering solutions developed as part of the LHA mid-life maintenance upgrade program. The budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD	
Other Procurement, Navy BA-1 SHIPS SUPPORT EQUIPMENT		A	COMMAND AND CONTROL SWITCHBOARDS 81GE BLI: 092500	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SURFACE WARFARE N86													
GE001	RMA	A						0			50			50
GE002	MK 443 / MK 70 / ICNET	A						360			800			0
GE003	C & C SWBDs Design, TM & MODs	A						2,267			1,811			1,309
GEINS	Installation							101			251			111
GE004	DDG 993 ORDALTs/Field Changes	A						75			15			0
GE005	CG 47/DDG 51 ORDALTS/Field Changes	A						35			143			175
GEINS	Installation							60			20			70
GE006	DD 963 SWBDs, ORDALTs/Field Changes	A						371			90			275
GEINS	Installation							75			63			0
GE066	CGN ORDALTs/Field Changes	A						25			12			0
GE067	LHA,LCC, LHD ORDALTs/Field Changes	A						70			230			428
GEINS	Installation							10			0			35
GE068	FFG SWBDs, ORDALTs/Field Changes	A						367			93			15
GEINS	Installation										82			88
GE069	CV/CVN ORDALTs/Field Changes	A						60			321			420
GEINS	Installation							43			35			0
GE830	Production Engineering	A						50			75			75
GE950	INTEGRATED VOICE NETWORK SYSTEM	A						2,791						6,377
GEINS	Installation										983			359
	Hardware							6471			3640			9124
	Installation							289			1434			663
TOTAL								**6,760**			**5,074**			**9,787**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN BA-1: SHIPS SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE COMMAND AND CONTROL SWITCHBOARDS	SUBHEAD 81GE

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY1997										
GE950										
INTERIOR VOICE NETWORK	1	2791	NAVSEA	4/97	GSA/FFP	GTE GOVERNMENT SYSTEMS/NEEDHAM HEIGHTS, MA.	1/98	9/98	YES	
FY1998										
GE002										
MK 443 CSCP	3	100	PHD NSWC	N/A	GSA/CPFF	SAIC_AMSEC/OXNARD	12/97	8/98	YES	
FY 1999										
GE950										
INTERIOR VOICE NETWORK	2	3188.5	NAVSEA	TSR - 11/98	GSA/FFP	GTE GOVERNMENT SYSTEMS/NEEDHAM HEIGHTS, MA.	1/99	1/00	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CV/CVN/LHA/LHD TYPE MODIFICATION: MODIFICATION TITLE: GE002

DESCRIPTION/JUSTIFICATION:

ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **Estimated RFP issue date 12-97**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																							0	0.0
EQUIPMENT									3	350.0					2	540.0	2	540.0	3	810.0			10	2240.0
EQUIPMENT NONRECURRING						250.0		360.0		450.0						290.0		200.0		300.0			0	1850.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST																							0	0.0
TOTAL PROCUREMENT	0	0	0	0	0	250	0	360	3	800	0	0	0	0	2	830	2	740	3	1110	0	0	10	4090.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **CV/CVN/LHD/LHA** MODIFICATION TITLE: GE002

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: 4 MONTHS PRODUCTION LEADTIME: 4 MONTHS
CONTRACT DATES: FY 1997: **N/A** FY 1998: Apr-98 FY 1999: N/A
DELIVERY DATE: FY 1997: **N/A** FY 1998: Aug-98 FY 1999: N/A

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0
FY 1995 EQUIPMENT																							0	0
FY 1996 EQUIPMENT																							0	0
FY 1997 EQUIPMENT																							0	0
FY 1998 EQUIPMENT									3	0													3	0
FY 1999 EQUIPMENT																							0	0
FY 2000 EQUIPMENT																							0	0
FY 2001 EQUIPMENT															2	0							2	0
FY 2002 EQUIPMENT																	2	170					2	170
FY 2003 EQUIPMENT																			3	255			3	255
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	0	10
Out	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	3	0	0	10

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: DDG 993 TYPE MODIFICATION: ORDALTs/Field Changes MODIFICATION TITLE: GE003/GE004

DESCRIPTION/JUSTIFICATION:

ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS					5	171.0	3	75.0															8	246.0
INSTALLATION KITS NONRECURRING						300.0		150.0		15.0													0	465.0
EQUIPMENT																							0	0.0
EQUIPMENT NONRECURRING																							0	0.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST																							0	0.0
TOTAL PROCUREMENT	0	0	0	0	5	471	3	225	0	15	0	0	0	0	0	0	0	0	0	0	0	0	8	711.0

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CG 47/ DDG 51 TYPE MODIFICATION: ORDALTs/Field Changes MODIFICATION TITLE: GE003/GE005

DESCRIPTION/JUSTIFICATION:

ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS					10	235.0	12	255.0	1	103.0	4	100.0	13	170.0	12	220.0	12	235.0	8	215.0			72	1533.0
INSTALLATION KITS NONRECURRING						500.0		324.0		527.0		424.0		284.0		224.0		394.0		124.0			0	2801.0
EQUIPMENT																							0	0.0
EQUIPMENT NONRECURRING																							0	0.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST																							0	0.0
TOTAL PROCUREMENT	0	0	0	0	10	735	12	579	1	630	4	524	13	454	12	444	12	629	8	339	0	0	72	4334.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **CG 47/DDG 51** MODIFICATION TITLE: GE003/GE005

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A
DELIVERY DATE: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0
FY 1995 EQUIPMENT																							0	0
FY 1996 EQUIPMENT					10	50																	10	50
FY 1997 EQUIPMENT							12	60															12	60
FY 1998 EQUIPMENT									1	20													1	20
FY 1999 EQUIPMENT											4	70											4	70
FY 2000 EQUIPMENT													13	90									13	90
FY 2001 EQUIPMENT													12	75									12	75
FY 2002 EQUIPMENT															12	95							12	95
FY 2003 EQUIPMENT																	8	50		0			8	50
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	10	6	6	0	0	1	0	0	4	0	0	0	12	13	0	0	0	12	0	0	0	0	8	0	0	0	0	0	0	0	72
Out	10	0	0	6	6	0	0	0	1	0	0	4	0	0	0	12	13	0	0	0	12	0	0	0	8	0	0	0	0	0	72

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: DD 963 TYPE MODIFICATION: ORDALTs/Field Changes MODIFICATION TITLE: GE003/GE006

DESCRIPTION/JUSTIFICATION:

ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS					15	100.0	15	75.0	6	15.0	13	175.0	7	90.0	2	60.0	4	120.0	5	140.0			67	775.0
INSTALLATION KITS NONRECURRING						300.0		300.0		285.0		175.0		50.0				25.0		275.0			0	1410.0
EQUIPMENT																							0	0.0
EQUIPMENT NONRECURRING																							0	0.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST																							0	0.0
TOTAL PROCUREMENT	0	0	0	0	15	400	15	375	6	300	13	350	7	140	2	60	4	145	5	415	0	0	67	2185.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **DD 963** MODIFICATION TITLE: GE003/GE006

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A
DELIVERY DATE: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0
FY 1995 EQUIPMENT																							0	0
FY 1996 EQUIPMENT					3	15			12														15	15
FY 1997 EQUIPMENT							5	75	10														15	75
FY 1998 EQUIPMENT									6	63													6	63
FY 1999 EQUIPMENT											13	0											13	0
FY 2000 EQUIPMENT													6	12	1	0							7	12
FY 2001 EQUIPMENT															2	0							2	0
FY 2002 EQUIPMENT																	4	0					4	0
FY 2003 EQUIPMENT																			5	0			5	0
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	3	2	3	0	0	0	28	0	0	13	0	0	0	0	6	0	3	0	0	0	0	4	0	5	0	0	0	0	0	0	67
Out	3	0	0	3	2	0	0	0	28	0	0	13	0	0	0	0	6	0	3	0	0	0	0	0	4	0	0	5	0	0	67

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CGN TYPE MODIFICATION: ORDALTs/Field Changes MODIFICATION TITLE: GE003/GE066

DESCRIPTION/JUSTIFICATION:

ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING						50.0		25.0		12.0													0	87.0
EQUIPMENT																							0	0.0
EQUIPMENT NONRECURRING																							0	0.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST																							0	0.0
TOTAL PROCUREMENT	0	0	0	0	0	50	0	25	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	87.0

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: LHA/LHD TYPE MODIFICATION: ORDALTs/Field Changes MODIFICATION TITLE: GE003/GE067

DESCRIPTION/JUSTIFICATION:

ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS					3	100.0	2	70.0	1	100.0	8	185.0	10	288.0	10	280.0	5	600.0	3	586.0			42	2209.0
INSTALLATION KITS NONRECURRING						800.0		500.0		456.0		668.0		895.0		833.0		800.0		730.0			0	5682.0
EQUIPMENT																							0	0.0
EQUIPMENT NONRECURRING																							0	0.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST										100.0													0	100.0
TOTAL PROCUREMENT	0	0	0	0	3	900	2	570	1	656	8	853	10	1183	10	1113	5	1400	3	1316	0	0	42	7991.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **LHA/LHD** MODIFICATION TITLE: GE003/GE067

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A
DELIVERY DATE: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0
FY 1995 EQUIPMENT																							0	0
FY 1996 EQUIPMENT					3	15																	3	15
FY 1997 EQUIPMENT							2	10															2	10
FY 1998 EQUIPMENT									1	0													1	0
FY 1999 EQUIPMENT											8	35											8	35
FY 2000 EQUIPMENT													10	0									10	0
FY 2001 EQUIPMENT															10	85							10	85
FY 2002 EQUIPMENT																	5	170					5	170
FY 2003 EQUIPMENT																			3	170			3	170
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	3	2	0	0	0	0	1	0	0	0	8	0	0	10	0	0	10	0	0	0	0	0	5	0	0	3	0	0	0	0	42
Out	3	0	0	0	2	0	0	0	1	0	0	0	8	0	0	0	10	0	0	10	0	0	0	0	5	0	0	3	0	0	42

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FFG TYPE MODIFICATION: ORDALTs/Field Changes MODIFICATION TITLE: GE068

DESCRIPTION/JUSTIFICATION:

ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS					13	95.0	12	90.0	14	4.0	6	0.0	6	45.0									51	234.0
INSTALLATION KITS NONRECURRING						250.0		250.0		9.0		15.0				10.0		15.0		15.0			0	564.0
EQUIPMENT																							0	0.0
EQUIPMENT NONRECURRING																							0	0.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST						90.0		127.0		80.0													0	297.0
TOTAL PROCUREMENT	0	0	0	0	13	435	12	467	14	93	6	15	6	45	0	10	0	15	0	15	0	0	51	1095.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **FFG** MODIFICATION TITLE: GE068

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A
DELIVERY DATE: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0
FY 1995 EQUIPMENT																							0	0
FY 1996 EQUIPMENT					13	0																	13	0
FY 1997 EQUIPMENT							12	0															12	0
FY 1998 EQUIPMENT									14	82													14	82
FY 1999 EQUIPMENT											6	88											6	88
FY 2000 EQUIPMENT															6	80							6	80
FY 2001 EQUIPMENT																							0	0
FY 2002 EQUIPMENT																							0	0
FY 2003 EQUIPMENT																							0	0
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	13	4	8	0	0	7	7	0	0	6	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	51
Out	13	0	0	6	6	0	0	0	14	0	0	0	6	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	51

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CV/CVN TYPE MODIFICATION: ORDALTs/Field Changes MODIFICATION TITLE: GE003/GE069

DESCRIPTION/JUSTIFICATION:

ORDALTs/ENHANCEMENTS/UPGRADES FOR C&C SWITCHBOARDS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS					10	250.0	12	300.0	2	152.0	11	270.0	13	315.0	12	540.0	8	675.0	6	640.0			74	3142.0
INSTALLATION KITS NONRECURRING						861.0		729.0		869.0		610.0		820.0		850.0		700.0		625.0			0	6064.0
EQUIPMENT																							0	0.0
EQUIPMENT NONRECURRING																							0	0.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST																							0	0.0
TOTAL PROCUREMENT	0	0	0	0	10	1111	12	1029	2	1021	11	880	13	1135	12	1390	8	1375	6	1265	0	0	74	9206.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **CV/CVN** MODIFICATION TITLE: GE003/GE069

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A
DELIVERY DATE: FY 1997: **N/A** FY 1998: N/A FY 1999: N/A

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0
FY 1995 EQUIPMENT																							0	0
FY 1996 EQUIPMENT					10	27																	10	27.4
FY 1997 EQUIPMENT							12	43															12	43
FY 1998 EQUIPMENT									2	35													2	35
FY 1999 EQUIPMENT											11	0											11	0
FY 2000 EQUIPMENT													13	0									13	0
FY 2001 EQUIPMENT															12	170							12	170
FY 2002 EQUIPMENT																	8	170					8	170
FY 2003 EQUIPMENT																			6	85			6	85
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	10	8	4	0	0	0	2	0	6	5	0	0	0	13	0	0	11	1	0	0	0	8	0	0	0	6	0	0	0	0	74
Out	10	0	0	8	4	0	0	0	2	0	0	0	11	0	0	13	0	0	0	1	11	0	0	0	8	0	0	0	6	0	74

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CV/CVN/LHA/LHD/DDG 51/DD 993/ DDG963/CG/ TYPE MODIFICATION: _____ MODIFICATION TITLE: GE001/GE830/GEINS

DESCRIPTION/JUSTIFICATION:

Reliability, Maintainability, & Availability (RMA): Evaluate product improvement proposals designed to improve switching capability and availability, upgrade unreliable components and replace obsolete parts and items no longer i production.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING						168.6		151.0		376.0		236.0		202.0		214.0		232.0		272.0			0	1851.6
EQUIPMENT																							0	0.0
EQUIPMENT NONRECURRING																							0	0.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST																							0	0.0
TOTAL PROCUREMENT	0	0	0	0	0	169	0	151	0	376	0	236	0	202	0	214	0	232	0	272	0	0	0	1851.6

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **RMA/PRODUCTION ENGINEERING/INSTALL** MODIFICATION TITLE: GE001/GE830/GEINS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1997: N/A FY 1998: N/A FY 1999: N/A
DELIVERY DATE: FY 1997: N/A FY 1998: N/A FY 1999: N/A

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0
FY 1995 EQUIPMENT																							0	0
FY 1996 EQUIPMENT																							0	0
FY 1997 EQUIPMENT																							0	0
FY 1998 EQUIPMENT																							0	0
FY 1999 EQUIPMENT																							0	0
FY 2000 EQUIPMENT																							0	0
FY 2001 EQUIPMENT																							0	0
FY 2002 EQUIPMENT																							0	0
FY 2003 EQUIPMENT																							0	0
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: LHA 1-5 AN/STC-1 REPLACEMENT TYPE MODIFICATION: MODIFICATION TITLE: GE950

DESCRIPTION/JUSTIFICATION:

LHA INTERIOR VOICE NETWORK - LHA MIDLIFE UPGRADE

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																							0	0.0
EQUIPMENT							1	2791.0			2	6377.0	1	2789.0									4	11957.0
EQUIPMENT NONRECURRING																							0	0.0
ENGINEERING CHANGE ORDERS																							0	0.0
DATA																							0	0.0
TRAINING EQUIPMENT																							0	0.0
SUPPORT EQUIPMENT																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
OTHER																							0	0.0
INTERIM CONTRACTOR SUPPORT																							0	0.0
INSTALL COST																							0	0.0
TOTAL PROCUREMENT	0	0	0	0	0	0	1	2791	0	0	2	6377	1	2789	0	0	0	0	0	0	0	0	4	11957.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **LHA 1-5 AN/STC-1 REPLACEMENT** MODIFICATION TITLE: GE950

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **Tiger Team**
ADMINISTRATIVE LEADTIME: 12 MONTHS PRODUCTION LEADTIME: 12 MONTHS
CONTRACT DATES: FY 1997: 1/98 FY 1998: N/A FY 1999: 1/99
DELIVERY DATE: FY 1997: 9/98 FY 1998: N/A FY 1999: 1/00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0
FY 1995 EQUIPMENT																							0	0
FY 1996 EQUIPMENT																							0	0
FY 1997 EQUIPMENT									1	983													1	983
FY 1998 EQUIPMENT												359											0	359
FY 1999 EQUIPMENT													1	1211	2	1049							3	2260
FY 2000 EQUIPMENT																							0	0
FY 2001 EQUIPMENT																							0	0
FY 2002 EQUIPMENT																							0	0
FY 2003 EQUIPMENT																							0	0
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Out	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	4

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT GE950 - LHA INTERIOR VOICE NETWORK	DATE Jan 1998

APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy
BA-1: SHIP SUPPORT EQUIPMENT

Installing Agent
TBD

1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
														LHA 1 (FY 97)	1
FY 1999								FY 2000							
										LHA 5 (FY 99)	1				

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT GE950 - LHA INTERIOR VOICE NETWORK								DATE **Jan 1998**	
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-1: SHIP SUPPORT EQUIPMENT**								Installing Agent **TBD**									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR			
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY		
FY 2001								FY 2002									
LHA 3 (FY99)	1	LHA 2 (FY 00)	1														
FY 2003																	

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY **OPN BA-1: Ships Support Equipment**								P-1 ITEM NOMENCLATURE/LINE ITEM # POLLUTION CONTROL EQUIPMENT (81HF/0935)					
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$126.5	$126.5	$149.7	$137.5	$25.2	$24.0	$27.5		$616.9
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

SHIPBOARD POLLUTION CONTROL SYSTEMS/EQUIPMENT: This item provides funds for the procurement of pollution control systems and equipment that are required by Navy ships in order for them to comply with international regulations, federal laws, DOD Directives and Navy environment protection regulations. These regulations, laws and directives restrict the discharge of oily wastes, sewage, solid waste, plastic waste, medical waste and hazardous waste. Most of these applicable regulations require Navy ships to comply by fixed deadline dates. Failure to comply carries potential personal, civil, and criminal liability, and significantly imposes constraints on the operational capabilities of Navy ships. In some instances, the compliance schedule has required an acceleration of the normal schedules in the procurement process.

HF016 - OIL CONTENT MONITORS (OCM) - These monitors will be installed aboard surface ships, including submarine tenders downstream of the oil water separator, to provide positive control of the overboard discharge from the OCM to ensure discharges do not exceed state, federal, and international environmental regulations. Installation of these OCMs will enable the fleet to comply with DOD Directive 6050.15 and OPNAVINST 5090.1. The IO for this is 151 with 129 being procured in prior year with the balance procured in subsequent years. 118 units have been installed. Total cost is $316.4.

HF019 - SEWAGE PUMPS (40 GPM) - ShipAlts DD 963K-688K/669K and DDG 993-229K provide for capability to collect gray water (plumbing waste from showers, laundry, space deck drains, sinks, scullery, etc.) an discharge it to pier side sewage facilities. Numerous state and federal authorities, and some foreign ports have levied restrictions on the overboard discharge of gray water on US Navy ships. Sewage pumping systems are required for these alterations. Each unit of issue cited herein consists of two (2) pumps, level controls, valves and fittings. The DD 963/DDG993 classes use 40 gpm pumps. The IO for this is 36, 36 units were procured in prior year. 33 units have been installed. The total cost is $37.0M.

HF019 - SEWAGE PUMPS (200 GPM) - ShipAlt LHA-1-692K provided for capability to collect gray water (plumbing waste from showers, laundry, space deck drains, sinks, scullery, etc.) and discharge it to pier side sewage facilities. Numerous state and federal, authorities, and some foreign ports have levied restrictions on the overboard discharge of gray water on US Navy ships. Sewage pumping systems are require for these alterations. Each unit of issue cited herein consists of two (2) pumps, level controls, valves and fittings. The LHA-1 classes use 200 gpm pumps. The IO for this is 10, 4 units were procured in prior years. The total cost is $15.9 M.

HF025 - METAL GLASS SHREDDER (MSG), LARGE PULPER (LP) AND SMALL PULPERS (SP) - These equipment will be installed on surface ships to reliably process shipboard non-plastic solid waste. This is a capability which does not currently exist. The pulpers are designed to pulp paper, cardboard and food waste into environmentally benigh slurry to be discharged. The MGS is designed to shred metal and glass waste into sinkable form which is discharged. The Navy has developed the pulpers and MGS to eliminate the possibility of having Navy ships' waste fouling the marine environment and exposed beaches. The FY97 National Defense Authorization Act allows for the use of pulpers and shredders to achieve compliance with MARPOL special area discharge regulations and requires full surface ship compliance by 31 December 2000. The Secretary of Navy submitted to Congress the Navy's Special-Area Compliance Plan in November, 1996.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OPN BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # POLLUTION CONTROL EQUIPMENT (81HF/0935)

MSG, LP AND SP CONTINUED - In this plan, the Navy committed to budget, procure and install solid waste pulpers and shredders on all warships the size of frigates and larger by 31 December, 2000. Milestone III Acquisition Decision Memorandum was signed in September 1996. The MGS and pulpers will be procured by best value competitive awards. The RFP for this procurement was released in February 1997 with planned contract award in November 1997. The Pulpers and Shredders will be installed on existing ships by K ShipAlt backfit starting in August 1998. They will be forward-fitted on new ship construction where applicable. The Inventory Objective for MGS is 169 units, for LP is 138 and SP is 39. Total program cost for procurement and installation, including installation design, is $274.1M

HF024 - CFC & HALON ELIMINATION PROGRAM - CFCs and Halons are two substances that have been implicated in the depletion of stratospheric ozone. Due to increased cancer rates resulting from ozone depletion, the production of CFC-based refrigerants (including CFC-11, CFC-12, and CFC-114) was prohibited after 31 DEC 95 by the Clean Air Act of 1990. Presidential Executive Order of 21 APR 93 calls for federal agencies to "maximize the use of safe alternatives to ozone-depleting substances". OPNAVINST 5909.1B dated 1 NOV 94 further requires the "reduction of the use and emission of (ozone-depleting substances) to the lowest achievable level". The Navy is currently dependent on CFC-based refrigerants for the mission-critical cooling of (1) vital electronics and weapon systems, (2) food and medical stowage, and (3) inhabited spaces aboard surface ships and submarines. To counter the immediate threat of production cessation on uninterrupted Fleet operations, DoD directed the Defense Logistics Agency to establish a stockpile of CFC-based refrigerants. This stockpile is sized to support Fleet operations until the last CFC-based systems are retired or converted to ozone-friendly refrigerants. In addition, the size of the stockpile was based on an assumed conversion schedule of shipboard air-conditioning and refrigeration systems. The CFC & Halon Elimination Team is now converting shipboard air-conditioning and refrigeration systems to ozone-friendly refrigerants. The CFC-12 conversion program, which will convert 1,038 systems, began in FY 94 and is expected to complete FY 01. To date, over 382 systems have been converted (37% of the total) and over 82 ships are "CFC-12 free". The CFC-114 program, which will convert approximately 583 systems, is expected to commence in FY 99 and complete in FY 08. The Team is also attempting to reduce overall shipboard consumption of refrigerants. Due to the dependence of shipboard, weapon, and support systems on refrigeration, an interruption in the conversion programs subjects the Navy to the risk of prematurely depleting the stockpile and, subsequently, significantly impairing Fleet operations. Total cost is approximately 468.6M equipment and install. 176 CFC-12 AC Backfit units have been installed and 206 CFC-12 Reefer Backfit units have been installed.

HF030 - PLASTIC WASTE PROCESSOR (PWP) - This equipment will be installed on surface ships to provide the capability, which does not currently exist to process food contaminated and other plastic waste into compact and sanitary solid blocks for onboard storage, subsequent offload and recycle ashore. Navy policy, national and international regulations prohibit ships from discharging plastic waste at sea (based on MARPOL Annex V, PL 100-200, and OPNAVINST 5090.11). Congress has mandated that the Navy complete installation of PWPs on 25% of the ships no later than 1 March 1997, 50% no later than 1 July 1997, 75% no later than 1 July 1998 and complete installations no later than December 1998. PWP equipment reduces the volume of plastic waste generated onboard ships approximately 30 times and eliminates a sanitation and odor condition. The PWP consists of 1, 2 or 3 Compress Melt Units (CMU) and 1 to 0 Plastic Waste Shredder. CMUs heat and compress the shredded plastic. Four types of PPs are being procured based on the processing capacity required for various ships. Type-A consists of 1 Plastic Waste Shredder and 3 CMUs; Type-B, 1 Shredder, 2 CMU's, Type-C, 2 CMU's, 0 Shredder and Type-D, a single CMU and no Shredder. Types of PWPs are combined for larger ships which require greater processing capacity. PWP equipment has completed RDT&E. Milestone III, Approval for Production, was granted in January 1995. PWP equipment is being procured by competitive awards (2 contracts) following K ShipAlt backfit installation or new ship construction where applicable. The procurement quantity is 245 units. 235 installations are included in the budget. 3 ships being decommissioned prior to the 31 Dec 1998 deadline are not receiving PWP installations. In addition, ship sponsors of 7 ships have decided to implement "3 day plans" in lieu of installing the PWP. These 7 ships decommission in FY99-FY03. Total revised cost is $231.8M.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # POLLUTION CONTROL EQUIPMENT 0935

PROGRAM DESCRIPTION/JUSTIFICATION:

SHORE BASED POLLUTION EQUIPMENT - (N452)
The Shorebased funds provide for equipment required to clean up Navy oil spills on the open sea as required by the Federal Waste Pollution Control Act - Public Law 92-500. The law created a National Oil and Hazardous Substance Pollution Contingency Plan, and designates the Department of Defense as one of the primary agencies responsible for promotion of effective operation of the plan. OPNAVINST 5090.1A and NAVSEAINST 4740.8A assign the Supervisor of Salvage the responsibility to provide technical expertise, resources, and equipment for cleaning Navy-originated spills of oil and other hazardous material in coastal waters or the open sea. Major items of procurement are:

HF040 Support Systems: These systems include those auxiliary systems required to keep the oil spill responders operating in the field. These systems include equipment required for command and control, communication, supply, personnel transfer craft, GPS asset tracking, repair, supply, offloading, deployment, demobilization, and other ancillary requirements of a spill response. Required I/O is 76.

HF042 Boom Tending Boats (Inflatable): Outboard powered inflatable boats 19' and 23' in length capable of operating in a wide variety of weather and sea conditions. These inflatable boats are better suited to open ocean operations than the rigid boats due to increased portability and operator safety. The boats are used for inspection and in-place maintenance of the moored boom systems and to provide for personnel and cargo transport throughout a spill response operations area. Required I/O is 22.

HF051 Oil Boom Systems: These systems consist of 2,000' of inflatable oil boom, or 750' of fireboom with protective hardware including all associated equipment required to store, inflate, deploy, recover, and repair the boom. The systems are packaged in 8' x 8' x 20' shipping containers. Required I/O is 52.

HF054 Beach Transfer Systems: These systems consist of an all-terrain tractor with trailer and two all-terrain vehicles with support equipment packaged in an 8' x 8' x 20' shipping container. The system transports equipment and materials to otherwise inaccessible soft beach and mud areas of a spill response. Required I/O is 8.

HF055 Salvage Skimmer Systems: These systems are a collection of small, special-purpose skimmers, containment boom, transfer pumps, storage tanks, sorbents, and ancillary equipment intended as a stand-alone response package for small, salvage-related spills inside and adjacent to ships or inland locations, or special remote tankers offloading locations. Required I/O is 21.

HF056 Equipment Clean-up Systems: These systems provide for the extensive cleaning of equipment prior to demobilization at a response site. The system provides a full array of all tools and materials required for efficient cleaning and demobilization of response assets. Required I/O is 8.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # POLLUTION CONTROL EQUIPMENT

HF057 Logistics Support Systems: Logistics Support Systems are used to assist in disposal of removed oil and debris. These systems include: vacuum systems, floating hose systems, oil bladder transfer systems, debris handling systems, bladder systems, incinerator systems, oil/water separator systems,steam generator

HF058 Arctic Oil Recovery Systems: This systems is designed to recover oil in an arctic environment where specific weather conditions render normal skimmer recovery methods useless. Required I/O is 6.

HF059 Boom Mooring Systems (Deep Water Extension): This system is used to extend the depth in which the existing boom mooring systems can be used from 200' to 600' allowing use of diversionary boom in deep water applications. Required I/O is 64.

HF060 Hot Tap Systems: Designed to allow penetration into tanks below the waterline. The hot tap is a system that secures a device to the hull, cuts through shell plating and allows installation of a valve to permit pumping. Two types are required Diver Deployable for shallow work and ROV Deployable for deployment at depth. This allows lightering or removal of oil from a vessel without tank access above the waterline. Required I/O is 10.

HF061 Viscous Oil Transfer Systems: Oil that weathers, emulsifies, or mixes with other contaminants will become thick and viscous to the point that regular centrifugal pumping systems will not move the oil. The viscous oil pumping system is a different type of pump with peripherals to allow the pumping of this type of oil. Required I/O is 28.

HF062 Submersible 6" Hydraulic Pumping Systems: This system allows the lightening of oil from tanks aboard ships whose transfer systems are inoperative. The size of the pump allows for insertion the tanks from topside access hatches. Required I/O is 33.

HF063 Vessel of Opportunity (VOSS) Skimming Systems: The VOSS is a skimming system which can be used aboard any vessel with enough deck space to support the operating equipment. It allows skimming capability in locations where traditional skimmers may not be practicable, such as offshore or in extremely inclement weather. It may be a belt, disk, wire or rope mop type skimmer. Required I/O is 14.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # POLLUTION CONTROL EQUIPMENT

HF064 Modular Barge Systems: This system creates a temporary storage capability for recovered oil. Oil can be transferred from skimmers as well as oil bladders further transfer to shoreside facilities or large tank barge. Oil can also be transferred between oil bladders. The systems also allows for deck spaces upon which to set up other support systems or barge sections to incorporate future support systems. Required I/O is 4.

HF065 Boarding Kits: This is designed to be placed aboard a vessel with no power or support services for personnel. It contains all the equipment necessary to support a team of salvors and pollution response personnel while working aboard a "dead" tanker. Required I/O is 10.

HR004 - BILGE PUMPS - These pumps are used to transfer only waste from the bilge to oily waste holding tanks when it can then be processed by the oil-water separator. the bilge pumps also allow bilge water to be pumped overboard through a deck riser while in port to permit offloading of bilge water to shore facilities. The IO for this is 25. Total cost is $1.64M.

HF830 - PRODUCTION ENGINEERING - The review and approval of any production contract technical document, or the separate development of this documentation to include Technical Manuals, PMS, Level III production drawings. Provisional Technical Documentation (PTD), Program Support Data (SPD), and Allowance Parts Lists (AL's); Engineering in support of final design reviews. This work can be accomplished by NSWC, PHILA and the in-service engineering agent, other Naval Activities or contractors as appropriate.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5			WEAPON SYSTEM		February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN BA:1 SHIPS SUPPORT EQUIPMENT		ID Code	POLLUTION CONTROL EQUIPMENT		81HF/0935

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SOLID WASTE													
HF030	PLASTIC WASTE PROCESSOR *	A												
	PWP-TYPE A					20	*	$6,759						
	PWP-TYPE B					49	*	$10,759						
	PWP-TYPE C					26	*	$4,265						
	PWP-TYPE D													
HF830	PRODUCTION ENGINEERING	A						$2,500			$4,638			$1,768
HF025	PULPERS & SHREDDERS	A												
	METAL GLASS SHREDDERS								101	*	$5,856	68	*	$3,783
	LARGE PULPERS								86	*	$8,406	52	*	$4,861
	SMALL PULPERS								21	*	$1,733	18	*	$1,244
	SUBTOTAL SOLID-WASTE					95		24,283	208		20,633	138		11,656
	NON-SOLID WASTE													
HF019	200 GPM SEWAGE PUMP	A				4	77	$308	2	78,500	$157			
HF016	OIL CONTENT MONITOR	A												
HF024	CFC-12 (R-12) AC BACKFIT	A				16	35.0	$560	9	46,111	$415	3	35,000	$105
HF024	CFC-12 (R-12) REEFER BACKFIT	A				16	30.6	$490	103	36,456	$3,755	45	37,133	$1,671
HF024	CFC-114 (R-114) AC BACKFIT	A							20	250,650	$5,013	21	289,760	$6,085
HF125														
HF830	PRODUCTION ENGINEERING	A						$123			$1,371			$899
	SUBTOTAL NON-SOLID WASTE							$1,481			$10,711			$8,760
	SUBTOTAL SEA 03L							$25,764			$31,344			$20,416
TOTAL								**25,764**			**31,344**			**20,416**

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIPS SUPPORT EQUIPMENT		ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD Pollution Control Equipment	(81HF/0935)

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	B. SHOREBASED - (N452)													
HF040	Support Systems	A				3	83.3	250	4	87	348	2	89	178
HF042	Boom Tend Boats (Inflatable)	A				1	90	90				2	96	192
HF051	Oil Boom Systems	A				4	239.8	959	5	241.2	1,206	3	244	732
HF054	Beach Transfer Systems	A							1	63	63	2	68	136
HF055	Salvage Skimmer Systems	A				1	88	88				2	100	200
HF056	Equipment Clean-up Systems	A				1	95	95	1	95	95			
HF057	Logistics Support Systems	A				3	168	504	3	172	516	3	176	528
HF058	Arctic Oil Recovery Systems	A				1	350	350	1	361	361			
HF059	Boom Mooring Systems	A				13	9,769	127	16	10.3	165	16	11	176
HF060	Hot Tap Systems	A							1	234	234			
HF061	Viscous Oil Transfer Systems	A							2	105	210			
HF062	Submersible 6" Hyd Pump Sys	A							2	74	148	1	75	75
HF063	VOSS Skimmer Systems	A												
HF064	Modular Barge Systems	A										1	608	608
TOTAL								**2,463**			**3,346**			**2,825**

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN BA:1 SHIPS SUPPORT EQUIPMENT		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD POLLUTION CONTROL EQUIPMENT (81HF/0935)	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SUBTOTAL SEA 00C							$2,463			$3,346			$2,825
	SUBTOTAL SEA 03L							$25,764			$31,344			$20,416
	GRAND TOTAL EQUIPMENT							$28,227			$34,690			$23,241
	GRAND TOTAL INSTALL							$98,310			$91,846			$126,428
TOTAL								**126,537**			**126,536**			**149,669**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy (OPN BA 1: SHIPS SUPPORT EQUIPMENT	POLLUTION CONTROL EQUIPMENT (0935)	81HF

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 97										
(HF019)										
SEWAGE PUMP										
(200 GPM)	4	$77,000	SPCC, MECH, PA		RCP/OPTION	SCOTT PUMP	FEB 97	AUG 98	YES	
(HF024)										
CFC 12 AC/BF (1)	16	$35,000	NAVSEA		WR	NSWC PHILA	FEB 97	NOV 97	YES	
CFC 12 REEFER (1)	16	$30,625	NAVSEA		WR	NSWC PHILA	FEB 97	FEB 98	YES	
(HF030)										
PLASTIC WASTE										
PROCESSOR										
PWP TYPE A	10	$361,212	NAVSEA		FP/OPT	UNIV TECH, TN	NOV 96	JUL 97	YES	
PWP TYPE B	23	$233,599	NAVSEA		FP/OPT	UNIV TECH, TN	NOV 96	JUL 97	YES	
PWP TYPE C	16	$167,383	NAVSEA		FP/OPT	UNIV TECH, TN	NOV 96	JUL 97	YES	
PWP TYPE A	10	$314,756	NAVSEA		FP/OPT	WESTHSE ELEC, CA	NOV 96	JUL 97	YES	
PWP TYPE B	26	$207,159	NAVSEA		FP/OPT	WESTHSE ELEC, CA	NOV 96	JUL 97	YES	
PWP TYPE C	10	$158,719	NAVSEA		FP/OPT	WESTHSE ELEC, CA	NOV 96	JUL 97	YES	

D. REMARKS

(1) UNIT PRICE OF CONVERSION KITS VARIES WITH SHIP CLASS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIPS SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE Pollution Control Equipment (0935)	SUBHEAD 81HF

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR (97)										
HF040 Support Systems	3	83,333	NAVSEA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	08/97	YES	
HF042 Boom Tend Boats	1	90,000	NAVSEA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	09/97	YES	
HF051 Oil Boom Systems	4	239,750	NAVSEA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	08/97	YES	
HF055 Salv Skimmer Sys	1	88,000	NAVSEA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	08/97	YES	
HF056 Equip Cln-up Sys	1	95,000	NAVSEA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	08/97	YES	
HF057 Logistics Spt Sys	3	168,000	NAVSEA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	06/97	YES	
HF058 Arctic Oil Recvy Sys	1	350,000	NAVSEA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	07/97	YES	
HF059 Boom Mooring Sys	13	9,769	NAVSEA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	08/97	YES	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE		SUBHEAD
Other Procurement, Navy OPN BA 1: SHIPS SUPPORT EQUIPMENT	POLLUTION CONTROL EQUIPMENT (0935)		81HF

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 98										
(HF024)										
CFC 12 AC/BF (1)	9	$46,111	NSWC PHILA, PA		RCP	UNKNOWN	FEB 98	NOV 99	YES	
CFC 12 REEFER (1)	103	$36,456	NSWC PHILA, PA		RCP	UNKNOWN	FEB 98	FEB 99	YES	
CFC 114 BACKFIT	20	$250,650	NAVSEA	20-Jun-97	FFP	UNKNOWN	FEB 98	JUL 98	YES	
(HF019)										
SEWAE PUMP										
(200 GPM)	2	$78,500	SPCC, MECH, PA		RCP/OPTION	SCOTT PUMP	FEB 98	AUG 99	YES	
(HF025)										
LARGE PULPER	46	$98,532	NAVSEA		C/FP	UNIV TECH, TN	NOV 97	JUL 98	YES	
	40	$96,822	NAVSEA		C/FP	FREQ ENG LAB	NOV 97	JUL 98	YES	
SMALL PULPER	11	$61,119	NAVSEA		C/FP	UNIV TECH, TN	NOV 97	JUL 98	YES	
	10	$106,097	NAVSEA		C/FP	FREQ ENG LAB	NOV 97	JUL 98	YES	
METAL GLASS SHREDDER	101	$57,984	NAVSEA		C/FP	FREQ ENG LAB	NOV 97	JUL 98	YES	

D. REMARKS

(1) UNIT PRICE OF CONVERSION KITS VARIES WITH SHIP CLASS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy OPN BA 1: SHIPS SUPPORT EQUIPMENT	POLLUTION CONTROL EQUIPMENT (0935)	81HF

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 99										
(HF024)										
CFC 12 AC/BF (1)	3	$35,000	NSWC PHILA, PA		RCP	UNKNOWN	FEB 99	NOV 00	YES	
CFC 12 REEFER (1)	45	$37,133	NSWC PHILA, PA		RCP	UNKNOWN	FEB 99	FEB 00	YES	
CFC 114 AC BACKFIT	21	$289,760	NAVSEA		FFP	UNKNOWN	DEC 98	SEP 99	YES	
(HF025)										
LARGE PULPER	26	$102,897	NAVSEA		C/FP	UNIV TECH, TN	APR 99	OCT 99	YES	
	26	$84,080	NAVSEA		C/FP	FEEQ ENG LAB	APR 99	OCT 99	YES	
SMALL PULPER	9	$69,660	NAVSEA		C/FP	UNIV TECH, TN	APR 99	OCT 99	YES	
	9	$68,539	NAVSEA		C/FP	FEEQ ENG LAB	APR 99	OCT 99	YES	
METAL GLASS SHREDDER	68	$55,630	NAVSEA		C/FP	FREQ ENG LAB	APR 99	OCT 99	YES	

D. REMARKS

(1) UNIT PRICE OF CONVERSION KITS VARIES WITH SHIP CLASS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-1: SHIPS SUPPORT EQUIPMENT	Pollution Control Equipment (0935)	81HF

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR (98)										
HF040 Support Systems	4	87,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/97	07/98	YES	
HF051 Oil Boom Systems	5	241,200	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/97	09/98	YES	
HF054 Beach Trans Sys	1	63,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	01/98	07/98	YES	
HF056 Equip Cln-up Sys	1	95,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/97	09/98	YES	
HF057 Logistics Spt Sys	3	172,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/97	09/98	YES	
HF058 Artic Oil Rcvy Sys	1	361,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/97	09/98	YES	
HF059 Boom Mooring Sys	16	10,312	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/97	05/98	YES	
HF060 Hot Tap Systems	1	234,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/97	09/98	YES	
HF061 Viscous Oil Trans Sys	2	105,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/97	08/98	YES	
HF062 Sub 6" Hyd Pump Sys	2	74,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/97	08/98	YES	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-1: SHIPS SUPPORT EQUIPMENT	Pollution Control Equipment (0935)	81HF

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR (99)										
HF040 Support Systems	2	89,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/98	09/99	YES	
HF042 Boom Tend Boats (Inflat)	2	96,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/98	08/99	YES	
HF051 Oil Boom Systems	3	244,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	11/98	09/99	YES	
HF054 Beach Trans Sys	2	68,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/98	07/99	YES	
HF055 Salv Skimmer Sys	2	100,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/98	09/99	YES	
HF057 Logistics Spt Sys	3	176,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/98	08/99	YES	
HF059 Boom Mooring Sys	16	11,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/98	03/99	YES	
HF062 Sub 6" Hyd Pump Sys	1	75,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/98	08/99	YES	
HF064 Modular Barge Sys	1	608,000	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	10/98	07/99	YES	

D. REMARKS

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 1998					
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**			Weapon System			P-1 ITEM NOMENCLATURE 81HF/ **0935**					
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
PLASTIC WASTE	UNIVERSAL TECH						9 mos	7 mos		ea
PROCESSORS										
	WESTINGHOUSE						9 mos	7 mos		ea

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1997												FISCAL YEAR 1998										BAL
						1996			CALENDAR YEAR 1997										CALENDAR YEAR 1998										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
A UNIV TECH INC			35	9	26	2	2	2	2	2	2	2	2	0	3	3	3	1	0										
A WESTINGHOUSE			36	12	24	2	2	2	2	2	2	2	0	0	3	3	3	1											
B UNIV TECH INC			52	10	42	3	3	3	2	2	2	3	1	0	3	3	3	3	3	3	3	2	0						
B WESTINGHOUSE			47	15	32	2	1	2	1	0	0	0	0	0	3	3	3	3	3	3	3	3	2	0	0	0	0		
C UNIV TECH INC			40	11	29	2	2	2	3	2	2	0	0	0	3	3	3	3	3	1	0								
C WESTINGHOUSE			31	14	17	0	2	2	3						3	3	3	1											
D UNIV TECH INC			2	0	2	0				2																			
D WESTINGHOUSE			2	0	2	0				2																			

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1999												FISCAL YEAR 2000										BAL
						1998			CALENDAR YEAR 1999										CALENDAR YEAR 2000										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks:

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21					DATE **February 1998**	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY BA 1**			Weapon System		P-1 ITEM NOMENCLATURE POLLUTION CONTROL EQUIPMENT (0935)	
		Production Rate			Procurement Leadtimes	
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
HF025 METAL GLASS SHREDDER	FREQ ENG LAB				0	12	8		20	MONTH

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1997												FISCAL YEAR 1998										BAL
						1996			CALENDAR YEAR 1997										CALENDAR YEAR 1998										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
BASE CONTRACT																														
METAL GLASS SHREDDER	98		101	0	101														A								2	4	6	89

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1999												FISCAL YEAR 2000										BAL
						1998			CALENDAR YEAR 1999										CALENDAR YEAR 2000										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
BASE CONTRACT (CONT)																														
METAL GLASS SHREDDER	98					6	6	6	7	8	8	8	8	8	8	8	8													0
OPTION 1																														
METAL GLASS SHREDDER	99		68	0	68							A						6	6	6	6	6	6	6	6	6	6	6	2	0

Remarks:

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21						DATE **February 1998**					
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY BA 1**				Weapon System		P-1 ITEM NOMENCLATURE POLLUTION CONTROL EQUIPMENT (0935)					
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
HFO25 LARGE PULPER	VENDOR A Univ Tech, TN				0	12	8		20	MONTH	
HFO25 LARGE PULPER	VENDOR B Frequ Eng Lab				0	12	8		20	MONTH	
HFO25 SMALL PULPER	VENDOR A Univ Tech, TN				0	12	8		20	MONTH	
HFO25 SMALL PULPER	VENDOR B Frequ Eng Lab				0	12	8		20	MONTH	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1997												FISCAL YEAR 1998										BAL
						1996			CALENDAR YEAR 1997										CALENDAR YEAR 1998										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
BASE CONTRACT																													
LARGE PULPER VENDOR A	98		43	0	43														A							1	2	3	37
LARGE PULPER VENDOR B	98		43	0	43														A							1	2	3	37
SMALL PULPER VENDOR A	98		11	0	11														A							1	0	1	9
SMALL PULPER VENDOR B	98		10	0	10														A							0	1	0	9

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1999												FISCAL YEAR 2000										BAL
						1998			CALENDAR YEAR 1999										CALENDAR YEAR 2000										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
BASE CONTRACT (CONT)																													
LARGE PULPER VENDOR A	98					3	3	3	3	3	3	3	3	3	3	3	4													0
LARGE PULPER VENDOR B	98					3	3	3	3	3	3	3	3	3	3	3	4													0
SMALL PULPER VENDOR A	98					0	1	0	1	0	1	1	1	1	1	1	1													0
SMALL PULPER VENDOR B	98					1	0	1	0	1	0	1	1	1	1	1	1													0
OPTION 1																													
LARGE PULPER VENDOR A	99		26									A						3	3	2	2	2	2	2	2	2	2	2	2	0
LARGE PULPER VENDOR B	99		26									A						3	3	2	2	2	2	2	2	2	2	2	2	0
SMALL PULPER VENDOR A	99		9									A						1	1	1	1	1	1	1	0	1	0	1	0	0
SMALL PULPER VENDOR B	99		9									A						1	1	1	1	1	1	0	1	0	1	0	1	0

Remarks:

CLASSIFICATION: **UNCLASSIFIED** February 1998

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: METAL GLASS SHREDDER TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Process Metal and Glass for disposal overboard

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA $ MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT									101	5.9	68	3.8											169	9.7
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						0.2		0.2	6	8.1	72	29.4	86	27.5	5	1.6							169	67.0
TOTAL PROCUREMENT						0.2		0.2		14.0		33.2		27.5		1.6								76.7

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **METAL GLASS SHREDDER** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIPYARD**
ADMINISTRATIVE LEADTIME: 12 Months PRODUCTION LEADTIME: 8 Months
CONTRACT DATES: FY 1997: FY 1998: NOV 97 FY 1999: APR 99
DELIVERY DATE: FY 1997: FY 1998: JUL 98 FY 1999: OCT 99

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT					AP	0.2	AP	0.2	6	7.5	72	25.2	23	7.0									101	40.1
FY 1999 EQUIPMENT									AP	0.6	AP	4.2	63	20.5	5	1.6							68	26.9
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	6	8	30	17	17	23	29	18	16	5	0	0	0	0	0	0	0	0	0	0	0		169
Out	0	0	0	0	0	0	0	0	0	6	8	30	17	17	23	29	18	16	5	0	0	0	0	0	0	0	0	0	0		169

PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: **UNCLASSIFIED** February 1998

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: LARGE SOLID WASTE PULPER TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Process food, paper and other plastic waste for disposal overboard.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **FINANCIAL PLAN: (TOA $ MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT									86	8.4	52	4.9											138	13.3
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						0.2		0.5	6	16.6	61	61.6	67	58.0	4	2.3							138	139.2
TOTAL PROCUREMENT						0.2		0.5		25.0		66.5		58.0		2.3								152.5

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **LARGE SOLID WASTE PULPER** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIPYARD**
ADMINISTRATIVE LEADTIME: 12 Months PRODUCTION LEADTIME: 8 Months
CONTRACT DATES: FY 1997: FY 1998: NOV 97 FY 1999: APR 99
DELIVERY DATE: FY 1997: FY 1998: JUL 98 FY 1999: OCT 99

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT					AP	0.2	AP	0.5	6	15.3	61	50.8	19	17.1									86	83.9
FY 1999 EQUIPMENT									AP	1.3	AP	10.8	48	40.9	4	2.3							52	55.3
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	6	8	25	15	13	19	24	15	9	4	0	0	0	0	0	0	0	0	0	0	0		138
Out	0	0	0	0	0	0	0	0	0	6	8	25	15	13	19	24	15	9	4	0	0	0	0	0	0	0	0	0	0		138

PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SMALL SOLID WASTE PUPLER TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Process Food, paper and other Non Plastic Waste for disposal overboard.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA $ MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT									21	1.7	18	1.2											39	2.9
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT *																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST										2.0	14	10.7	24	14.2	1	0.7							39	27.6
TOTAL PROCUREMENT										3.7		11.9		14.2		0.7								30.5

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **SMALL SOLID WASTE PULPER** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIPYARD**
ADMINISTRATIVE LEADTIME: 12 Months PRODUCTION LEADTIME: 8 Months
CONTRACT DATES: FY 1997: FY 1998: NOV 97 FY 1999: APR 99
DELIVERY DATE: FY 1997: FY 1998: JUL 98 FY 1999: OCT 99

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT									AP	1.7	14	8.2	7	3.1									21	13.0
FY 1999 EQUIPMENT									AP	0.3	AP	2.5	17	11.1	1	0.7							18	14.6
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	6	4	4	7	6	3	8	1	0	0	0	0	0	0	0	0	0	0	0		39
Out	0	0	0	0	0	0	0	0	0	0	0	6	4	4	7	6	3	8	1	0	0	0	0	0	0	0	0	0	0		39

THE TOTAL PROGRM QUANTITY REFLECTS THE
INVNETORY OBJECTIVE FOR THIS ITEM.

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: H2S SENSORS TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

H2S Gas Detection meet safety requirements

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A** **FINANCIAL PLAN: (TOA $ MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	397	1.6																					397	1.6
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST	16	0.4	150	4.4	118	3.7																	284	8.5
TOTAL PROCUREMENT		2.0		4.4		3.7																		10.1

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **H2S SENSORS**
H2S Gas Detection meet safety requirements

MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIPYARD**
ADMINISTRATIVE LEADTIME: 9 Months
PRODUCTION LEADTIME: 9 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	**16**	**0.4**	**150**	**4.4**	**118**	**3.7**																	**284**	**8.5**
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	284
Out	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	284

CLASSIFICATION: **UNCLASSIFIED** February 1998

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SEWAGE PUMP/GREYWATER (200 GPM) TYPE MODIFICATION: _____ MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Collect Greywater Waste from showers, laundry and discharge it to pierside sewage facilities

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA $ MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	2	0.4	0.0	0.0	2	0.2	4	0.3	2	0.2													10	1.1
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST						0.5	2	3.0	2	3.0	2	2.7		0.0		0.0					4	5.1	10	14.3
TOTAL PROCUREMENT		0.4				0.7		3.3		2.8		2.7		0.0		0.0								15.3

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **SEWAGE PUMP/GREYWATER (200 GPM)** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIPYARD**
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1997: **FEB 97** FY 1998: FEB 98 FY 1999:
DELIVERY DATE: FY 1997: **AUG 98** FY 1998: AUG 99 FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS					AP	0.5	2	3.0													0	0	2	3.5
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT									2	2.6													2	2.6
FY 1997 EQUIPMENT										0.4	2	2.7									2	2.9	4	6
FY 1998 EQUIPMENT																					2	2.3	2	2.3
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	2	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10
Out	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4	10

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SEWAGE PUMP/GREYWATER (40GPM) TYPE MODIFICATION: _____ MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Collect Greywater (Plumbing Waste from Showers, etc.) & discharge it to pierside sewage facilities.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A** **FINANCIAL PLAN: (TOA $ MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	36	2.2																					36	2.2
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST	33	32.7			3	1.9	AP	0.2	0	0.0														34.8
TOTAL PROCUREMENT		34.9				1.9		0.2		0.0													36	37.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **SEWAGE PUMP/GREYWATER (40GPM)** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIPYARD**
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS			**33**	**32.7**	3	1.9	AP	0.2	0	0													36	34.8
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

NOTE: AP spent in FY97 on DD-974. FY98 install cancelled in September 97 due to decom in 1998.

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Out	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: C100 OIL/WATER SEPARATOR TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Removes Oil from Oily Bilge Water to meet discharge regulations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A** **FINANCIAL PLAN: (TOA $ MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT			6	0.2	21	0.6																	27	0.8
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST					2	0.05	4	4.8	10	12.3	6	9.1	5	9.8									27	36.1
TOTAL PROCUREMENT				0.2		0.7		4.8		12.3		9.1		9.8										36.9

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **C100 OIL/WATER SEPARATOR** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT / SHIPYARD**
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 15 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0.0
FY 1995 EQUIPMENT					2	0.05	4	4.8															6	4.849
FY 1996 EQUIPMENT									10	12.3	6	9.1	5	4.24									21	25.64
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	2	0	2	2	0	4	2	2	2	0	0	4	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Out	2	0	0	2	2	0	0	0	0	0	6	2	2	0	0	4	2	5	0	0	0	0	0	0	0	0	0	0	0	0	27

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: OIL CONTENT MONITOR TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Monitor Oil Content of Oil/Water Separator Effiuent

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA $ MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	111	0.3	18	0.2	24	0.3																	153	0.8
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST			62	4.0	14	0.9	33	2.4	24	1.6	8	0.3	10	0.2							2	0.1	153	9.40
TOTAL PROCUREMENT		0.3		0.2		1.2		2.4		1.6		0.3		0.2										6.20

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **OIL CONTENT MONITOR** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT / SHIPYARD**
ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: 16 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	62	1			14	0.9	33	2.4	2	0.2													111	4.3
FY 1995 EQUIPMENT									18	0.98													18	0.98
FY 1996 EQUIPMENT									4	0.5	8	0.3	10	0.2							2	0.1	24	1.0
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	109	0	0	0	0	7	8	7	2	0	6	2	0	2	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	153
Out	109	0	0	0	0	7	8	7	2	0	6	2	0	2	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	153

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CFC-12 AC BACKFIT TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Modifies CFC-12 AC Units on most surface ship classed to O Zone - Friendly HFC 134A.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A** **FINANCIAL PLAN: (TOA $ MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	92	4.5	80	2.5	62	2.3	16	0.6	9	0.4	3	0.1									93	3.1	355	13.5
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST	68	2.4	74	3.0	17	0.5	31	1.8	53	2.4	16	0.4	3	0.2							93	5.5	355	16.2
TOTAL PROCUREMENT		6.9		5.5		2.8		2.4		2.8		0.5		0.2									0	21.1

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **CFC-12 AC BACKFIT** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 9 Months
CONTRACT DATES: FY 1997: **FEB 97** FY 1998: FEB 98 FY 1999: FEB 99
DELIVERY DATE: FY 1997: **NOV 97** FY 1998: NOV 99 FY 1999: NOV 00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	**68**	**2.4**	**24**	**1.3**																			92	3.7
FY 1995 EQUIPMENT			**50**	**1.9**	17	0.5	13	0.9															80	3.3
FY 1996 EQUIPMENT							18	0.9	44	1.6													62	2.5
FY 1997 EQUIPMENT									9	0.8	7	0.2											16	0.2
FY 1998 EQUIPMENT											9	0.2											9	0.2
FY 1999 EQUIPMENT													3	0.2									3	0.2
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																					93	5.5	355	15.6

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	159	7	7	7	10	8	12	18	15	6	6	4	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	93	355
Out	159	7	7	7	10	8	12	18	15	6	6	4	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	93	355

CLASSIFICATION: **UNCLASSIFIED** February 1998

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CFC-12 REEFER UNIT CONVERSION TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A**

FINANCIAL PLAN: (TOA $ MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	90	1.6	80	2.5	107	2.8	16	0.5	103	3.8	45	1.7	29	0.9							211	10.0	681	23.8
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST	35	1.0	64	1.7	93	0.9	85	4.6	119	3.4	30	3.7	44	4.9							211	14.6	681	34.8
TOTAL PROCUREMENT		2.6		4.2		3.7		5.1		7.2		5.4		5.8								24.6		58.6

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **CFC-12 REEFER UNIT CONVERSION** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION: **AIT**
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: Feb 97 FY 1998: Feb 98 FY 1999: Feb 99
DELIVERY DATE: FY 1997: Feb 98 FY 1998: Feb 99 FY 1999: Feb 00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	**35**	**1**	**55**	**1.5**																			90	2.5
FY 1995 EQUIPMENT			**9**	**0.2**	71	2.2																	80	2.4
FY 1996 EQUIPMENT					22	0.8	85	4.6															107	5.4
FY 1997 EQUIPMENT									16	0.8													16	0.8
FY 1998 EQUIPMENT									103	2.6	0	0.0											103	2.6
FY 1999 EQUIPMENT											30	3.7	15	2.6									45	6.3
FY 2000 EQUIPMENT													29	2.3									29	2.3
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																					211	15	681	36.9

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	192	21	21	21	22	29	29	29	32	7	7	7	9	14	10	10	10	0	0	0	0	0	0	0	0	0	0	0	0	211	681
Out	192	21	21	21	22	29	29	29	32	7	7	7	9	14	10	10	10	0	0	0	0	0	0	0	0	0	0	0	0	211	681

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CFC-114 AC UNIT CONVERSION TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Modifies CFC-114 AC Units

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **N/A** **FINANCIAL PLAN: (TOA $ MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT									20	5.0	21	6.1	44	11.2	23	6.9	30	12.7	35	11.0	387	118.6	560	171.5
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																					2	0.6	2	0.6
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST									4	3.1	16	6.3	21	7.7	44	11.8	23	8.1	30	12.5	424	130.2	562	179.7
TOTAL PROCUREMENT										5.0		6.1		11.2		6.9		12.7		11.0		118.6		351.2

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **CFC-114 AC UNIT CONVERSION** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **Shipyard**
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 9 Months
CONTRACT DATES: FY 1997: FY 1998: FEB 98 FY 1999: DEC 98
DELIVERY DATE: FY 1997: FY 1998: JUL 98 FY 1999: SEP 99

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT									4	3.1	16	6.3											20	9.4
FY 1999 EQUIPMENT													21	7.7									21	7.7
FY 2000 EQUIPMENT															44	11.8							44	11.8
FY 2001 EQUIPMENT																	23	8.1					23	8.1
FY 2002 EQUIPMENT																			30	12.5			30	12.5
FY 2003 EQUIPMENT																					35	###	35	15.0
TO COMPLETE																					389	130.2		64.5

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	4	4	4	4	4	17	4	0	0	0	11	19	14	0	7	11	5	3	16	11	0	424	562
Out	0	0	0	0	0	0	0	0	4	4	4	4	4	17	4	0	0	0	11	19	14	0	7	11	5	3	16	11	0	424	562

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 10NP OIL WATER SEPARATOR TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Remove Oil from Bilge water can be discharged overboard within Environmental Regulations

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA $ MILLIONS)

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	323	32																					323	32.0
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST					320	6.0	3	2.1															323	8.1
TOTAL PROCUREMENT		32.0		0.0		6.0		2.1		0.00		0.0		0.0										40.1

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **10NP OIL WATER SEPARATOR** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT SHIPYARD**
ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	**313**				7	6.0	3	2.1															323	8.1
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	320	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	323
Out	320	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	323

I.O. 13 P-3A

INSTALLATION EXHIBITS DO NOT ACCOUNT FOR THE 2 ASSETS. ALL UNITS PROCURED 94 & PRIOR SURPLUS DUE TO DECOMMISSIONING OF SHIP AFTER CONTRACT AWARD. SURPLUS USED AS SPARE.

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: C50 OIL/WATER SEPARATOR TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Removes Oil from Bilge Water so water can be discharged overboard within environmental regulations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **FINANCIAL PLAN: (TOA $ MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	6	0.1																					6	0.1
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST							4	1.7			2	1.0											6	2.7
TOTAL PROCUREMENT	6	0.1	0	0.0				1.7				1.0												2.8

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **C50 OIL/WATER SEPARATOR** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT / SHIPYARD**
ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS							4	1.7			2	1.0											6	2.7
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

CLASSIFICATION: **UNCLASSIFIED** February 1998

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: BILGE PUMP TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION:

Transfer olly Bilge Water From Bilge well to Oily Waste Holding Tanks for processing by the OWS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **FINANCIAL PLAN: (TOA $ MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	13	0.2																			12	0.2	25	0.4
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST					4	0.4	5	0.5	4	0.3											12	1.20	25	2.39
TOTAL PROCUREMENT		0.2				0.4		0.5		0.3														2.79

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **BILGE PUMP** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT SHIPYARD**
ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS					4	0.44	5	0.5		0.3													9	1.2
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																					12	1.2	12	1.2

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	4	0	2	2	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	25
Out	0	0	4	0	0	0	2	2	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	25

*** 15 units to be installed under shipalt 8434/35 (C100 Program)**

CLASSIFICATION: **UNCLASSIFIED** February 1998

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: PLASTIC WASTE PROCESSOR TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

DESCRIPTION/JUSTIFICATION: N/A

Process Food, contaminated waste and other Plastic Waste into compact/sanitary blocks for storage.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **FINANCIAL PLAN: (TOA $ MILLIONS)**

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
FINANCIAL PLAN (IN MILLIONS)	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT			33	10.4	117	26.7	95	21.8															245	58.9
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST			AP	10.1	71	49.3	95	76.4	68	39.0	1	1.2											235	176.0
TOTAL PROCUREMENT				20.5		76		98.2		39.0		1.2												234.9

* 10 units contracted prior to decommissioning decision

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **PLASTIC WASTE PROCESSOR** MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT/SHIPYARD**
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 9 Months
CONTRACT DATES: FY 1997: **Nov-96** FY 1998: FY 1999:
DELIVERY DATE: FY 1997: **Jul-97** FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT			AP 7	10.1	26	32.2																	33	42.3
FY 1996 EQUIPMENT					38	17.1	80	67.0															118	84.1
FY 1997 EQUIPMENT							15	9.7	68	39.1	1	1.2											84	50.0
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	71	26	23	36	10	22	13	20	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	235 *
Out	70	19	38	28	5	17	17	25	10	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	235 *

* 10 units contracted prior to decommissioning decision

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1			Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT		Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF040 Support Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	3	3	4	2	1	3	2	4
Unit Cost	71.3	83.3	87	89	90	92	94	96
Total Cost	213.9	249.9	348	178	90	276	188	384
Asset Dynamics								
Beginning Asset Position	37	40	42	46	48	50	53	55
Deliveries from all prior year funding	3							
Deliveries from FY 1997 funding		2	1					
Deliveries from FY 1998 funding			3	1				
Deliveries from FY 1999 funding				1	1			
Deliveries from subsequent years' funding					1	3	2	2
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	40	42	46	48	50	53	55	57
Inventory Objective/Current Authorized Allowance	76	76	76	76	76	76	76	76

Inventory Objective 76	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								
REMARKS:								

P-1 Shopping List Item No
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Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA:1			Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT			Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF042 Boom Tend Boats**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY			1		2		2		3
Unit Cost			90		96		99		100
Total Cost		0	90	0	192	0	198	0	300
Asset Dynamics									
Beginning Asset Position		8	8	9	9	11	11	13	13
Deliveries from all prior year funding									
Deliveries from FY 1997 funding			1						
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding					2				
Deliveries from subsequent years' funding							2		3
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		8	9	9	11	11	13	13	16
Inventory Objective/Current Authorized Allowance		22	22	22	22	22	22	22	22
Inventory Objective 22	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1		Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT	Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF051 Oil Boom Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	3	4	5	3	3	3	3	3
Unit Cost	225	239.7	241.2	244	245	248	251	253
Total Cost	675	958.8	1206	732	735	744	753	760
Asset Dynamics								
Beginning Asset Position	15	18	20	23	24	28	30	32
Deliveries from all prior year funding	3							
Deliveries from FY 1997 funding		2	2					
Deliveries from FY 1998 funding			3	2				
Deliveries from FY 1999 funding				1	2			
Deliveries from subsequent years' funding					4	3	3	3
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.			2	2	2	1	1	1
End of Year Asset Position	18	20	23	24	28	30	32	34
Inventory Objective/Current Authorized Allowance	52	52	52	52	52	52	52	52

Inventory Objective 52	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:	PY thru _____:				
	PY-1:	PY-1:	PY-1:				
	PY-2:	PY-2:	PY-2:				
	PY-3:	PY-3:	PY-3:				
TOTAL:							

REMARKS:

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1		Subhead 81HF			Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT		Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF054 Beach Transfer Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY			1	2			2	
Unit Cost			63	68			71	
Total Cost	0	0	63	136	0	0	142	0
Asset Dynamics								
Beginning Asset Position	1	2	2	3	5	5	5	7
Deliveries from all prior year funding	1							
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding			1					
Deliveries from FY 1999 funding				2				
Deliveries from subsequent years' funding							2	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	2	2	3	5	5	5	7	7
Inventory Objective/Current Authorized Allowance	8	8	8	8	8	8	8	8

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
8									
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1		Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT	Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF055 Salv Skimmer Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		1		2	2			1
Unit Cost		88		100	103			108
Total Cost	0	88	0	200	206	0	0	108
Asset Dynamics								
Beginning Asset Position	2	2	3	3	4	6	6	6
Deliveries from all prior year funding								
Deliveries from FY 1997 funding		1						
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding				1				
Deliveries from subsequent years' funding					2			1
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	2	3	3	4	6	6	6	7
Inventory Objective/Current Authorized Allowance	21	21	21	21	21	21	21	21

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
21								
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								
REMARKS:								

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1			Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT	Admin Leadtime (after Oct 1): xx months					Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF056 Equip Clean-up Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		1	1			1		
Unit Cost		95	95			97		
Total Cost	0	95	95	0	0	97	0	0
Asset Dynamics								
Beginning Asset Position	3	3	4	5	5	5	6	6
Deliveries from all prior year funding								
Deliveries from FY 1997 funding		1						
Deliveries from FY 1998 funding			1					
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding						1		
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	3	4	5	5	5	6	6	6
Inventory Objective/Current Authorized Allowance	8	8	8	8	8	8	8	8

Inventory Objective 8	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)
	PY thru _____:	PY thru _____:	PY thru _____:
	PY-1:	PY-1:	PY-1:
	PY-2:	PY-2:	PY-2:
	PY-3:	PY-3:	PY-3:
TOTAL:			

REMARKS:

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1		Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT	Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF057 Logistics Support Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	2	3	3	3	1	1	2	3
Unit Cost	161.5	168	172	176	178	182	185	187
Total Cost	323	504	516	528	178	182	370	560
Asset Dynamics								
Beginning Asset Position	4	6	8	9	14	16	17	19
Deliveries from all prior year funding	2							
Deliveries from FY 1997 funding		2	1					
Deliveries from FY 1998 funding				3				
Deliveries from FY 1999 funding				2	1			
Deliveries from subsequent years' funding					1	1	2	3
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	6	8	9	14	16	17	19	22
Inventory Objective/Current Authorized Allowance	69	69	69	69	69	69	69	69

Inventory Objective 69	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								
REMARKS:								

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1		Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT	Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF058 Arctic Oil Recovery Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		1	1		1			
Unit Cost		350	361		366			
Total Cost	0	350	361	0	366	0	0	0
Asset Dynamics								
Beginning Asset Position			1	1	2	3	3	3
Deliveries from all prior year funding								
Deliveries from FY 1997 funding		1						
Deliveries from FY 1998 funding				1				
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding					1			
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	1	1	2	3	3	3	3
Inventory Objective/Current Authorized Allowance	6	6	6	6	6	6	6	6

Inventory Objective 6	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								
REMARKS:								

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1		Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT	Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF059 Boom Mooring Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		13	16	16		2	3	
Unit Cost		9.77	10.31	11		11	12	
Total Cost	0	127.01	164.96	176	0	22	36	0
Asset Dynamics								
Beginning Asset Position	9	9	22	38	54	54	56	59
Deliveries from all prior year funding								
Deliveries from FY 1997 funding		13						
Deliveries from FY 1998 funding			16					
Deliveries from FY 1999 funding				16				
Deliveries from subsequent years' funding						2	3	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	9	22	38	54	54	56	59	59
Inventory Objective/Current Authorized Allowance	64	64	64	64	64	64	64	64

Inventory Objective 64	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:	PY thru _____:				
	PY-1:	PY-1:	PY-1:				
	PY-2:	PY-2:	PY-2:				
	PY-3:	PY-3:	PY-3:				
TOTAL:							

REMARKS:

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1		Subhead 81HF			Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT		Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF060 Hot Tap Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY			1					
Unit Cost			234					
Total Cost	0	0	234	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	4	4	4	5	5	5	5	5
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding			1					
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	4	4	5	5	5	5	5	5
Inventory Objective/Current Authorized Allowance	10	10	10	10	10	10	10	10

Inventory Objective 10	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								
REMARKS:								

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA:1			Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT			Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF061 Viscous Oil Transfer Systems		FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary QTY				2			1	1	
Unit Cost				105			107	112	
Total Cost		0	0	210	0	0	107	112	0
Asset Dynamics									
Beginning Asset Position		9	9	9	11	11	11	12	13
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding				2					
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding							1	1	
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		9	9	11	11	11	12	13	13
Inventory Objective/Current Authorized Allowance		28	28	28	28	28	28	28	28
Inventory Objective 28	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1		Subhead 81HF			Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT		Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF062 Sub 6" Hyd Pump Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY			2	1				
Unit Cost			74	75				
Total Cost	0	0	148	75	0	0	0	0
Asset Dynamics								
Beginning Asset Position	21	21	21	24	25	25	25	25
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding			3					
Deliveries from FY 1999 funding				1				
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	21	21	24	25	25	25	25	25
Inventory Objective/Current Authorized Allowance	33	33	33	33	33	33	33	33

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
33								
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								
REMARKS:								

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA:1			Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT		Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF063 VOSS Skim Systems**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY							1	
Unit Cost							611	
Total Cost	0	0	0	0	0	0	611	0
Asset Dynamics								
Beginning Asset Position	6	6	6	6	6	6	6	7
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding							1	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	6	6	6	6	6	6	7	7
Inventory Objective/Current Authorized Allowance	9	9	9	9	9	9	9	9

Inventory Objective 9	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								
REMARKS:								

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA:1			Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT			Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF064 Modular Barge Systems**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY					1				
Unit Cost					608				
Total Cost		0	0	0	608	0	0	0	0
Asset Dynamics									
Beginning Asset Position						1	1	1	1
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding					1				
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance		4	4	4	4	4	4	4	4
Inventory Objective 4	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA:1			Subhead 81HF		Date: February 1998		
P-1 Line Item Nomenclature POLLUTION CONTROL EQUIPMENT			Admin Leadtime (after Oct 1): xx months				Prod Leadtime 3-6 MONTHS		
Project Unit/Item **HF065 Boarding Kits**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY							1		
Unit Cost							42		
Total Cost		0	0	0	0	0	42	0	0
Asset Dynamics									
Beginning Asset Position		3	3	3	3	3	3	4	4
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding							1		
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		3	3	3	3	3	4	4	4
Inventory Objective/Current Authorized Allowance		10	10	10	10	10	10	10	10
Inventory Objective 10	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *SUBMARINE SILENCING EQUIPMENT/0940*
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$3.9	$4.2	$3.5	$3.7	$3.8	$3.9	$4.0		$26.9
SPARES COST (In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

This program is for the procurement of special material required to implement the military's high priority Submarine Silencing Program for operating nuclear submarines. The overall objectives and detail requirements for this program were established and defined in the CNO Specific Operational Requirements (SOR) 46-28 and NAVSEAINST C9073.2B. Only one program is in place to procure hardware systems for the purpose of measuring/monitoring, assessing, and improving the detection capability / reducing the detectability of our submarines.

LABORATORY/FACILITIES UPGRADES/REFURBISHMENT (HG050, HG051)

Consists of replacing or refurbishing broken, old obsolete acquisition and analysis hardware and software prior to equipment failure and subsequently jeopardizing ship's safety (e.g. ranging equipment) or the execution of acoustic trials and completion of trials program objectives outlined in CNO Specific Organizational Requirements 46-28 (assessment of ship's acoustic posture, etc.) and NAVSEAINST C9073.2B (Acoustics Surveys Policy). These planned refurbishments and replacements are especially critical in order to maintain the technological advancements recently made in the area of acoustic data acquisition under the Acoustic Measurement Facilities Program (AMFIP) East and West coasts (USNS HAYES and SEAFAC, respectively). Examples of these items include: hydrophone arrays, towed arrays, ranging and tracking systems, on-board array electronics, noise sources, shore power cables and data fiberoptic cables, data analysis systems, workstations, data storage and retrieval, communications systems, analyzers, tape recorders, accelerometers, monitors, etc. These equipments are utilized on the test vessel, the listening platform, and at the laboratories. [In FY97 and beyond, the East and West Coast requirements were merged into one funding line.]

FMP INSTALLATIONS (HG5IN)

Booted GRP Bow Sonar Domes are a requirement essential to the mission of the ship. Submarines without this equipment are seriously degraded with regards to sonar detection capability. Ships without this capability are at a greater risk to the safety of the submarine and its crew. Submarine GRP Bow Dome Boots will be removed from inactivated submarines and installed on the other operating ships.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998

APPROPRIATION/BUDGET ACTIVITY	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD
OTHER PROCUREMENT, NAVY BA-1		**SUBMARINE SILENCING EQUIPMENT/81HG** *BLI # 0940*

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
						QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SUBMARINES N-87													
HG050	FACILITIES/LAB UPGRADES/ REFURB- EAST*	A						$3,295			$4,185			$3,456
HG051	FACILITIES/LAB UPGRADES/ REFURB - WEST *	A						0			0			0
	MATERIAL TOTAL							$3,295			$4,185			$3,456
HG5IN	FMP Installation							$591			0			0
	GRAND TOTAL							3,886			4,185			3,456

* In FY97 and beyond, East and West Coast requirements (HG050/051) are merged into one funding line (HG050).

P3A **INDIVIDUAL MODIFICATION** **February 1998**

MODELS OF SYSTEM AFFECTED: N/A TYPE MODIFICATION: MODIFICATION TITLE: INSTALL SUBMARINE GRP BOW DOME BOOT (HG030)

DESCRIPTION/JUSTIFICATION:

REPLACE BOOTED STEEL DOMES WITH BOOTED GRP DOME/SONAR PERFORMANCE ENHANCEMENT

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT			7	7.0	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0		7	7.035
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST					4	2.951	3	0.591																
TOTAL PROCUREMENT			7	7.0	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	7	7.035

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)** **February 1998**

MODELS OF SYSTEMS AFFECTED: N/A MODIFICATION TITLE: INSTALL SUBMARINE GRP BOW DOME BOOT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	**5**		**1**																					
FY 1995 EQUIPMENT					4	2.951	3	0.591	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000		0.000	7	3.542
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	10	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Out	10	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13

5 Domes previously installed prior to FY94
1 Dome installed in 4th quarter FY was procurred prior to FY96.
1 Dome installed in 4th quarter FY95

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment								P-1 ITEM NOMENCLATURE/LINE ITEM # SUBMARINE BATTERIES (81HM) (0945)					
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$8.9	$8.2	$8.7	$13.3	$12.8	$9.8	$13.7		75.4
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

GUPPY 1 MOD C - HM001

Batteries are the primary source of submarine emergency power and are "Mission Critical". They are replacement batteries for 637/640 class submarines whose installed batteries have reached the end of their service life. Thirty-five years of experience with this battery design has established a predicable service life of 72 months. Due to the electrochemical degradation associated with batteries service life extensions are not possible without significant reduction of system capability. Batteries must be replaced as scheduled in order to maintain fleet readiness.

GUPPY 1 MOD E - HM002

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. These replacement batteries for 688 class are used as the secondary underwater power sources. The MOD E battery provides the increased energy needed to extend reactor troubleshooting and recovery time for this class of submarines. That is, MOD E will support vital ship loads for nearly twice as long as the MOD C (twice as long refers to the energy delivered during a discharge and not service life) and thereby, extends operational capabilities. The replacement schedule for these batteries is predicted using continually updated usage data from each ship. Previous experience and laboratory tests indicate that MOD E batteries will need replacement after 66 months of service.

PRODUCTION ENGINEERING HM830

Technical support is required from Naval Surface Warfare Center (NSWC Crane FY 96). NSWC Crane receives sample cells of lead-acid batteries (all types) to perform continuous life testing until complete cell failure. The procedure is beneficial to the Navy since a cause of premature failure may be detected and corrected before the complete batteries are installed. This test program is also used to develop and verify improved operating and maintenance procedures and application of NSSN/SEAWOLF battery technologies to other designs in order to extend service life and reduce the number of battery changeouts (reduced life cycle costs) over the life of the ship.

PROCUREMENT/INSTALLATION OF BATTERIES ON THE FOLLOWING HULLS:

GUPPY 1 MOD C

(HM001) FY 97 FY 98

SSN 680 Pearl Harbor APR 98. SSN 686 at Portsmouth JAN 98.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # SUBMARINES BATTERIES (81HM)) (0945)

GUPPY 1 MOD - E (HM002)

FY 97

SHIP	INSTALLING AGENT	DATE
SSN 697	PEARL HARBOR	JUL 97
SSN 750	PORTSMOUTH	MAY 97
SSN 762	PEARL HARBOR	JUL 97
SSN 770	PEARL HARBOR	SEP 97
SSN 751	PORTSMOUTH	OCT 97
SSN 713	PUGET SOUND	NOV 97
SSN 699	PORTSMOUTH	NOV 97
SSN 701	PUGET SOUND	FEB 98
SSN 705	PORTSMOUTH	OCT 97
SSN 768	PORTSMOUTH	JUL 98

FY 98 SHIP	INSTALLING AGENT	DATE	FY 99 SHIP (HM002)	INSTALLING AGENT	DATE
SSN 754	PEARL	NOV 98			
SSN 753	PORTSMOUTH	AUG 98	SSN 714	PORTSMOUTH	AUG 99
SSN 755	PORTSMOUTH	NOV 98	SSN 690	PORTSMOUTH	AUG 99
SSN 769	PORTSMOUTH	NOV 98	SSN 772	PEARL HARBOR	AUG 99
SSN 716	PUGET SOUND	FEB 99	SSN 758	PUGET SOUND	NOV 99
SSN 706	PORTSMOUTH	FEB 99	SSN 756	PORTSMOUTH	NOV 99
SSN 771	PEARL HARBOR	MAR 99	SSN 773	PEARL HARBOR	JAN 00
SSN 707	PUGET SOUND	MAY 99	SSN 715	PEARL HARBOR	FEB 00

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # SUBMARINES BATTERIES (81HM)) (0945)

DSRV1 & 2 (HM003)

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. Silver Zinc Batteries provide the only power source for DSRV 1&2 rescue vehicles, which provide the Navy with a capability for personnel rescue from a disabled submarine. A complete new battery is installed when an operating set reaches the end of its estimated 15 month life cycle.

Procurement Installation on the following Hulls

FY 97

DSRV-1	DSU	2 sets/yr at 3-4 months intervals
DSRV-2	DSU	2 sets/yr at 3-4 months intervals

FY 98

DSRV-1	Deep Submergence Unit (DSU)	3 sets/yr at 3-4 months intervals
DSRV-2	Deep Submergence Unit (DSU)	3 sets/yr at 3-4 months intervals

FY 99

DSRV-1	DSU	3 sets/yr at 3-4 months intervals
DSRV-2	DSU	3 sets/yr at 3-4 months intervals

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # SUBMARINES BATTERIES (81HM)) (0945)

DSV 3 & 4 (HM004)
Submarines batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. Deep Submergence Vehicles are designated as manned, non-combatant submersibles, which provide the Navy with underwater search and recovery capabilities to 10,000 and 20,000 feet respectively. They possess unique capabilities and characteristics to locate, recover or deploy military scientific interest items. Silver Zinc batteries are required and efficiently support Deep Submergence Vehicles (DSV) missions at these depths. A complete new battery set is installed when an operating set reaches the end of its estimated 12 month life cycle.

Procurement Installation on the following Hulls

	FY 97			
DSV-3		DSU	MAR 97, 98	1 set
DSV-4		DSU	AUG 97, 98	1 set
	FY 98			
DSV-3		DSU	MAR 99, 00	1 set
DSV-4		DSU	AUG 90, 00	1 set
	FY 99			
DSV-3		DSU	MAR 00, 01	1 set
DSV-4		DSU	AUG 00, 01	1 set

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # SUBMARINES BATTERIES (81HM)) (0945)

NR-1 (HM005)

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. The NR-1 Silver Zinc battery is a secondary underwater power source. Its function during a military or oceanographic research mission is an emergency source of power in the event of nuclear reactor shut down. A new battery is installed at the end of its 15 month cycle.

Procurement Installation on the following Hull.

NR-1

FY 97 Portsmouth	Nov 98
FY 99 Portsmouth	May 01
FY 00 Portsmouth	Aug 02

SILVER ZINC EMERGENCY BATTERIES (HM006)

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment and are utilized aboard the DSRV 1 & 2 deep submergence vehicles to activate critical components, E.G. release valves and devices, as well as emergency back-up power for the life support systems. Batteries can be installed by ships Force after a 12 month life cycle.

GFE (SILVER)
Silver is required for all DSRV, NR-1 emergency batteries, and is requisitioned from the governments reclaiming facility.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # SUBMARINES BATTERIES (81HM)) (0945)

TRIDENT 1 (HM008)

Submarine batteries are consumable items which require replacement upon reaching the end of their service life. Batteries are MISSION CRITICAL equipment. These are replacement batteries for all Trident class ships. Experience gained with testing at Mare Island Naval Shipyard and on board ship has shown that battery life is determined by total months in service and not total equivalent cycles. Renewal criteria for Trident is based on extensive laboratory/tests and evaluation of available operational data, resulting in an expected wet life of 72 months.

Procurement Installation on the Following Hulls

FY 97		
SSBN 734	Kings Bay	MAY 98
SSBN 735	Kings Bay	MAY 99
FY 98		
SSBN 741	Kings Bay	MAY 99
SSBN 730	TRF	AUG 99
FY 99		
SSBN 729	TRF	OCT 99
SSBN 742	Kings Bay	May 99

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA 1: SHIPS SUPPORT EQUIPMENT**	ID Code	**P-1 ITEM NOMENCLATURE/SUBHEAD** **SUBMARINE BATTERIES (81HM) (0945)**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N87 SUBMARINE WARFARE													
HM001	GUPPY 1 MOD C (126 CELL)	A				1	396	396	1	409	409			
HM002	GUPPY 1 MOD E (126 CELL)	A				10	568.4	5,684	8	582.625	4,661	7	596	4,172
HM003	DSRV 1-2	A				2 SETS	311	622	3 SETS	229.333	688	3 SETS	325	975
HM003A	(GFE) SILVER							148			256			289
HM004	DSV 3-4	A												
HM004A	(GFE) SILVER													
HM005	NR-1	A				1	243.0	243			0	1	254	254
HM005A	(GFE) SILVER							72			0			76
HM006	EMERGENCY BATTERIES	A				8	8.0	64	8	7,875	63	5	13.6	68
HM006A	(GFE) SILVER							5			6			9
HM008	TRIDENT 1 TYPE (126 CELL)	A				2	640.0	1,280	2	712.5	1,425	2	729	1,458
HM830	PRODUCTION ENGINEERING							394			739			1,350
TOTAL								**8,908**			**8,247**			**8,651**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy	SUBMARINE BATTERIES/0945	81HM

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1997										
HM001	1	396.0	NAVSEA	SEP 96	SS/FP	GNB, LOMBARD, ILL	FEB 97	JUL 97	YES	
HM002	10	568.4	NAVSEA	SEP 96	SS/FP	GNB, LOMBARD, ILL	FEB 97	JUL 97	YES	
HM003	2	311.0	NAVSEA	DEC 96	C/FP/OPT	BST Plainfiled, CT	FEB 97	OCT 97	YES	
HM005	1	243.0	NAVSEA	DEC 96	C/FP	YARDNEY TECH, PAWCATUCK, CT	FEB 97	FEB 98	YES	
HM008	2	640.0	NAVSEA	AUG 96	C/FP/OPT	GNB, LOMBARD, ILL	DEC 96	AUG 97	YES	
HM006	8	8.0	NAVSEA	DEC 96	C/FP	YARDNEY TECH, PAWCATUCK, CT	FEB 97	FEB 98	YES	

D. REMARKS

*DSRV 1 & 2 - ONE (1) SET CONSIST OF (2) BATTERIES

MOD C AND MOD E BATTERIES ARE SOLE SOURCE TO GNB BECAUSE THEY ARE THE ONLY COMPANY THAT IS QUALIFIED. SECNAV MADE A DECISION THAT IT WAS NOT IN THE INTEREST OF THE NAVY TO QUALIFY ANOTHER SOURCE AND DIRECTED US TO PROCURE THESE BATTERIES FROM GNB.

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIPMENT	SUBMARINE BATTERIES/0945	81HM

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1998										
HM001	1	409	NAVSEA	SEP 96	OPTION	GNB LOMBARD, ILL	DEC 97	OCT 98	YES	
HM002	8	582.625	NAVSEA	SEP 96	OPTION	GNB LOMBARD, ILL	NOV 97	APR 98	YES	
HM003	3	229.333	NAVSEA	DEC 96	OPTION	YARDNEY TECH, PAWCATUCK, CT	DEC 97	DEC 98	YES	
									YES	
HM006	8	7.875	NAVSEA	DEC 96	OPTION	YARDNEY TECH, PAWCATUCK, CT	DEC 97	DEC 98	YES	
HM008	2	712.5	NAVSEA		C/NP	UNKNOWN	APR 98	OCT 98	YES	
FY 1999										
HM002	7	596.0	NAVSEA		SS/NP	GNB LOMBARD, ILL	FEB 99	JUL 99	YES	
HM003	3	325.0	NAVSEA		COMP	UNKNOWN	JAN 99	JAN 00	YES	
									YES	
HM005	1	254	NAVSEA		COMP	UNKNOWN	JAN 99	JAN 00	YES	
HM006	5	13.6	NAVSEA		COMP	UNKNOWN	JAN 99	JAN 00	YES	
HM008	2	729.0	NAVSEA		OPTION	UNKNOWN	JAN 99	JUL 99	YES	

D. REMARKS

Exhibit P-20, Requirements Study	Approp Code/BA 1810		Subhead 81HM		Date: February 1998		
P-1 Line Item Nomenclature **SUBMARINE BATTERIES/ 0945**	Admin Leadtime (after Oct 1): xx months 6				Prod Leadtime 10		
Project Unit/Item **HM001: GUPPY 1 MOD C**	PY	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		1	1	0	0	0	0	0
Unit Cost		396	409					
Total Cost		396	409	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	0			
Deliveries from all prior year funding								
Deliveries from FY 1997 funding		1						
Deliveries from FY 1998 funding			0	1				
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding					N/A	N/A	N/A	N/A
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc. *		1		1				
End of Year Asset Position	0	0	0	0	0	0	0	0
Inventory Objective/Current Authorized Allowance								
I/O= N/A								

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								

REMARKS: * Usage based on life of battery.

Exhibit P-20, Requirements Study	Approp Code/BA 1810			Subhead 81HM		Date: February 1998		
P-1 Line Item Nomenclature **SUBMARINE BATTERIES/ 0945**		Admin Leadtime (after Oct 1): xx months 6				Prod Leadtime 5		
Project Unit/Item **HM002: GUPPY 1 MOD E**	PY	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		10	8	7	11	10	7	11
Unit Cost		568.4	582.6	596	609.7	623.8	638.1	652.8
Total Cost		5684	4660.8	4172	6706.7	6238	4467	7181
Asset Dynamics								
Beginning Asset Position	0	0	0	0	0	0	0	0
Deliveries from all prior year funding								
Deliveries from FY 1997 funding		10						
Deliveries from FY 1998 funding			8					
Deliveries from FY 1999 funding				7				
Deliveries from subsequent years' funding					11	10	7	11
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc. *		10	8	7	11	10	7	11
End of Year Asset	0	0	0	0	0	0	0	0
Inventory Objective/Current Authorized Allowance								
I/O= N/A								

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								

REMARKS: * Usage based on life of battery.

Exhibit P-20, Requirements Study	Approp Code/BA 1810			Subhead 81HM		Date: February 1998		
P-1 Line Item Nomenclature **SUBMARINE BATTERIES/ 0945**		Admin Leadtime (after Oct 1): xx months 6				Prod Leadtime 12		
Project Unit/Item **HM003: DSRV 1-2**	PY	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		2	3	3	3	3	3	3
Unit Cost		311	229.3	325	233	238.3	244	249.3
Total Cost (**)		622	944	1264	999	1022	1046	1069
Asset Dynamics								
Beginning Asset Position	0	0	0	0	0	0	0	0
Deliveries from all prior year funding								
Deliveries from FY 1997 funding			2					
Deliveries from FY 1998 funding				3				
Deliveries from FY 1999 funding					3			
Deliveries from subsequent years' funding						3	3	3
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc. *			2	3	3	3	3	3
End of Year Asset Position	0	0	0	0	0	0	0	0
Inventory Objective/Current Authorized Allowance								
I/O= N/A								

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								

REMARKS: * Usage based on life of battery. ** INCLUDES COST OF GFE SILVER

Exhibit P-20, Requirements Study	Approp Code/BA 1810			Subhead 81HM		Date: February 1998		
P-1 Line Item Nomenclature **SUBMARINE BATTERIES/ 0945**		Admin Leadtime (after Oct 1): xx months 6				Prod Leadtime 12		
Project Unit/Item **HM005: NR-1**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		1	0	1	1	0	1	2
Unit Cost		243	0	254	227	0	238	243
Total Cost (**)	0	243	0	254	301	0	316	565
Asset Dynamics								
Beginning Asset Position			0	0	0	0	0	0
Deliveries from all prior year funding								
Deliveries from FY 1997 funding			1					
Deliveries from FY 1998 funding				0				
Deliveries from FY 1999 funding					1			
Deliveries from subsequent years' funding						1	0	1
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc. *			1	0	1	1	0	1
End of Year Asset Position	0	0	0	0	0	0	0	0
Inventory Objective/Current Authorized Allowance								
I/O= N/A								

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								

REMARKS: * Usage based on life of battery. ** INCLUDES COST OF GFE SILVER

Exhibit P-20, Requirements Study	Approp Code/BA 1810			Subhead 81HM		Date: February 1998		
P-1 Line Item Nomenclature **SUBMARINE BATTERIES/ 0945**		Admin Leadtime (after Oct 1): xx months 6				Prod Leadtime 12		
Project Unit/Item **HM006: EMERGENCY BATTERIES**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		8	8	5	8	0	8	8
Unit Cost		8	7.8	13.6	8.6	0	9.0	8.0
Total Cost (**)	0	69	63	68	78	0	81	73
Asset Dynamics								
Beginning Asset Position		0	0	0	0	0	0	0
Deliveries from all prior year funding		0						
Deliveries from FY 1997 funding			8					
Deliveries from FY 1998 funding				8				
Deliveries from FY 1999 funding					5			
Deliveries from subsequent years' funding						8	0	8
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc. *			8	8	5	8	0	8
End of Year Asset Position	0	0	0	0	0	0	0	0
Inventory Objective/Current Authorized Allowance								
I/O= N/A								

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								

REMARKS: * Usage based on life of battery. * INCLUDES COST OF GFE SILVER

Exhibit P-20, Requirements Study	Approp Code/BA 1810	Subhead 81HM	Date: February 1998
P-1 Line Item Nomenclature **SUBMARINE BATTERIES/ 0945**	Admin Leadtime (after Oct 1): xx months 6		Prod Leadtime 8

Project Unit/Item **HM008: TRIDENT**	PY	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		2	2	2	5	3	3	2
Unit Cost		640	712.5	729.0	745.6	762.6	780.3	798.5
Total Cost		1280	1425	1458	3728	2288	2341	1597
Asset Dynamics								
Beginning Asset Position		0	0	0	0	0	0	0
Deliveries from all prior year funding								
Deliveries from FY 1997 funding		2						
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding				2	2			
Deliveries from subsequent years' funding						5	3	3
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc. *		2	0	2	2	5	3	3
End of Year Asset Position		0	0	0	0	0	0	0
Inventory Objective/Current Authorized Allowance								
I/O= N/A								

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:		PY thru _____:				
	PY-1:	PY-1:		PY-1:				
	PY-2:	PY-2:		PY-2:				
	PY-3:	PY-3:		PY-3:				
TOTAL:								

REMARKS: * Usage based on life of battery.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA-1: Ships Support Equipment**	**P-1 ITEM NOMENCLATURE/LINE ITEM #** ***SSN 21 Class Support Equipment (0949)***
Program Element for Code B Items: **N/A**	**OTHER RELATED PROGRAM ELEMENTS** **N/A**

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													**0**
EQUIPMENT COST (In Millions)		A			**$18.9**	**$6.3**	**$15.5**	**$10.4**	**$11.4**	**$1.5**	**$0.2**	**$0.0**	**64.2**
SPARES COST (In Millions)													**0**

PROGRAM DESCRIPTION/JUSTIFICATION:

INSURANCE SPARES - Based on experience gained from other submarine classes, insurance spares assets are required to support a major ship program. Insurance spares will be available in the event of a catastrophic failure of a major component. These spares will support propulsion, electrical, ship control, major auxiliary systems, and other SEAWOLF critical equipments which are currently in procurement for the SEAWOLF Class. Specific components to be bought have been identified based on the history of SSN 688 Class Insurance spares and the specific leadtime of each spare. Insurance spares will be installed both by IMA and depot level activities depending on the equipment and the severity of casualty. Most Insurance spares will eventually transition to become rotatable pool spare initial assets prior to scheduled component replacement.

ROTATABLE POOL - Rotatable Pool for support of SEAWOLF Class planned maintenance must be procured and available in time to support the scheduled maintenance actions specified in the SEAWOLF Class Maintenance Plan. The Rotatable Pool concept meets the OPNAV requirement to reduce the duration of depot maintenance periods, reduce repair cost, and increase operational availability. Increasing equipment complexity and lengthened repair turnaround times preclude ripout and reinstallation of many submarine components within planned depot availability timeframes. These spares will support propulsion, electrical, ship control, major auxiliary systems and other SEAWOLF critical equipments which are currently in production for the SEAWOLF Class. Specific components to be bought have been identified based upon design completion and ongoing logistic support analysis. Rotatable pool assets will be installed during regular ship upkeeps by IMA/Ships Force personnel and by shipyard personnel during scheduled availabilities (SRAs).

SEAWOLF SPECIFIC IMA/DEPOT EQUIPMENT - Funding within this line will provide Submarine IMAs the support equipment necessary to provide maintenance and repair services on selected SEAWOLF unique systems. Adequate depot capability must exist to repair and maintain new technology systems and equipment on SEAWOLF submarines. This includes the procurement of special support equipment, test program sets, jigs, fixtures, etc. The SEAWOLF Class Performance Monitoring Program requires the procurement of special purpose support equipment necessary for monitoring the performance of critical systems and equipment on operational ships. Prior to FY 96, SEAWOLF OPN was included in a shared budget line: HM&E under $2M.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment		ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD SSN 21 Class Support Equipment (0949)	H1CC

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	FY 1997			FY 1998			FY 1999			
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	Submarines (N87)													
CC001	SSN 21 Class Support Equipment	A						18,146			4,179			7,468
	SEAWOLF Tool/Equipment under $100k							772			2,113			8,007
	-													
	-													
	-													
TOTAL					**0**			**18,918**			**6,292**			**15,475**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment	C. P-1 ITEM NOMENCLATURE SSN 21 Class Support Equipment	SUBHEAD H1CC

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR (97)										
CC001										
High Pressure Air Comp	3	355.0	Portsmouth NSY	6/97	SS/FFP	Rix, Emeryville CA	8/97	1/00	YES	
Low Pressure Air Comp	1	403.0	Portsmouth NSY	6/97	SS/FFP	Nash, Trumbull CT	8/97	8/00	YES	
Torpedo Ejection Pump	1	4,025.0	SUPSHIP, Groton	2/97	SS/FFP	Nash, Trumbull CT	3/97	5/99	YES	
ASW Pump/Motor Assy	1	1,487.3	SUPSHIP, Groton	5/97	SS/FFP	Electric Boat, Groton CT	6/97	12/98	YES	
MSW Pump/Motor Assy	1	3,163.0	SUPSHIP, Groton	5/97	SS/FFP	Inger/Dres, Phillipsburg NJ	6/97	5/99	YES	
Sanitary Pump/Motor Assy	1	1,064.0	Portsmouth NSY	7/97	SS/FFP	Sargent, Tuscon AZ	8/97	6/00	YES	
Trim/Drain Pump/Motor	4	345.0	Portsmouth NSY	6/97	SS/FFP	Warren Pumps, Warren MA	8/97	9/99	YES	
Chilled Water Pump/Motor	4	122.0	Portsmouth NSY	5/97	SS/FFP	Warren Pumps, Warren MA	8/97	11/99	YES	
EAFW Pump/Motor Assy	2	283.0	Portsmouth NSY	5/97	SS/FFP	Dress Ind, Connersville IN	8/97	8/00	YES	
Perisocpe Mast 8J Mod 3	1	412.0	NAVSEA	1/97	SS/FFP	Kollmorgen, N Hampton MA	3/97	3/99	YES	
E&E Adapt Assy 8J Mod 3	1	584.0	NAVSEA	1/97	SS/FFP	Kollmorgen, N Hampton MA	3/97	8/99	YES	
E&E Adapt Assy Type 18H	1	427.0	NAVSEA	1/97	SS/FFP	Kollmorgen, N Hampton MA	5/97	10/99	YES	
Eyepiece Assy 18H Mod 1	1	320.0	NAVSEA	1/97	SS/FFP	Kollmorgen, N Hampton MA	3/97	3/99	YES	
Main Shaft Seal Housing	1	748.0	Portsmouth NSY	4/97	SS/FFP	EBCorp, Groton, CT	5/97	5/98	YES	
External Hydraulic Pumps	4	115.0	Portsmouth NSY	6/97	SS/FFP	Sargent, Tuscon, AZ	8/97	1/99	YES	
HPP Hyd Pumps & Motors	1	144.0	Portsmouth NSY	5/97	SS/FFP	IMO Industries, Monroe, NC	7/97	6/99	YES	
EPM Clutch	1	372.0	Portsmouth NSY	5/97	SS/FFP	Westinghouse, Cheswick PA	8/97	8/99	YES	
Low Pressure Blower	2	344.0	Portsmouth NSY	3/97	SS/FFP	Dress/ Root, Connersville IN	5/97	5/98	YES	
Controllable Air Firing Valve	1	350.0	SUPSHIP, Groton	2/97	SS/FFP	Allied Signal, Sylmar, CA	3/97	8/99	YES	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-1: Ships Support Equipment	SSN 21 Class Support Equipment	H1CC

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR (98)										
CC001										
Data Interface Unit	1	148.0	NAVSEA		SS/FFP	Kollmorgen, N Hampton MA	1/98	3/99	YES	
Camera Electronic Assy	1	106.0	NAVSEA		SS/FFP	Kollmorgen, N Hampton MA	1/98	10/99	YES	
Frequency Converter	1	700.0	NAVSEA		SS/FFP	Kollmorgen, N Hampton MA	1/98	6/99	YES	
HPP Hyd Accumulator	3	232.0	Portsmouth NSY		SS/FFP	Precision Machine, RI	1/98	6/99	YES	
HPP Hydraulic Pump	1	148.0	Portsmouth NSY		SS/FFP	IMO/DELEVAL, Monroe NC	1/98	6/99	YES	
LP Blower & Motor	2	372.0	Portsmouth NSY		SS/FFP	Dress/ Root, Connersville IN	1/98	1/00	YES	
Main Feed Pump Motor	2	238.0	SUPSHIP, Groton		SS/FFP	Inger/Dres, Phillipsburg NJ	1/98	10/99	YES	
Main Condensate Pmp/Mtr	1	581.0	SUPSHIP, Groton		SS/FFP	Inger/Dres, Phillipsburg NJ	1/98	1/00	YES	
Main Condensate Motor	2	290.0	SUPSHIP, Groton		SS/FFP	Inger/Dres, Phillipsburg NJ	1/98	4/99	YES	
FISCAL YEAR (99)										
CC001										
Main Shaft & Shaft Sleeves	1	1,832.0	SUPSHIP, Groton		SS/FFP	Jorgensen, Valley Forge, PA	1/99	1/01	YES	
Main Shaft Seal Housing	1	859.0	Portsmouth NSY		SS/FFP	EB Corp, Groton CT	1/99	1/01	YES	
Rudder & External Gear	1	2,918.0	SUPSHIP, Groton		SS/FFP	EB Corp, Groton CT	1/99	6/01	YES	
Outer Stern Diving Planes	1	935.0	SUPSHIP, Groton		SS/FFP	EB Corp, Groton CT	1/99	6/01	YES	
Outer Stern PL & Ext Gear	1	924.0	SUPSHIP, Groton		SS/FFP	EB Corp, Groton CT	1/99	6/01	YES	

D. REMARKS

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 26 months		
Project Unit/Item **Torpedo Ejection Pump**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	1	0	0	0	0	0	0
Unit Cost			4025	0	0	0	0	0	0
Total Cost		0	4025	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	1	1	1	1
Deliveries from all prior year funding				0					
Deliveries from FY 1997 funding					1				
Deliveries from FY 1998 funding						0			
Deliveries from FY 1999 funding							0		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 23 months		
Project Unit/Item **Main Seawater Pump/Mtr Assy**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	1	0	0	0	0	0	0
Unit Cost			3163	0	0	0	0	0	0
Total Cost		0	3163	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	1	1	1	1
Deliveries from all prior year funding					0				
Deliveries from FY 1997 funding					1				
Deliveries from FY 1998 funding						0			
Deliveries from FY 1999 funding							0	0	0
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 30 months		
Project Unit/Item **Rudder & External Gear**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	0	1	0	0	0	0
Unit Cost		0	0	0	2918	0	0	0	0
Total Cost		0	0	0	2918	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	0	1	1
Deliveries from all prior year funding									
Deliveries from FY 1997 funding							1		
Deliveries from FY 1998 funding								0	
Deliveries from FY 1999 funding									0
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	0	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 12 months		
Project Unit/Item **HPP Hyd Accumulators**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		1	0	3	0	0	0	0	0
Unit Cost		220	0	232	0	0	0	0	0
Total Cost		220	0	696	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	1	1	4	4	4	4
Deliveries from all prior year funding			1						
Deliveries from FY 1997 funding				0	3				
Deliveries from FY 1998 funding						0	0	0	0
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	1	1	4	4	4	4	4
Inventory Objective/Current Authorized Allowance									
4									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 12 months		
Project Unit/Item **Main Shaft & Shaft Sleeves**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		1	0	0	1	0	0	0	0
Unit Cost		1686	0	0	1832	0	0	0	0
Total Cost		1686	0	0	1832	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	1	1	1	1	2	2
Deliveries from all prior year funding			1						
Deliveries from FY 1997 funding				0					
Deliveries from FY 1998 funding					0				
Deliveries from FY 1999 funding						0	1		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	1	1	1	1	2	2	2
Inventory Objective/Current Authorized Allowance									
2									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 15 months		
Project Unit/Item **Data Interface Unit**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	1	0	0	0	0	0
Unit Cost		0	0	148	0	0	0	0	0
Total Cost		0	0	148	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	1	1	1	1
Deliveries from all prior year funding					0				
Deliveries from FY 1997 funding					1				
Deliveries from FY 1998 funding						0			
Deliveries from FY 1999 funding							0		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 22 months		
Project Unit/Item **Camera Electronic Assy**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	1	0	0	0	0	0
Unit Cost		0	0	106	0	0	0	0	0
Total Cost		0	0	106	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	1	1	1
Deliveries from all prior year funding				0					
Deliveries from FY 1997 funding					0				
Deliveries from FY 1998 funding						1			
Deliveries from FY 1999 funding							0		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 18 months		
Project Unit/Item **Frequency Converter**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	1	0	0	0	0	0
Unit Cost		0	0	700	0	0	0	0	0
Total Cost		0	0	700	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	1	1	1	1
Deliveries from all prior year funding				0	0				
Deliveries from FY 1997 funding					0				
Deliveries from FY 1998 funding					1				
Deliveries from FY 1999 funding						0			
Deliveries from subsequent years' funding							0	0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 22 months		
Project Unit/Item **Main Feed Pump Motor**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	2	0	0	0	0	0
Unit Cost		0	0	238	0	0	0	0	0
Total Cost		0	0	476	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	2	2	2
Deliveries from all prior year funding					0				
Deliveries from FY 1997 funding					0				
Deliveries from FY 1998 funding						2			
Deliveries from FY 1999 funding						0			
Deliveries from subsequent years' funding							0	0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	2	2	2	2
Inventory Objective/Current Authorized Allowance									
2									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 24 months		
Project Unit/Item **Main Condensate Pump**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	1	0	0	0	0	0
Unit Cost		0	0	581	0	0	0	0	0
Total Cost		0	0	581	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	1	1	1
Deliveries from all prior year funding					0				
Deliveries from FY 1997 funding					0				
Deliveries from FY 1998 funding						1			
Deliveries from FY 1999 funding							0		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 16 months		
Project Unit/Item **Main Condensate Motor**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	2	0	0	0	0	0
Unit Cost		0	0	290	0	0	0	0	0
Total Cost		0	0	580	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	2	2	2	2
Deliveries from all prior year funding					0				
Deliveries from FY 1997 funding					0				
Deliveries from FY 1998 funding					2				
Deliveries from FY 1999 funding						0			
Deliveries from subsequent years' funding							0	0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	2	2	2	2	2
Inventory Objective/Current Authorized Allowance									
2									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 30 months		
Project Unit/Item **Outer Stern Diving Planes**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	0	1	0	0	0	0
Unit Cost		0	0	0	935	0	0	0	0
Total Cost		0	0	0	935	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	0	1	1
Deliveries from all prior year funding						0			
Deliveries from FY 1997 funding						0			
Deliveries from FY 1998 funding						0			
Deliveries from FY 1999 funding							1		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	0	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment		Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 30 months		
Project Unit/Item **Outer Stern Planes & Diving Gear**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	0	0	1	0	0	0	0
Unit Cost	0	0	0	924	0	0	0	0
Total Cost	0	0	0	924	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	0	0	1	1
Deliveries from all prior year funding					0			
Deliveries from FY 1997 funding					0			
Deliveries from FY 1998 funding					0			
Deliveries from FY 1999 funding						1		
Deliveries from subsequent years' funding							0	0
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	0	0	1	1	1
Inventory Objective/Current Authorized Allowance								
1								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:	PY thru _____:				
	PY-1:	PY-1:	PY-1:				
	PY-2:	PY-2:	PY-2:				
	PY-3:	PY-3:	PY-3:				
TOTAL:							
REMARKS:							

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 3 months				Prod Leadtime: 29 months		
Project Unit/Item **High Pressure Air Compressor**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	3	0	0	0	0	0	0
Unit Cost		0	355	0	0	0	0	0	0
Total Cost		0	1065	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	3	3	3
Deliveries from all prior year funding						0			
Deliveries from FY 1997 funding						3			
Deliveries from FY 1998 funding							0		
Deliveries from FY 1999 funding								0	
Deliveries from subsequent years' funding									0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	3	3	3	3
Inventory Objective/Current Authorized Allowance									
3									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

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Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment		Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 36 months		
Project Unit/Item **Low Pressure Air Compressor**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	1	0	0	0	0	0	0
Unit Cost	0	403	0	0	0	0	0	0
Total Cost	0	403	0	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	0	1	1	1
Deliveries from all prior year funding					0			
Deliveries from FY 1997 funding					1			
Deliveries from FY 1998 funding						0		
Deliveries from FY 1999 funding							0	
Deliveries from subsequent years' funding								0
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	0	1	1	1	1
Inventory Objective/Current Authorized Allowance								
1								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:	PY thru _____:				
	PY-1:	PY-1:	PY-1:				
	PY-2:	PY-2:	PY-2:				
	PY-3:	PY-3:	PY-3:				
TOTAL:							
REMARKS:							

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 7 months				Prod Leadtime: 18 months		
Project Unit/Item **ASW Pump/Mtr Assy**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	1	0	0	0	0	0	0
Unit Cost		0	1487	0	0	0	0	0	0
Total Cost		0	1487	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	1	1	1	1	1
Deliveries from all prior year funding				0					
Deliveries from FY 1997 funding				1					
Deliveries from FY 1998 funding					0				
Deliveries from FY 1999 funding						0			
Deliveries from subsequent years' funding							0	0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	1	1	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 34 months		
Project Unit/Item **Sanitary Pump/Motor Assy**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	1	0	0	0	0	0	0
Unit Cost		0	1064	0	0	0	0	0	0
Total Cost		0	1064	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	1	1	1
Deliveries from all prior year funding				0	0				
Deliveries from FY 1997 funding						1			
Deliveries from FY 1998 funding							0		
Deliveries from FY 1999 funding								0	
Deliveries from subsequent years' funding									0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 25 months		
Project Unit/Item **Trim/Drain Pump & Motor Assy**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	4	0	0	0	0	0	0
Unit Cost		0	345	0	0	0	0	0	0
Total Cost		0	1380	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	4	4	4	4
Deliveries from all prior year funding				0					
Deliveries from FY 1997 funding					4				
Deliveries from FY 1998 funding						0			
Deliveries from FY 1999 funding							0		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	4	4	4	4	4
Inventory Objective/Current Authorized Allowance									
4									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 27 months		
Project Unit/Item **Chilled Water Pump/Motor**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	4	0	0	0	0	0	0
Unit Cost		0	122	0	0	0	0	0	0
Total Cost		0	488	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	4	4	4
Deliveries from all prior year funding			0	0	0				
Deliveries from FY 1997 funding						4			
Deliveries from FY 1998 funding							0		
Deliveries from FY 1999 funding								0	
Deliveries from subsequent years' funding									0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	4	4	4	4
Inventory Objective/Current Authorized Allowance									
4									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

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Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 36 months		
Project Unit/Item **EAFW Pump/Motor Assy**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	2	0	0	0	0	0	0
Unit Cost		0	283	0	0	0	0	0	0
Total Cost		0	566	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	2	2	2
Deliveries from all prior year funding				0	0				
Deliveries from FY 1997 funding						2			
Deliveries from FY 1998 funding							0		
Deliveries from FY 1999 funding								0	
Deliveries from subsequent years' funding									0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	2	2	2	2
Inventory Objective/Current Authorized Allowance									
2									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 24 months		
Project Unit/Item **Periscope Mast 8J Mod 3**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	1	0	0	0	0	0	0
Unit Cost	0	412	0	0	0	0	0	0
Total Cost	0	412	0	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	1	1	1	1
Deliveries from all prior year funding			0	0				
Deliveries from FY 1997 funding				1				
Deliveries from FY 1998 funding					0			
Deliveries from FY 1999 funding						0		
Deliveries from subsequent years' funding							0	0
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance								
1								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:	PY thru _____:				
	PY-1:	PY-1:	PY-1:				
	PY-2:	PY-2:	PY-2:				
	PY-3:	PY-3:	PY-3:				
TOTAL:							
REMARKS:							

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 29 months		
Project Unit/Item **E&E Adapter 8J**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	1	0	0	0	0	0	0
Unit Cost		0	584	0	0	0	0	0	0
Total Cost		0	584	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	1	1	1	1
Deliveries from all prior year funding				0	0				
Deliveries from FY 1997 funding					1				
Deliveries from FY 1998 funding						0			
Deliveries from FY 1999 funding							0		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

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Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 29 months		
Project Unit/Item **E&E Adapter 18H**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	1	0	0	0	0	0	0
Unit Cost		0	427	0	0	0	0	0	0
Total Cost		0	427	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	1	1	1
Deliveries from all prior year funding				0	0	0			
Deliveries from FY 1997 funding						1			
Deliveries from FY 1998 funding							0		
Deliveries from FY 1999 funding								0	
Deliveries from subsequent years' funding									0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	1	1	1	1
Inventory Objective/Current Authorized Allowance									
1									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 24 months		
Project Unit/Item **Eyepiece Assy 18H**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	1	0	0	0	0	0	0
Unit Cost	0	320	0	0	0	0	0	0
Total Cost	0	320	0	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	1	1	1	1
Deliveries from all prior year funding			0	0				
Deliveries from FY 1997 funding				1				
Deliveries from FY 1998 funding					0			
Deliveries from FY 1999 funding						0		
Deliveries from subsequent years' funding							0	
Other Gains								0
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance								
1								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:	PY thru _____:				
	PY-1:	PY-1:	PY-1:				
	PY-2:	PY-2:	PY-2:				
	PY-3:	PY-3:	PY-3:				
TOTAL:							
REMARKS:							

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 12 months		
Project Unit/Item **Main Shaft Seal Housing**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	1	0	1	0	0	0	0
Unit Cost		0	748	0	859	0	0	0	0
Total Cost		0	748	0	859	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	1	1	1	2	2
Deliveries from all prior year funding				0					
Deliveries from FY 1997 funding				1					
Deliveries from FY 1998 funding					0				
Deliveries from FY 1999 funding						0	1		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	1	1	1	2	2	2
Inventory Objective/Current Authorized Allowance									
2									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 17 months		
Project Unit/Item **External Hydraulic Pumps**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	4	0	0	0	0	0	0
Unit Cost		0	115	0	0	0	0	0	0
Total Cost		0	460	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	4	4	4	4
Deliveries from all prior year funding				0	0				
Deliveries from FY 1997 funding					4				
Deliveries from FY 1998 funding						0			
Deliveries from FY 1999 funding							0		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	4	4	4	4	4
Inventory Objective/Current Authorized Allowance									
4									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 8 months				Prod Leadtime: 23 months		
Project Unit/Item **HPP Hyd Pumps & Motors**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	1	1	0	0	5	0	0
Unit Cost		0	144	148	0	0	175	0	0
Total Cost		0	144	148	0	0	875	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	0	1	2	2	2
Deliveries from all prior year funding				0	0				
Deliveries from FY 1997 funding					1				
Deliveries from FY 1998 funding						1			
Deliveries from FY 1999 funding							0		
Deliveries from subsequent years' funding								0	5
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	1	2	2	2	7
Inventory Objective/Current Authorized Allowance									
7									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment		Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 24 months		
Project Unit/Item **EPM Clutch**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	1	0	0	0	0	0	0
Unit Cost	0	372	0	0	0	0	0	0
Total Cost	0	372	0	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	1	1	1	1
Deliveries from all prior year funding			0	0				
Deliveries from FY 1997 funding				1				
Deliveries from FY 1998 funding					0			
Deliveries from FY 1999 funding						0		
Deliveries from subsequent years' funding							0	0
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance								
1								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:	PY thru _____:				
	PY-1:	PY-1:	PY-1:				
	PY-2:	PY-2:	PY-2:				
	PY-3:	PY-3:	PY-3:				
TOTAL:							
REMARKS:							

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study		Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment			Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 12 months		
Project Unit/Item **Low Pressure Blower & Motor**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	2	2	0	0	0	0	0
Unit Cost		0	344	372	0	0	0	0	0
Total Cost		0	688	744	0	0	0	0	0
Asset Dynamics									
Beginning Asset Position		0	0	0	2	2	4	4	4
Deliveries from all prior year funding				0					
Deliveries from FY 1997 funding				2					
Deliveries from FY 1998 funding					0	2			
Deliveries from FY 1999 funding							0		
Deliveries from subsequent years' funding								0	0
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	2	2	4	4	4	4
Inventory Objective/Current Authorized Allowance									
4									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No 17

Exhibit P-20, Requirements Study	Approp Code/BA 1810 BA-1			Subhead H1CC		Date: February 1998		
P-1 Line Item Nomenclature SSN 21 Class Support Equipment		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 29 months		
Project Unit/Item **Controllable Air Firing Valve**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	1	0	0	0	0	0	0
Unit Cost	0	350	0	0	0	0	0	0
Total Cost	0	350	0	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	0	0	0	0	1	1	1	1
Deliveries from all prior year funding			0	0				
Deliveries from FY 1997 funding				1				
Deliveries from FY 1998 funding					0			
Deliveries from FY 1999 funding						0		
Deliveries from subsequent years' funding							0	0
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	1	1	1	1	1
Inventory Objective/Current Authorized Allowance								
1								

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)				
	PY thru _____:	PY thru _____:	PY thru _____:				
	PY-1:	PY-1:	PY-1:				
	PY-2:	PY-2:	PY-2:				
	PY-3:	PY-3:	PY-3:				
TOTAL:							
REMARKS:							

P-1 Shopping List Item No 17

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIP SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Strategic Platform Support Equipment/#095000*
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)		A			$13.4	$20.9	$10.3	$7.9	$11.7	$9.8	$12.3		$86.3
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

Funding in this P-1 line provides for the procurement of tactical Hull, Mechanical and Electrical (HM&E) equipment that will be installed aboard ships and in the facilities at the TRIDENT Refit Facility (TRIREFFAC) and TRIDENT Training Facility (TRITRAFAC). The TRIDENT Refit Facility is a dedicated shore support facility providing a full range of industrial support. Unlike many other programs TRIDENT does not use tenders for industrial support, but rather depends upon the TRIREFFAC for a full range of maintenance functions. The TRITRAFAC provides the crews for the SSBN 726 Class Submarines with realistic training experience in operating and maintaining shipboard equipment.

TRIPER ASSETS (HM&E) - In order to achieve the required operational availability and not exceed a specific Engineered Availability (EA) Period, a planned, progressive incremental overhaul of the submarine is accomplished utilizing the TRIDENT PLANNED EQUIPMENT REPLACEMENT (TRIPER) Program's inventory of pretested, prestaged ready for issue equipments. TRIPER stock levels a calculated as functions of equipment change out dates, procurement lead times, repair turn around times, equipment recoverability, equipment population and safety level requirements.

HM&E AND STRATEGIC WEAPONS SYSTEMS/SUPPORT SUBSYSTEM (SWS/SS) ALTERATIONS - This provides for the replacement of obsolete equipment on board of SSBN 726 Class Submarines and at dedicated Shore Support Facilities (TLCSF, TRITRAFAC (B), TRIREFFAC (B), TRITRAFAC (KB), TRIREFFAC (KB), Major Shore Spares (MSS)). These alterations are necessary in order to replace obsolete/outdated equipments with new equipments to maintain or increase mission capabilities, replace or modify components/systems which have proven to be unreliable, correct design and safety problems and reduce fleet maintenance burdens. It provides for installation of Noise Quieting Equipment and system/hull modification to reduce noise transmission to meet Submarine Silencing goals. Alterations and actions are done at the lowest practicable and authorized level (taking into consideration urgency, priority, capability, capacity and cost). Alterations to SSBN 726 Class Submarines are scheduled for accomplishment at the TRIREFFACs. This requires equipment procurement and installation, technical planning, training, and associated resources. This line provides for material procurement necessary to install the required alterations to SSBN 726 Class Submarines at the TRIREFFAC, Bangor, and the TRIREFFAC, Kings Bay. Additionally, this line provides for the utilization o specially trained and dedicated installation teams to ensure accelerated and correct installation of complex and high priority alterations within specific timeframes. Provided are comprehensive program management and execution, including planning, direction, control, installation, integration, and coordination of specifically selected safety related, mission enhancement or technical HM&E alterations.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIP SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Strategic Platform Support Equipment/#095000*

TRIDENT ENGINEERED AVAILABILITY (EA) - TRIDENT EA material support funding is required to provide replacement and contingency material to support the critical path schedule during the SSBN 726 Class Submarine Engineered Availabilities (EAs) commencing in FY93 and continuing through the operational life of the submarine. This equipment is separate and exclusive of TRIPER program equipment. Funding is also required to formulate or procure complex tools and fixtures required to reduce EA scheduled durations. This program also provides funding for installation of Depot level alterations packages.

HM&E MODERNIZATION KITS - Accomplishes alterations and actions at the lowest practicable and authorized level (taking into consideration urgency, priority, capability, capacity and cost). Alterations, and upgrades to SSBN 726 Class Submarines are scheduled for accomplishment at the TRIREFFACs. This requires equipment procurement and installation, technical planning, training, and associated resources. This line provides for material procurement necessary to install the required alterations to SSBN 726 Class Submarines at the TRIREFFAC, Bangor, and the TRIREFFAC, Kings Bay. *Note: This line was to be phased out effective FY98. This project unit is now being used for the FY1998 AN/UYQ-70 Display Program that was placed within the TRIDENT (BA1) account. The FY98 Congressional Funding Plus-up for AN/UYQ-70 is to be used for computer workstation procurement.*

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIP SUPPORT EQUIPMENT		ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD Strategic Platform Support Equipment/81HH	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N871													
HH007	Equipment TRIPER Assets	A						$0			$500			$351
HH009	Equipment HM&E & SWS/SS Alteration	A						$4,360			$935			$4,994
HH012	Equipment HM&E TRIDENT EA	A						$7,800			$4,500			$5,000
HH017	Equipment HM&E Modernization Kits	A						$1,237			$15,000			$0
	Subtotal							$13,397			$20,935			$10,345
TOTAL								**$13,397**			**$20,935**			**$10,345**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) (Page 1)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIP SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE Strategic Platform Support Equipment HH007 TRIPER Assets	SUBHEAD 81HH

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
Fiscal Year (97)										
None										
Fical Year (98)										
TRIPER Priming Assets *	6	$83.33	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/98	12/98	Yes	
Fiscal Year (99)										
TRIPER Priming Assets *	4	$87.75	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	12/98	12/99	Yes	

D. REMARKS

***** Average unit cost.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) (Page 1)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIP SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE Strategic Platform Support Equipment HH009 HM&E and SWS/SS Alteration	SUBHEAD 81HH

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
Fiscal Year (97)										
Low Sensativity Rotor (LSR)	1	$4,360	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	11/97	7/99	Yes	
Fical Year (98)										
Submarine Conference HM&E Alterations	**	$785	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	1/98	9/99	Yes	
Misc MOD Mat. @ TRF/TTF, KB/B	1	$150	NAVSEA	N/A	WR	NUWC Newport, RI	2/98	5/98	Yes	
Fiscal Year 1999										
Submarine Conference HM&E Alterations	**	$1,318	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	12/98	9/99	Yes	
Misc MOD Mat. @ TRF/TTF, KB/B	2	$88	NAVSEA	N/A	WR	NUWC Newport, RI	12/98	4/99	Yes	
Low Sensitivity Rotor (LSR)	1	$3,500	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	12/98	6/99	Yes	

D. REMARKS

** As Required

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) (Page 1)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy	Strategic Platform Support Equipment	
BA-1: SHIP SUPPORT EQUIPMENT	HH012 HM&E TRIDENT Engineered Availability	81HH

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
Fiscal Year (97)										
Torpedo Tube Stop Mech. Cyl./Pis	12	$13.08	NAVSEA	N/A	WR	NUWC, Newport, RI	6/97	6/98	Yes	
TRIPER Assets	8	$93.75	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	10/97	1/98	Yes	
Torpedo Tube Stop Mech. Cyl./Pis	6	$11.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	4/97	6/98	Yes	
EA Prod Engr & Mgmt/Material	1	$400.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	3/97	Yes	
Alternate Bearing System	1	$1,000.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	4/97	6/97	Yes	
Two Addtl. Fire Fight Stat/Val Chg	11	$4.27	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	4/97	4/99	Yes	
EOG Level Control Valves	12	$17.16	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	4/97	8/98	Yes	
MSW Pump Comp. Impeller	6	$4.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	4/97	8/98	Yes	
Snap III East Coast Ships	3	$300.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	4/97	4/98	Yes	
EA Prod Engr & Mgmt/Material	1	$200.00	NAVSEA	N/A	WR	PSNS, Bremerton, WA	12/96	8/97	Yes	
EA Prod Engr & Mgmt/Material	1	$3,900.00	NAVSEA	N/A	WR	PSNS, Bremerton, WA	12/96	8/97	Yes	
TRIPER Assets	2	$75.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	12/97	Yes	
Fiscal Year (98)										
EA Prod Engr & Mgmt/Material	1	$3,600.00	NAVSEA	N/A	WR	PSNS/Bremerton, WA	12/97	6/98	Yes	
EA Material Procurement	1	$400.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	2/98	6/98	Yes	
EA Advanced Planning (SSBN 731)	1	$500.00	NAVSEA	N/A	WR	PSNS/Bremerton, WA	2/98	6/98	Yes	
Fiscal Year (99)										
EA Prod Engr & Mgmt/Material	1	$5,000.00	NAVSEA	N/A	WR	PSNS/Bremerton, WA	12/98	6/99	Yes	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) (Page 1)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIP SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE Strategic Platform Support Equipment HH017 HM&E Modernization Kits	SUBHEAD 81HH

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
Fiscal Year (97)										
Turbine Pump Ejectors Sys	9	$19.22	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	1/98	7/99	Yes	
SWS 70KW AC/DC Converter	5	$36.60	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	1/98	5/98	Yes	
EOG Level Control Valves	5	$15.40	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	7/98	Yes	
R-12 Refrigeration Plant Mod.	1	$420.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	11/97	Yes	
1/2" 02 Hull Stop Valve Actuator	1	$17.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	4/97	Yes	
TRIDENT II (D-5) Cable Connectors	6	$4.16	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	4/97	Yes	
TRIDENT 1 (C4) SWS 5V Power Supply Subsystem	6	$5.66	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	4/97	Yes	
MHC Lower Zone Cntrl.	1	$1.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	4/97	Yes	
TEP MK19 RPM Sens./Cntrl	18	$1.22	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	4/97	Yes	
ASW 16/17/18 Safe End Valve	18	$9.55	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	4/97	Yes	
500KW SSMG Set Positive Pressure	1	$98.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	4/97	Yes	
Driving Plane Cntrl Column Stick	18	$0.56	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	4/97	Yes	
Torpedo FIring Interlock Cyclinder	2	$2.50	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	3/97	4/97	Yes	
Fiscal Year (98)										
AN/UYQ-70 Display	1	$15,000.00	NAVSEA	N/A	CPIF/FPR	Lockheed Martin, LMTDS/ Eagan, MN	2/98 (Option)	4/98	Yes	
Fiscal Year (99)										
None										

D. REMARKS

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT, NAVY/BA-1 SHIP SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM #: DSSP EQUIPMENT/095500
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$5.0	$7.1	$10.5	$8.1	$5.5	$6.6	$4.6		47.4
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

The Deep Submergence Systems Program (DSSP) is responsible for the procurement, life cycle support, and improvement and modernization of assigned platforms and programs. The DSSP program provides for the procurement of equipment to support the establishment and maintenance of fleet capability for a number of programs which perform submarine research and rescue, inspection, object location and retrieval from the ocean environment, and research and scientific exploration missions. DSSP procurements replace obsolete, non-supportable equipment and subsystems through phased improvement and modernization projects. These projects may include special ship alterations, field change kits, and design corrections. DSSP systems include:

DEEP SUBMERGENCE RESCUE VEHICLES (DSRV) (HJ010)

The DSRVs provide the fleet with a world-wide capability to rescue personnel from submarines disabled on the ocean floor. These funds procure field changes and modernized subsystems for the operating DSRVs MYSTIC (DSRV-1) and AVALON (DSRV-2). Since there are only two DSRVs, one of which must be on 24-hour alert-ready status to respond to a submarine rescue mission anywhere in the world, their reliability and maintainability (minimum down-time) are key to mission readiness, response time, and operational safety. The resolution of equipment deficiencies necessitates that the highest priority field changes/modernizations be completed each fiscal year.

SUBMARINE NR-1 (HJ020)

The NR-1 is a unique, one-of-a-kind nuclear-powered research and ocean engineering submarine designed for extended search, object recovery, device implantment and submerged repair, and oceanographic research missions. Its research capabilities include ocean topography and geology, and it is capable of on-site data collection on the thermal optical, biological, and acoustic environments of the deep ocean. The NR-1 is equipped with several special systems which provide the capability to perform a number of military and scientific missions, and it has been successful in recovering items of high military value from the ocean floor. (For example, the NR-1 was an important element of the space shuttle "Challenger" recovery operations.) NR-1 is also fitted with special devices, such as an external manipulator arm, to enable it to recover objects on the ocean floor . NR-1's recent refueling overhaul, which included the installation of a new sonar system, has extended its useful life for another 20 years.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-1 SHIP SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # DSSP EQUIPMENT/095500

MANNED VEHICLE SYSTEMS (HJ060)
The Tethered Unmanned Work Vehicle System (TUWVS) provides operational forces with an effective means of conducting ocean bottom searches, inspections, object recovery, and work operations to a depth of 5,000 feet. The Advanced Tethered Vehicle, which is cable-controlled, can perform these same operations to depths of 20,000 feet. In addition, side look sonar search and inspection systems with depth capability up to 7,000 feet are operated and maintained by the unmanned vehicle detachment.

SUBMARINE RESCUE CHAMBERS (HJ080)
Provides world-wide capability to rescue personnel from submarines disabled on the ocean floor. SRCs can carry 6 rescuees per trip as compared to 24 on DSRVs. These units are 50 year old technology, simple but effective. The retirement of the ASR Class Submarine Rescue Ships requires two fly-away SRC rescue kits in FY 1996.

ADS (NEWTSUIT) (HJ090)
A COTS one-man, one atmosphere diving system that will provide world-wide capability in support of Submarine Rescue Chambers (SRC) mission. ADS will be used to clear disabled submarines' seating surfaces, attach the SRC downhaul cable and attach salvage fittings.

SUBMARINE ESCAPE & IMMERSION EQUIPMENT (HJ100)
The SEIE is used by a submariner to escape from a disabled submarine and survive on the surface until rescued. The system, which is being adapted from a British design, includes the escape suit, inner thermal suit and a single person life raft, all packaged as a unit onboard the submarine. This is a safety/survival appliance that is vastly superior to the current Stienke Hood escape appliance onboard USN submarines, which has reached obsolescence and has become a maintenance burden to the fleet. The SEIE increases the escape depth to 600 FSW and provides thermal protection to the user from hypothermia.

EQUIPMENT INSTALLATION (HJINS)
These funds are for the installation of DSSP equipment, as well as the training equipment and items which support shore facilities.

SOURCES:
The sources for these acquisitions are limited. There are few private companies actively engaged in deep ocean engineering and even fewer with the specialized experience, knowledge, and facilities to meet the exacting requirements of the DSSP programs. Accordingly, sole source contracts are typically required with LESC, CSDL, and LMTDS to continue their support of the various DSSP programs. Where possible, contracting via open competition is utilized.

REFERENCES:
Acquisition Plans 584-87 Revision 4 approved 14 July 1993.

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-1 SHIP SUPPORT EQUIPMENT					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD DSSP EQUIPMENT/81HJ 095500								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1997			FY 1998			FY 1999					
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N873													
HJ010	RESCUE/DSRV	A						$1,867			$1,541			$2,509
HJ020	NR-1	A						1,079			1,203			1,075
HJ060	UNMANNED VEHICLE SYSTEMS	A						1,273			1,400			1,100
HJ080	SUBMARINE RESCUE CHAMBERS	A						125			0			0
HJ090	ADS	A						0			850			185
HJ100	SUBMARINE ESCAPE AND IMMERSION EQUIPMENT	A						500			0			4,000
	MATERIAL TOTAL							$4,844			$4,994			$8,869
HJINS	EQUIPMENT INSTALLATION (NON-FMP)	A						197			2,111			1,601
TOTAL								**$5,041**			**$7,105**			**$10,470**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 1998		
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/1810/BA-1/SHIP SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE DSSP EQUIPMENT/095500 HJ010 RESCUE/DSRV SUPPORT EQUIPMENT				SUBHEAD 81HJ	
Cost Element/ FISCAL YEAR	**QTY**	**UNIT COST (000)**	**LOCATION OF PCO**	**RFP ISSUE DATE**	**CONTRACT METHOD & TYPE**	**CONTRACTOR AND LOCATION**	**AWARD DATE**	**DATE OF FIRST DELIVERY**	**SPECS AVAILABLE NOW**	**IF NO WHEN AVAILABLE**
FY1997										
Emergency Jettison Panel	1	$75	NAVSEA		SS/OPTION	LMESC - S. Diego, CA	10/96	11/97	YES	N/A
AC/DC Converter	1	$43	NAVSEA		SS/OPTION	LMESC - S. Diego, CA	1/97	5/97	YES	N/A
Regulator Battery Charger	1	$8	NAVSEA		SS/OPTION	LMESC - S. Diego, CA	1/97	5/97	YES	N/A
Sub Dist Buoy	1	$467	NAVSEA		RC/WR	NUWC - Newport, RI	3/97	12/98	NO	5/98
Scope of Cert Values	1	$1,015	NAVSEA		RC	NAVICP - Mechburg, PA	6/99	7/99	YES	N/A
Maintenance Access Panels	4	$65	NAVSEA		SS/OPTION	LMESC - S. Diego, CA	9/98	9/99	NO	11/97
FY1998										
C-17 LTV & Fly Away Plan	1	$829	NAVSEA		SS/OPTION	LMESC - S. Diego, CA	10/97	10/98	NO	5/98
ATS Upgrade	1	$500	NAVSEA		SS/OPTION	CSDL - Boston, MA	12/97	12/98	NO	6/98
Scope of Cert Values	1	$212	NAVSEA		SS/OPTION	LMESC - S. Diego, CA	10/99	11/99	YES	N/A
FY1999										
NAVSYS Replacement	1	$984	NAVSEA		SS/OPTION	CSDL - Boston, MA	11/98	12/99	NO	6/99
Power Cable Replacement	1	$189	NAVSEA		SS/OPTION	LMESC - S. Diego, CA	11/98	12/99	YES	N/A
1ST Hydraulic System Replacement	1	$1,336	NAVSEA		SS/OPTION	LMESC - S. Diego, CA	6/99	6/00	NO	7/99

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/1810/BA-1/SHIP SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE DSSP EQUIPMENT/095500 HJ020 NR-1	SUBHEAD 81HJ

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY1997										
UQC/ARD 8000 Interface Unit	1	$59	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	7/97	6/98	YES	N/A
CDU Replacement	1	$134	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	7/97	4/98	YES	N/A
PC Update	1	$68	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	3/97	4/98	YES	N/A
1000 W T.I. Light	1	$314	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	3/97	12/97	YES	N/A
SLS Rec/Elect	1	$256	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	5/97	3/98	YES	N/A
Battery Monitoring System	1	$248	NAVSEA		SS/OPTION	LMESC - S. Diego, CA	7/97	2/98	YES	N/A
FY1998										
NAVSYSTEM Upgrade	1	$194	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	11/97	5/98	NO	8/97
Thruster Control System	1	$135	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	3/98	10/97	NO	10/97
Underwater Modem	1	$429	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	2/98	2/99	NO	10/97
Pan & Tilt Camera Mod	2	$72.5	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	12/97	12/98	NO	10/97
Color Monitor Upgrade	5	$35	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	4/98	4/99	NO	12/97
Fiberoptic Interface	1	$125	SUPSHIP		SS/OPTION	LMTDS - Great Neck, NY	4/98	4/99	YES	N/A
FY1999										
Velocimeter	1	$305	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	12/98	12/99	YES	N/A
CVL Replacement	1	$329	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	2/99	2/00	YES	N/A
I&C PWR SWC HB	1	$250	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	5/99	5/00	YES	N/A
TV Camera Replacement	1	$191	NAVSEA		SS/OPTION	LMTDS - Great Neck, NY	3/99	2/00	YES	N/A

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/1810/BA-1/SHIP SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE DSSP EQUIPMENT/095500 HJ060 UNMANNED VEHICLE SYSTEMS EQUIPMENT	SUBHEAD 81HJ

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY1997										
TUWVS Fly Away Hardware & P Plan	1	$616	N/S		COMP/OPTION	O'Tech - Upper Malboro	4/97	4/98	NO	12/96
UK Pods	1	$499	N/S		COMP/OPTION	O'Tech - Upper Malboro	4/97	4/98	YES	N/A
TUWVS Responder Set	1	$158	N/S		COMP/OPTION	O'Tech - Upper Malboro	5/97	4/98	YES	N/A
FY1998										
TUWVS Depth Upgrade	1	$1,400	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	1/98	1/99	YES	N/A
FY1999										
TUWVS Tracking Upgrade	2	$175	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	1/99	1/00	YES	N/A
Viewing & Lighting Upgrade	2	$200	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	1/99	6/00	YES	N/A
DSDS	1	$350	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	1/99	6/00	YES	N/A

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/1810/BA-1/SHIP SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE DSSP EQUIPMENT/095500 HJ080 SUBMARINE RESCUE CHAMBERS	SUBHEAD 81HJ

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY1997										
SRC System Components	1	$125	CSS		RC	COASTASYSSTA Panama City, FL	6/97	6/98	YES	N/A

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/1810/BA-1/SHIP SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE DSSP EQUIPMENT/095500 HJ090 ADS	SUBHEAD 81HJ

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY1998										
Rescue Support Tools	1	$125	NAVSEA		RC	COASTASYSSTA Panama City, FL	2/98	10/98	NO	12/97
LARS Handling System	1	$725	NAVSEA		RC	COASTASYSSTA Panama City, FL	2/98	10/98	NO	12/97
FY1999										
Suit Communications Upgrade	3	$62	NAVSEA		RC	COASTASYSSTA Panama City, FL	2/99	10/99	YES	N/A

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/1810/BA-1/SHIP SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE DSSP EQUIPMENT/095500 HJ100 SEIE SUITS	SUBHEAD 81HJ

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY1997										
SEIE Suits	1	$500	NAVSEA		SS/OPTION	EBCorp - Groton, CT	8/97	12/98	NO	12/97
FY1999										
SEIE Suits	1	$4,000	NAVSEA		SS/OPTION	EBCorp - Groton, CT	2/99	7/99	YES	N/A

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: MYSTIC DSRV-1/AVALON DSRV-2 TYPE MODIFICATION: _____ MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: DEEP SUBMERGENCE RESCUE VEHICLES- HJ010

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.000
PROCUREMENT																								
INSTALLATION KITS					14	3.606	9	1.868	4	1.660	4	2.730	1	0.962	1	0.249	1	0.766			VAR	VAR	34	11.841
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT																								0.000
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER																								0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST																								0.000
TOTAL PROCUREMENT					14	3.606	9	1.868	4	1.660	4	2.730	1	0.962	1	0.249	1	0.766	0	0.000	VAR	VAR	34	11.841

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: MYSTIC DSRV-1/AVALON DSRV-2 MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: VARIOUS
ADMINISTRATIVE LEADTIME: VAR Months PRODUCTION LEADTIME: VAR Months
CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR
DELIVERY DATE: FY 1997: VAR FY 1998: VAR FY 1999: VAR

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT					1	0.340	10	0.196	2	0.337	1	0.000											14	0.873
FY 1997 EQUIPMENT							2	0.000	1	0.336	6	0.200											9	0.536
FY 1998 EQUIPMENT											2	0.000	2	0.162									4	0.162
FY 1999 EQUIPMENT													4	0.216									4	0.216
FY 2000 EQUIPMENT															1	0.346	0	0.000					1	0.346
FY 2001 EQUIPMENT																	1	0.465					1	0.465
FY 2002 EQUIPMENT																			1	0.700			1	0.700
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1	0	0	2	10	1	1	0	1	4	0	0	5	5	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0		34
Out	0	1	0	0	2	10	1	1	0	1	4	0	0	5	5	0	1	0	1	0	0	0	1	0	0	0	1	0	0		34

5 FY97 KITS NEED NO INSTALL FUNDING
3 FY98 KITS NEED NO INSTALL FUNDING
2 FY99 KIT NEEDS NO INSTALL FUNDING

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: NR-1 TYPE MODIFICATION: MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: SUBMARINE NR-1- HJ020

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.000
PROCUREMENT																								
INSTALLATION KITS					7	1.159	6	1.079	11	1.203	5	1.075	5	0.931	1	0.355	1	0.855	2	0.355	VAR	VAR	38	7.012
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT																								0.000
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER																								0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST																								0.000
TOTAL PROCUREMENT					7	1.159	6	1.079	11	1.203	5	1.075	5	0.931	1	0.355	1	0.855	2	0.355	VAR	VAR	38	7.012

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: NR-1 MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: VARIOUS
ADMINISTRATIVE LEADTIME: VAR Months PRODUCTION LEADTIME: VAR Months
CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR
DELIVERY DATE: FY 1997: VAR FY 1998: VAR FY 1999: VAR

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT					2	0.115	5	0.000															7	0.115
FY 1997 EQUIPMENT									6	0.359													6	0.359
FY 1998 EQUIPMENT									2	0.718	5	0.741	4	0.216									11	1.675
FY 1999 EQUIPMENT													4	0.359									4	0.359
FY 2000 EQUIPMENT													4	0.315									4	0.315
FY 2001 EQUIPMENT																	1	0.000					1	0.000
FY 2002 EQUIPMENT																			1	0.689			1	0.689
FY 2003 EQUIPMENT																					2	0.663	2	0.663
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	2	0	2	2	1	1	3	4	0	2	1	2	0	5	2	1	4	0	0	0	0	1	0	0	0	0	1	0	2	0	36
Out	0	2	0	2	2	1	1	3	4	0	2	1	2	0	5	2	1	4	0	0	0	0	1	0	0	0	0	1	0	2	36

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: TURTLE DSV-3/SEA CLIFF DSV-4 TYPE MODIFICATION: MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: DEEP SUBMERGENCE VEHICLES - HJ050

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.000
PROCUREMENT																								
INSTALLATION KITS					2	0.143	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	VAR	VAR	2	0.143
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT																								0.000
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER																								0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST																								0.000
TOTAL PROCUREMENT			0	0.000	2	0.143	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	VAR	VAR	2	0.143

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: TURTLE DSV-3/SEA CLIFF DSV-4 MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: VARIOUS
ADMINISTRATIVE LEADTIME: VAR Months PRODUCTION LEADTIME: VAR Months
CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR
DELIVERY DATE: FY 1997: VAR FY 1998: VAR FY 1999: VAR

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT					1	0.102			2	0.000													3	0.102
FY 1997 EQUIPMENT																							0	0.000
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Out	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

2 FY98 KITS NEED NO INSTALL FUNDING

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: TETHERED UNMANNED WORK VEHICLE SYSTEM TYPE MODIFICATION: MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

DESCRIPTION/JUSTIFICATION: DEEP SUBMERGENCE VEHICLES - HJ060

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.000
PROCUREMENT																								
INSTALLATION KITS					1	0.304	3	1.273	1	1.400	5	1.100	2	1.000	2	0.683	2	0.744	3	0.800	VAR	VAR	19	7.304
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT																								0.000
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER																								0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST																								0.000
TOTAL PROCUREMENT					1	0.304	3	1.273	1	1.400	5	1.100	2	1.000	2	0.683	2	0.744	3	0.800	VAR	VAR	19	7.304

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: TETHERED UNMANNED WORK VEHICLE SYSTEM MODIFICATION TITLE: DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: VARIOUS
ADMINISTRATIVE LEADTIME: VAR Months PRODUCTION LEADTIME: VAR Months
CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR
DELIVERY DATE: FY 1997: VAR FY 1998: VAR FY 1999: VAR

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT					1	0.086	1	0.000															2	0.086
FY 1997 EQUIPMENT									3	0.361													3	0.361
FY 1998 EQUIPMENT											1	0.700											1	0.700
FY 1999 EQUIPMENT													5	0.338									5	0.338
FY 2000 EQUIPMENT															2	0.509							2	0.509
FY 2001 EQUIPMENT																	2	0.774					2	0.774
FY 2002 EQUIPMENT																			2	0.000			2	0.000
FY 2003 EQUIPMENT																					3	0.000	3	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1	1	0	0	0	0	0	3	0	0	1	0	0	0	2	3	0	0	2	0	0	0	2	0	0	0	2	0	0	3	20
Out	1	0	1	0	0	0	0	0	3	0	0	1	0	0	0	2	3	0	0	2	0	0	0	2	0	0	0	2	0	3	20

1 FY96 KITS NEED NO INSTALL FUNDING

BUDGET ITEM JUSTIFICATION SHEET P-40						DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT						P-1 ITEM NOMENCLATURE/LINE ITEM # *MINESWEEPING EQUIPMENT / 097500*					
Program Element for Code B Items:						OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY											$0.0
EQUIPMENT COST (In Millions)	N/A	A	$3.9	$4.8	$0.4	$0.7	$0.4	$0.4	$0.4	N/A	$11.0
SPARES COST (In Millions)	N/A	A	$0.3	$0.4	$0.6	$0.3	$0.3	$0.3	$0.3	N/A	$2.4

PROGRAM DESCRIPTION/JUSTIFICATION:

ITEM DESCRIPTION/JUSTIFICATION:

Provide systems, subsystems, and engineering change kits for minesweeping and mine neutralization systems used by the surface MCM force. Systems and equipments are used for magnetic, acoustic, and mechanical type minesweeping systems, plus the AN/SLQ-48 (MNS) for mine neutralization. Engineering change kits improve reliability and maintainability and correct deficiencies to allow equipment to perform in accordance with specified requirements.

AN/SLQ-48 UPGRADE (UQ013) - Funding is to procure retrofit kits for the AN/SLQ-48 MNS and Handling System to improve vehicle maneuverability and system interoperability.

MAGNETIC SWEEP CABLES (UQ014) - The Magnetic Minesweeping Cables provide MCM-1 Class ships with the capability of magnetic minesweeping. Types of cables to be procured are S-3, CL-3, and Q3.

PRODUCTION ENGINEERING (UQ830) - Production Engineering in support of the above procurements. This includes conduct of first article tests, factory acceptance tests, and other production support efforts directly related to delivery of the hardware.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT		ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD MINESWEEPING EQUIPMENT / 097500 71UQ	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	MINE WARFARE, N852													
UQ013	AN/SLQ-48 UPGRADE	A						3,087			4,265			
UQ014	MAGNETIC SWEEP CABLES (S3)	A				4	79.8	319	2	79.0	158	2	78.5	161
	MAGNETIC SWEEP CABLES (CL-3)					7	54.0	378	4	60.0	240	4	58.0	233
UQ830	PRODUCTION ENGINEERING	A						55			103			
UQ900	CONSULTING SERVICES	A						40			50			
TOTAL					**0**			**3,879**			**4,816**			**394**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE MINESWEEPING EQUIPMENT	SUBHEAD 71UQ

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR 1997										
UQ014 - MAGNECTIC SWEEP CABLES										
S3	4	79.8	NAVSEA	N/A	C/FFP	BIW	12/96	5/97	YES	
CL-3	7	54.0	NAVSEA	N/A	C/FFP	BOSTON, MA	12/96	4/97	YES	
FISCAL YEAR 1998										
UQ014 - MAGNETIC SWEEP CABLES										
S3	2	79.0	NAVSEA	05/98	SS/FFP	BIW	01/98	6/98	YES	
CL-3	4	60.0	NAVSEA	05/98	SS/FFP	BOSTON, MA	01/98	5/98	YES	
FISCAL YEAR 1999										
UQ014 - MAGNECTIC SWEEP CABLES										
S3	2	78.5	NAVSEA	N/A	C/FFP	UNKNOWN	12/98	5/99	YES	
CL-3	4	58.0	NAVSEA	N/A	C/FFP	UNKNOWN	12/98	4/99	YES	

D. REMARKS

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1998
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA-1: Ships Support Equipment**	**P-1 ITEM NOMENCLATURE/LINE ITEM #** ***HM&E ITEMS UNDER $2 MILLION (81HK) (0980)***
Program Element for Code B Items:	**OTHER RELATED PROGRM ELEMENTS**

	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													**0**
EQUIPMENT COST (In Millions)					**$29.9**	**$49.9**	**$58.1**	**$53.3**	**$33.1**	**$20.0**	**$17.0**		**261**
SPARES COST (In Millions)													**0**

PROGRAM DESCRIPTION/JUSTIFICATION:

This request provides support for all "S" cognizance equipment for submarines, surface ships, and aircraft carriers which are not in any specific category. These components will be used to accomplish both shipyard/type commander alterations, fill Fleet requisitions from casualties, attrition, etc. as well as procure allowance items as required by the Consolidated Shipboard Allowance List. The following is a breakout of these items:

HK052 - PERFORMANCE MONITORING PROGRAM - A maintenance concept which entails identifying, acquiring, and analyzing performance data of critical operational SSN ship systems without costly open and inspect methods. The results of this program yield the material condition assessment and operational readiness of deployed submarines on a continuing basis to safely and reliably extend their operating cycles between overhauls. These funds are required to procure specialized support and test equipment (e.g. Thermal Imaging, Vibration Monitoring, Ultrasonic Flowmeter, etc.) essential to obtaining (non-inclusively) accurate technical data for engineering analysis.

HK830 - PRODUCTION ENGINEERING (N87, N86, AND N88) - The review and approval of any production contract technical documentation, or the separate development of this documentation to include, Technical manuals, PMS, Level III production drawings, Provisioning Technical Documentation (PTD), Program Support Data (PSD), and Allowance Parts List (APL); engineering support for final design reviews. This work can be accomplished by NSWC PHILADELPHIA as the in service Engineering agent, other Naval activities or contractors as appropriate.

HK215 - Control & Survivability Enhancements for Landing Craft Air Cushion (LCAC) - The procurement and installation of systems on the Landing Craft Air Cushion (LCAC) to provide capabilities for the platform to perform the assault breaching mission. Hardware includes an enlarged seal and wave fence (Deep Skirt) to reduce craft operating restrictions in the surf zone and remote control modification kits and operating stations.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: FEBRUARY 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # HM&E ITEMS UNDER $2 MILLION (81HK) (0980)

HK067 - SEMMSS (ASSESSMENT OF EQUIPMENT CONDITION) - This supports the CNO mandated program to provide engineering repair decisions for the near term availabilities by executing condition assessment of all shipboard systems. These funds are for the initial outfitting and periodic replacement of the AEC Performance Monitoring Team's Test, Measurement and Diagnostic Equipment (TMDE) inventories. The TMDE inventories are comprised of electrical, electronic mechanical and electromechanical test equipment used to measure operating parameters of shipboard systems/equipment's. To fully support the program, each team will have TMDE inventories for 400 individual items. Many of these items are specialized, high-technology, high costs, instruments not O&M,N supportable. Examples of the new and replacement TMDE are: moisture analyzer, hydrometer, oxygen leak detector, flowmeter, vibration monitoring equipment's anameter, electrical/motorized megger, etc.

HK213 - LANDING CRAFT AIR CUSHION (LCAC) - Beginning in FY 94, the HK213 line will fund material procurement and shipalt installation and design for the LCAC Fleet Modernization Program (FMP). Funds in this line are for modifications on the craft to enhance military capabilities directed by CNO or technical characteristics when warranted by reason of safety, reliability and/or cost effectiveness. Advanced technology used in LCAC demands constant and continual modifications to ensure proper mission performance and maintain craft configuration to those new craft. There is a direct relationship between the number of LCAC both delivered and planned and the funding in the program line. In addition, funding will also support modification on two Full Mission Trainers (FMT). Total planned inventory is 84; 67 craft have been delivered to date with approximately one craft being delivered each month.

HK261 - MACHALTs - The Machinery Alteration Program (MACHALT) is a program that permits changes to HM&E equipment and systems where the changes are contained within the boundaries of the individual equipment of systems and have limited system ramifications. The MACHALT program enables changes to be accomplished in a more expeditious manner and eliminate them from the formal SHIPALT process. MACHALTs are most effective for multi-class alterations. One MACHALT can replace several SHIPALTs in the system.

HK122 - 363 TON AIR CONDITIONER - This programs procures and installs Air Conditioning Plants on CVN-68 Class. It provides the necessary Air Conditioning capacity to keep pace with installed and planned installations of systems and equipment requiring Air conditioning or chilled water for operation. This program is part of the aircraft carrier critical distributive systems program.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: FEBRUARY 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: Ships Support Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # HM&E ITEMS UNDER $2 MILLION (81HK) (0980)

HK5IN - INSTALLATION OF EQUIPMENT - Funding is for the Installation of equipment including Fleet Modernization Program Installation, installation of training equipment, and installation of equipment in other shore facilities.

HK068 - COMMAND AND CONTROL UPGRADES - Modifications to enhance extensive communications, and support for Fleet Commanders and embarked staff.

HK262, HK263, HK265, HK266, LHA MID-LIFE UPGRADE - REVERSE OSMOSIS, BALLAST/DEBALLAST, UPGRADE CHT SYSTEMS, STAR ROTARY COMPRESSORS, 300 TON A/C PLANT - This program supports material procurement and installation of engineering solutions developed as part of the LHA Mid-Life Maintenance Upgrade Program. This program is a joint OPNAV, CINCLANTFLT, SURFLANT, CINCPACFLT, and SURFACE initiative to resolve maintenance deficiencies, increase readiness and reduce future maintenance costs enabling the ships to reach their service life. Joint Fleet Priority #600 as assigned by OPNAV; NAVSEA, TYPE COMMANDER and LHA Mid-Life Management Team, will procure and install CHT Systems Upgrades, Star Rotary Compressors, and 300/250 Ton A/C Plant, Reverse Osmosis Desalination units.

HKDSA DESIGN SERVICES ALLOCATION - The Budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 & out.

HK214, FUEL OIL PURIFIERS - These self-cleaning purifiers are critical to fuel cleanliness for Gas Turbine operation and will replace existing ones that are no longer repairable or supportable by the original manufacturer.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-1: Ships Support Equipment**		ID Code	**P-1 ITEM NOMENCLATURE/SUBHEAD** **HM&E ITEMS UNDER $2 MILLION (81HK) (0980)**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N85 EXPEDITIONARY WARFARE													
HK213	MOD KITS LAND CRAFT CUSHION	A						641			0			631
HK214	F. O. PURIFIER	A												
HK215	CONTROL & SURVIVIBALITY ENHANCEMENTS (LCAC)	A												
HK260	CIRC PUMP MOTORS	A										2	60	120
HK262	REVERSE OSMOSIS	A							4	438	1,750	4	438	1,752
HK263	UPGRADE CHT SYSTEMS	A							2	535	1,070	2	600	1,200
HK264	STAR ROTARY COMPRESSORS	A				2	300	600	4	282	1,129	8	282	2,256
HK265	300 TON AC PLANTS	A				1	1,000	1,000	1	972	972	2	1,000	2,000
HK266	BALLAST DEBALLAST								3	212	635			
HK267	CARGO HANDLING MONORAIL	A										1	490	490
	SUBTOTAL N85							**2,241**			**5,556**			**8,449**
	SURFACE N86													
HK067	SEMMSS	A						800			835			399
HK068	COMMAND & CONTL UPGRADES	A				3	1,152	3,434				4	1,075	4,300
HK261	MACHALTS	A						6,191			7,216			3,623
HK830	PRODUCTION ENGINEERING	A						200			215			200
	SUBTOTAL N86							**10,625**			**8,266**			**8,522**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998

APPROPRIATION/BUDGET ACTIVITY	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD
Other Procurement, Navy BA-1: Ships Support Equipment		HM&E ITEMS UNDER $2 MILLION (81HK) (0980)

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SUBMARINES (N87)													
HK052	PERFORMANCE MONITOR INSURANCE SPARES													
	SUBTOTAL N87													
	AIRCRAFT CARRIERS (N88)													
HK122	363 TON A/C PLANT	A				1	1,367	1,367	1	1,337	1,337	2	1,373	2,746
	SUBTOTAL N88							**1,367**			**1,337**			**2,746**
	TOTAL EQUIPMENT							**$14,233**			**$15,159**			**$19,717**
HK5IN	INSTALLATION OF EQUIPMENT K" ALT/"D" ALT													
	N85							8,302			9,527			27,973
	N86										11,568			
	N87							0			0			0
	N88							7,405			13,630			10,431
	TOTAL INSTALLATION							**$15,707**			**$34,725**			**$38,404**
	GRAND TOTAL							**$29,940**			**$49,884**			**$58,121**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment	C. P-1 ITEM NOMENCLATURE HM&E ITEMS UNDER $2 MILLION	SUBHEAD 81HK (0980)

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 97										
HK213	N/A	325,000	NAVSEA		PD	SUPSHIP NEW ORLEANS	Feb-97	Sep-98	N/A	
LAND CRAFT CUSHION	N/A	316,000	NAVSEA		LOE	TRW	May-97	May-98	N/A	
HK068										
Command & Control	3	1,152,000	NAVSEA		LTR CONTRACT	YORK YORK, PA	May-97	Jun-98	YES	
HK122										
363 TON A/C PLANTS	1	1,367,000	NAVSEA		C/FP	YORK YORK, PA	Oct-97	Feb-99	YES	
HK067 SEMMSS	N/A	800,000	NAVSEA		WR	NSWC PHILA, PA	Apr-97	Apr-97	N/A	
HK261 MACHALTS	N/A	6,191,000	NAVSEA		WR	NSWC PHILA, PA	Dec-96	Dec-97	N/A	
HK264										
STAR ROTARY	2	300,000	NAVSEA		C/FP	RIX INDUSTRIES	Jun-97	Jun-98	YES	
HK265										
300 TON AC PLANTS	1	1,000,000	NAVSEA		SS/FP	YORK YORK, PA	Oct-97	Nov-98	YES	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment	C. P-1 ITEM NOMENCLATURE HM&E ITEMS UNDER $2 MILLION	SUBHEAD 81HK (0980)

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 98										
HK266 **BALLAST/DEBALLAST**	3	211,667	NAVSEA		C/FP	UNKNOWN	May-98	May-99	YES	
HK122 **363 TON A/C PLANTS**	1	1,333,700	NAVSEA		OPT	YORK YORK, PA	Feb-98	Aug-99	YES	
HK067 SEMMSS	N/A	835,000	NAVSEA		WX	UNKNOWN	Mar-98	Mar-99	N/A	
HK261 MACHALTS	N/A	7,216,000	NAVSEA		WX	NSWC PHILA, PA	Mar-98	Mar-99	N/A	
HK263 UPGRADE CHT SYSTEMS	2	535,000	NAVSEA		RC	SPCC MECH, PA	Feb-98	Aug-98	YES	
HK264 STAR ROTARY	4	282,250	NAVSEA		OPT	RIX INDUSTRIES	Feb-98	Feb-99	YES	
HK265 300 TON AC PLANTS	1	972,000	NAVSEA		OPT	YORK YORK, PA	Jan-98	Mar-99	YES	
HK262 REVERSE OSMOSIS	4	437,500	NAVSEA		C/FP	UNKNOWN	Jun-98	Jun-99	YES	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment	C. P-1 ITEM NOMENCLATURE HM&E ITEMS UNDER $2 MILLION	SUBHEAD 81HK (0980)

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 99										
HK213 LAND CRAFT CUSHION	N/A	631,000	NAVSEA		WR	NSY PUGET SOUND	Feb-99	Feb-00	N/A	
HK260 CIRC PUMP MOTOR	2	60,000	NAVSEA		C/FP	UNKNOWN	Apr-99	Apr-00	YES	
HK267 CARGO HANDLING	1	490,000	NAVSEA		C/FP	UNKNOWN	Jun-99	Oct-00	YES	
HK122 363 TON A/C PLANTS	2	1,373,000	NAVSEA		OPT	YORK, YORK PA	Feb-99	Aug-00	YES	
HK067 SEMMSS	N/A	399,000	NAVSEA		WX	UNKNOWN	Mar-99	Mar-00	N/A	
HK261 MACHALTS	N/A	3,623,000	NAVSEA		WX	NSWC PHILA, PA	Feb-99	Feb-00	N/A	
HK263 UPGRADE CHT SYSTEMS	2	600,000	NAVSEA		RC	SPCC MECH, PA	Feb-99	Aug-99	YES	
HK264 STAR ROTARY	8	282,000	NAVSEA		OPT	RIS INDUSTRIES	Feb-99	Feb-00	YES	

D. REMARKS

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 1998		
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: Ships Support Equipment					C. P-1 ITEM NOMENCLATURE HM&E ITEMS UNDER $2 MILLION				SUBHEAD 81HK (0980)	
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 99 (CONT.)										
HK265 300 TON AC PLANTS	2	1,000,000	NAVSEA		OPT	YORK, YORK PA	Jan-99	Mar-00	YES	
HK262 REVERSE OSMOSIS	4	438,000	NAVSEA		OPT	UNKNOWN	Feb-99	Feb-00	N/A	
HK068 COMMAND & CONTRC	4	1,075,000	NAVSEA		OPT	YORK YORK, PA	Dec-98	Feb-00	N/A	

D. REMARKS

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: STAR ROTARY (LHA MIDLIFE UPGRADE) (HK264) #831 TYPE MODIFICATION: MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT							2	0.6	4	1.1	8	2.3	4	1.0										5.0
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST									A/P	0.1	8	2.5	4	1.5	8	1.9								6.0
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: STAR ROTARY (LHA MIDLIFE UPGRADE) (HK264) MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIPYD/COMP
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES:	FY 1997: Jun-97	FY 1998: Feb-98	FY 1999: Feb-99
DELIVERY DATE:	FY 1997: Jun-98	FY 1998: Feb-99	FY 1999: Feb-00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT									A/P	0.1	4	1.2												
FY 1998 EQUIPMENT											4	1.3												
FY 1999 EQUIPMENT													4	1.5	4	0.9								
FY 2000 EQUIPMENT															4	1.0								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	4	0	0	4	0	4	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	20
Out	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	20

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: BALLAST/DEBALLAST (HK266) (LHA MIDLIFE UPGRADE) #153

TYPE MODIFICATION:

MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT									3	0.6														0.6
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST							7	1.4			3	1.8												3.2
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: BALLAST/DEBALLAST (LHA MIDLIFE UPG) (HK266) MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1997: FY 1998: May-98 FY 1999:
DELIVERY DATE: FY 1997: FY 1998: May-99 FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS							7	1.4																
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT											3	1.8												
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: 300 TON A/C (LHA MIDLIFE UPGRADE) (HK265) #418 TYPE MODIFICATION: MODIFICATION TITLE: HM& E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT							1	1.3	1	1.0	2	2.0	1	1.0										5.3
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST									1	5.5	1	6.3	1	5.8	2	7.4								25.0
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 300 TON A/C (LHA MIDLIFE UPGRADE) (HK265) MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYD/COMP

ADMINISTRATIVE LEADTIME: 12 Months PRODUCTION LEADTIME: 15 Months

CONTRACT DATES: FY 1997: Oct-97 FY 1998: Jan-98 FY 1999: Jan-99

DELIVERY DATE: FY 1997: Jan-99 FY 1998: Apr-99 FY 1999: Apr-00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT									1	5.5														
FY 1998 EQUIPMENT											1	6.3												
FY 1999 EQUIPMENT													1	5.8	1	4.0								
FY 2000 EQUIPMENT															1	3.4								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5
Out	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	5

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: 363 TON AIR CONDITIONER (HK122) CVN TYPE MODIFICATION: MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

The air conditioning plants provide cooling to the chilled water system which is a vital system supporting and the ships critical offensive, and defensive electronic systems. Lack of a continuous supply of chilled water to these vita systems has a serious effect on mission capability. The chilled water demand on aircraft carriers has grown as a result of installation of numerous electronic systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT	11	9.9					1	1.3	1	1.3	2	2.7	2	2.9										18.1
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST	1	3.9	4	19.1	2	17.0	2	7.4	2	13.6	1	10.4	1	12.1	2	10.9	2	6.6	A/P	5.6				106.6
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 363 TON A/C (HK122) CVN MODIFICATION TITLE: HM&E UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIPYD/COMP
ADMINISTRATIVE LEADTIME: 12 Months PRODUCTION LEADTIME: 15 Months
CONTRACT DATES: FY 1997: Oct-97 FY 1998: Feb-98 FY 1999: Feb-99
DELIVERY DATE: FY 1997: Nov-98 FY 1998: Jun-99 FY 1999: Jun-00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	1	4	4	19.1	2	17.0	2	7.4	2	13.6	1	10.4	1	12.1										
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT															2	10.9								
FY 1998 EQUIPMENT																	2	6.6						
FY 1999 EQUIPMENT																			A/P	5.6				
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	2	0	1	0	1	1	0	1	0	0	0	1	0	1	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	12
Out	2	0	0	0	1	0	0	1	1	0	1	0	0	1	0	0	1	0	0	0	2	0	0	0	0	0	2	0	0	0	12

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: REV OSMOSIS (LHA MIDLIFE UPGRADE) (HK262) #834 TYPE MODIFICATION: MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT									4	1.8	4	1.8	12	4.3										7.9
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST											4	1.6	4	1.8	12	2.9								6.3
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: REV OSMOSIS (LHA MIDLIFE UPGRADE) (HK262) MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIPYD/COMP
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES:	FY 1997:	FY 1998: Jun-98	FY 1999:	Feb-99
DELIVERY DATE:	FY 1997:	FY 1998: Jun-99	FY 1999:	Feb-00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT											4	1.6												
FY 1999 EQUIPMENT													4	1.8										
FY 2000 EQUIPMENT															12	2.9								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	8	4	0	0	0	0	0	0	0	0	0	0	20
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4	8	0	0	0	0	0	0	0	20

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: CHT UPGRADE (LHA MIDLIFE UPGRADE) (HK263) #942 TYPE MODIFICATION: MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT									2	1.1	2	1.2	1	0.6										2.9
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST									A/P	0.3	2	11.0	1	5.1	1	4.3	1	3.5						24.2
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CHT UPGRADE (LHA UPGRADE) (HK263) MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYD/COMP

ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 1997: FY 1998: Feb-98 FY 1999: Feb-99

DELIVERY DATE: FY 1997: FY 1998: Aug-98 FY 1999: Aug-99

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty		Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT									A/P	0.3	2	11.0												
FY 1999 EQUIPMENT													1	5.1	1	4.3								
FY 2000 EQUIPMENT																	1	3.5						
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5
Out	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	5

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: COMMAND/CONTROL UPG (250 TON A/C) (HK068) TYPE MODIFICATION: MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT					1	1.0	3	2.5			4	4.3												7.8
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST									4	11.6			4	10.6										22.2
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: COMMAND/CONTROL UPG (250 TON A/C) (HK068) MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIPYD/COMP
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 14 Months
CONTRACT DATES: FY 1997: May-97 FY 1998: FY 1999: Dec-98
DELIVERY DATE: FY 1997: Jun-98 FY 1998: FY 1999: Feb-00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT									1	2.9														
FY 1997 EQUIPMENT									3	8.7														
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT													4	10.6										
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Out	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	8

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: LANDING CRAFT AIR CUSHION (LCAC) (AI (HK213)

TYPE MODIFICATION:

MODIFICATION TITLE: HM&E UNDER 2M

DESCRIPTION/JUSTIFICATION:

Funds in this line are for modification on the craft to enhance military capabilities directed by CNO or technical characteristics when warranted by reason of safety, reliability and/or cost effectiveness. Advanced technology used i LCAC demands contant and continual modifications to ensure proper mission performance and miantain craft configuration to those new craft.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT				2.3		6.6		0.8		0.0		0.6		1.1		1.0		1.0		1.0				14.4
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST				2.4		2.9		5.7		3.6		4.8		2.8		2.6		2.5		2.4				29.7
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: LANDING CRAFT AIR CUSHION (LCAC) (HK213) MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months
CONTRACT DATES: FY 1997: VARIOUS FY 1998: VARIOUS FY 1999: VARIOUS
DELIVERY DATE: FY 1997: VARIOUS FY 1998: VARIOUS FY 1999: VARIOUS

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT				2.4																				
FY 1996 EQUIPMENT						2.9																		
FY 1997 EQUIPMENT								5.7		3.6														
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT												4.8												
FY 2000 EQUIPMENT														2.8										
FY 2001 EQUIPMENT																2.6								
FY 2002 EQUIPMENT																		2.5						
FY 2003 EQUIPMENT																				2.4				
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: BOAT DAVITS TYPE MODIFICATION: MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

The hydraulic sytem with ingle arm davits will be replaced with new mechanical shock absorber and two speed winch.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT	2	0.5																						0.5
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST					2	0.1																		0.1
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: BOAT DAVITS MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS					2	0.1																		
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Out	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: LPAC TYPE MODIFICATION: MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

The replacement compressor is the Naqvy's standard lwo pressure air compressor. It is a design owned solely by the Navy. This replacementis the Navy's standard 200 SCFM, 125 PSI low pressure "STAR" air compressor. The units are programmed for installation in the DDG-51 Class, LSD-49 Class, and as a back fit in the AOE-1 Class. Each SHIPALT requires the installation of new low pressure air compressors to increase air capacit or improve reliability. Installation will be accomplished by an alteration S/A AOE-645.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT	1	1.0																						1.0
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST					1	0.4																		0.4
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: LPAC MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIPYARD/COMP
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 10 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999:
DELIVERY DATE: FY 1997: FY 1998: FY 1999:

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS					1	0.4																		
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Out	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: PIONEER TYPE MODIFICATION: MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Pr		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	$
FINANCIAL PLAN (IN MILLIONS)																							
PROCUREMENT																							
INSTALLATION KITS																					0		0.0
INSTALLATION KITS NONRECURRING																							0.0
EQUIPMENT			1	0.7																			0.7
EQUIPMENT NONRECURRING																							0.0
ENGINEERING CHANGE ORDERS																							0.0
DATA																							0.0
TRAINING EQUIPMENT																							0.0
SUPPORT EQUIPMENT																							0.0
OTHER																							0.0
OTHER																							0.0
OTHER																							0.0
INTERIM CONTRACTOR SUPPORT																							0.0
INSTALL COST								1.2															1.2
TOTAL PROCUREMENT																							0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: (PIONEER MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 16 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999: Jun-99
DELIVERY DATE: FY 1997: FY 1998: FY 1999: Oct-00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT							1	1.2																
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: CARGO MONORAIL (LHA MIDLIFE UPG) (HK267) TYPE MODIFICATION: MODIFICATION TITLE: HM&E ITEMS UNDER 2M

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT											1	0.5												0.5
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST															1	0.6								0.6
TOTAL PROCUREMENT																								0.0

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CARGO MONORAIL (LHA MIDLIFE UPG) (HK267) MODIFICATION TITLE: HM&E ITEMS UNDER 2M

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 16 Months
CONTRACT DATES: FY 1997: FY 1998: FY 1999: Jun-99
DELIVERY DATE: FY 1997: FY 1998: FY 1999: Oct-00

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT															1	0.6								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA: 1 SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *SURFACE IMA BLI#098300*
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$2.4	$0.5	$0.7	$8.4	$2.9	$2.5	$6.6	N/A	
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

A. Intermediate Maintenance Activity (IMA) (Ashore)

B. Support and Test Equipment Engineering Program (STEEP) - Program requirements (without funds) for FY 98 and outyears are being transferred to the 3M Program (81G4) in accordance with OPNAV sponsor direction.

Intermediate Maintenance Activity (IMA) Improvement Program

The IMA Improvement Program funds are used to procure industrial plant equipment for shore activities which provide maintenance capabilities for Sailors to maintain surface and sub-surface vessels of the U.S. Navy. These activities ashore include the following: Shore Intermediate Maintenance Activities (SIMAs), Trident Refit Facilities (TRFs), Regional Repair Centers, Subase Repair Activities, and Air Cushion Unit Facilities and Ship Repair Facilities (SRFs). The equipment provided to ashore activities correlates to skills required when Sailors are assigned to maintenance shops afloat. The programs provide new and used Industrial Plant Equipment (IPE) to replace equipment beyond economical repair and to upgrade capabilities for ship maintenance under the following categories:

MILITARY CONSTRUCTION OUTFITTING (MCON) - Modern IPE, test equipment, and associated support equipment must be procured and installed or available for use in the work spaces. Procurement of equipment is phased to coincide with military construction milestones. **IPE REPLACEMENT** - SIMAS are inspected periodically to determine the need for refurbishment or replacement of existing equipment. **IMA UPGRADE/NEW TECHNOLOGY** - IMA Upgrade/New Technology provides technology to improve work shop productivity and add new capabilities, to meet changing OSHA and EPA standards, and to maintain existing capabilities where machinery becomes uneconomical to repair. New equipmen is procured to satisfy realignment of capabilities at IMAs in support of new systems.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: FEBRUARY 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1 SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # SURFACE IMA

STEEP

Program requirements (without funds) for FY98 and outyears are being transferred to the 3M Program (81G4) in accordance with OPNAV sponsor direction.

The **STEEP** Program provides support and test equipment for Intermediate Maintenance Activities and aboard most combatants. Funding of this program to requirements levels results in lower maintenance costs and enables readiness of respective electronic equipment to be maintained. Deploying Automatic Test and Diagnostic Equipment, and their respective Test Program Sets and Gold Disks allows shipboard personnel to test and diagnose circuit card assemblies at the site of the operational failure. The STEEP and 2M Program (2M/ATE) together provide a complete electronics subassembly field level maintenance program, avoiding Fleet OPTAR costs and averting CASREPs. For FY 96 and FY 97, funding will be used to procure and deploy non-aviation Test Program Sets (TPSs) and Gold Disks.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: FEBRUARY 1998

APPROPRIATION/BUDGET ACTIVITY	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD
Other Procurement, Navy BA-(1): (SURFACE IMA)		SURFACE IMA BLI#098300

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	LOGISTICS - N43													
	K6100 SUBLANT (MCON)							970			0			0
	IPE REPLACEMENT							0			460			661
	IMA UPGRADE/NEW TECHNOLOGY							804			0			0
	K6010 SUPPORT & TEST EQUIPMENT ENGINEERING PROGRAM (STEEP)							603			0			0
TOTAL								**2,377**			**460**			**661**

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 1: Ships Support Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # Radiological Controls / 098700
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$ 0.2	$ 0.2	$ -	$ 0.2	$ 0.2	$ 0.2	$ 0.2		$ 1.2
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

The Radiological Affairs Support Office (NAVSEADET RASO), a Detachment of SEA 07R, supports Navy Industrial Radiological Controls Programs, provides radiological analyses of environmental samples for Navy radiation protection programs and accident/incident response, as well as providing personnel and equipment for the Navy RADCON team for response to a nuclear weapons accident/incident or similar radiological event. Additionally, NAVSEADET RASO trains all Navy and USMC Industrial Radiation Safety Officers through the conduct of formal official courses taught at the detachment. In support of their stated responsibilities, NAVSEADET RASO is required to maintain state-of-the-art field and mobile radiation detection, identification, and measurement equipment for both fixed site and remote emergency response operations. The associated instrumentation is used extensively for routine work and instructional purposes, yet must be ready for rapid deployment in case of emergencies. As a result, there is a continuing need to insure adequate redundancy of instruments to prevent a degradation or loss of capability in any area, to further support procurement of technologically advanced instrumentation, and to ensure that a fully equipped and air transportable Navy RADCON team is available for rapid deployment.

NAVSEA provides all Navy funding to support the National Council on Radiation Protection and Measurements (NCRP). NCRP is a Congressionally chartered organization which collects, analyzes and disseminates, in the public interest, information and recommendations about radiation protection and measurements. NCRP recommendations for national human radiation exposure limits, environmental release/cleanup standards, and pathway analyses for human radiation exposures are used by federal and state regulatory agencies to define their standards for compliance. Recommendations of the NCRP have major legal and Congressional influence during consideration of new federal radiation protection statutes. Navy's support to NCRP ensures prompt and real-time awareness of areas of interest that impact programs which include Naval Reactors, nuclear medicine at Navy hospitals and clinics, Navy nuclear weapons programs, Navy research; and industrial operations, including shipyards.

FY 96 funding and beyond provides resources to ensure Navy's goals of reducing personnel exposure to ionizing radiation to levels as low as reasonably achievable (ALARA) as well as protecting the general public and the environment from radiation exposure caused by previous Navy operations are met. Recent decisions by Base Closure and Realignment Commissions have resulted in increasing numbers of Navy shore activities being decommissioned with plans to transfer ownership to local civilian entities with no restrictions on their future use. Prior to release of these facilities which include former Naval shipyards, Naval air Stations, and ammunition depots; extensive radiological surveys of the sites are conducted to ensure that no residual radioactivity caused by prior Navy operations remains. Anomalies discovered during these surveys often require NAVSEADET RASO personnel to bring portable state-of-the-art radiation instruments to the sites to adequately characterize the nature of apparent zones of elevated (higher than naturally occurring background) radiation. As technological improvements in radiation instrumentation progress the capability of NAVSEADET RASO personnel instruments must be upgraded to expeditiously and adequately resolve concerns raised by these anomalous findings.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA:1 SHIPS SUPPORT EQUIPMENT SHIPS SUPPORT EQUIPMENT		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Radiological Controls (81GZ)	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	LOGISTISTICS (N-4)													
GZ007	RASO Program Support	A						54			20			0
GZ010	Radiation Area Monitors	A						40			20			0
GZ830	Production Engineering	A						94			120			0
TOTAL								**188**			**160**			**0**

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA : 1 SHIPS SUPPORT EQUIPMENT**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Radiological Controls (81GZ)

COST CODE	ELEMENT OF COST	IDENT CODE	FY 2000			FY 2001			FY 2002			FY 2003			TO COMPLETE COSTS	TOTAL COSTS
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
GZ007	RASO Program Support	A			57			81			66			67		
GZ010	Radiation Area Monitors	A			20			20			20			19		
GZ830	Production Engineering	A			119			99			119			124		
					196			**200**			**205**			**210**		

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA: 1 SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # MINI/MICROMINIATURE ELECTRONIC TEST AND REPAIR (81G4) BLI: 098800
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY	N/A	A											0
EQUIPMENT COST (In Millions)					$0.9	$0.5	$0.5	$0.5	$0.6	$0.6	$0.6	N/A	$4.2
SPARES COST (In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

NOTE: During PR-98, the Sponsor N431 deleted the Support and Test Equipment Engineering Program (STEEP) funding and resourced it in FY 98 and out to Surface IMA (Ashore) and recommendated that all STEEP requirements be identified here in the 2M repair program. Funding for STEEP is not being transferred to the 2M repair program, but will remain in the Surface IMA Program (81K6) for IMA MILCON projects and IMA upgrades .

1. The Navy 2M Program provides sailors with the capability to repair electronic circuit card assemblies (CCAs) and electronic modules (EMs) at Intermediate Maintenance Activities and aboard most combatants. Funding to requirement levels will enable Navy cost avoidance annually by Fleet maintenance levels executing CCA repairs in lieu of more expensive depot sites. The services provided by 2M allow new repair tools to be selected, deployed, and supported in the Fleet in time to support new CCA technologies. 2. The STEEP Program provides support and test equipment for intermediate Maintenance activities and aboard most combatants. Funding of this program to requirement levels results in lower maintenance costs and enables readiness of respective electronic equipment to be maintained. Deploying automatic test (ATE) and diagnostic equipment, and their respective Test Program Sets and Gold Disks allows shipboard personnel to test and diagnose circuit card assemblies at the site of the operational failure. The STEEP and 2M Program (2M/ATE) together provide a complete electronics subassembly field level maintenance program, avoiding Fleet OPTAR costs and averting CASREPs. For FY 96 and outyears, funding will be used to procure and deploy non-aviation Test Program Sets (TPSs) and Gold Disks. Outyear funding will be used to procure and deploy commercial equipment to test and diagnose new electronic technologies being introduced into the Fleet. The STEEP and 2M Programs (2M/ATE) together provide a complete electronics subassembly field level maintenance program, avoiding OPTAR costs and averting CASREPs due to long (up to 120 day) logistics delays. Due to changing technologies, CCAs currently in the Fleet range in price from $500 to $40K each. Currently deployed repair tools, equipment and repair processes will not support repair of CCAs containing advanced technologies such as surface mount and leadless ship carrier. This technology is now becoming prevalent in commercial and military equipment.

The value of the 2M repair program is not restricted to a platform or system nor is limited to purely monetary avoidances. The 2M repair program allows Fleet readiness to be maintained by providing a capability for quality Fleet repairs, thus reducing degradation of equipment reliability and availability.

This program is a continuing program. As such, the quantities identified in this budget will be used to procure new technology tools and integrate capabilities to enable them to be more usable for the sailor.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA 1: Ships Support Equipment**		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **MINI/MICROMINIATURE ELECTRONIC TEST AND REPAIR (81G4)**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
G4001	Diagnostic and Repair Tools					24	30	709	16	30	484	17	30	518
G4001	Softside Toll Kits					10	12	115						
G4001	Repair Consolidation Tool					20	6	120						
TOTAL					**0**			**944**			**484**			**518**

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA- 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Diving and Salvage Equipment (BLI 1130)*
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$7.4	$4.7	$5.7	$5.6	$5.8	$5.9	$5.9		41.0
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

DIVING - (N873)

This request provides funding for procurement of modern equipment to replace the Navy's archaic diving systems. The demand for divers' services for salvage, ship husbandry, repair and sanitizing work is rapidly increasing. The requested funding buys diving hardware which increases the efficiency and safety of the working diver. Program objectives are to: (1) provide increased safety for diver decompression and better recompression chamber patient monitoring capability, (2) increase underwater ship maintenance capabilities, (3) improve quick response capability, and (4) standardize the configuration of diving systems in the Fleet. The major items of procurement are:

HY106 Lightweight Dive System (LWDS):

a. This system is completely self-contained, man-portable, and can be deployed from dockside or a ship of opportunity. The system will support two working divers and a standby diver to 60 feet of seawater (FSW) for up to a six hour mission performing ship husbandry, light salvage, and underwater inspection tasks. The LWDS consists of four subsystems; Diver Life Support System (DLSS), Diver Equipment, a Spare Parts Kit, and 5000 PSI Flask Replacements (see below for contents of subsystems). The Diver Equipment will interface with all Navy certified, air surface supplied diving systems. Required I/O is 40.

DLSS:

1. Compressor Package - Compressor and prime mover mounted on a common frame; with external fuel tank and gauges.
2. Composite Flasks - Racks of composite HP cylinders; with manifolds and interconnecting hoses.
3. Volume Tank - Assembly mounted on separate frame; with interconnecting hoses.
4. Control Console - Suitcase size with air supply and pneumofathometer control.

Diver Equipment:

1. Full Facemask (FFM) - Lightweight, low volume FFM with communications that interface with fielded communications sets. Each set includes 3 FFMs.
2. Harness Assembly - Diver harness with manifold block. Each set includes three Harness Assemblies.

5000 PSI Flask Replacement:

This item replaces the composite flasks used in the LWDS which have reached their 15 year service life.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA- 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Diving and Salvage Equipment (BLI 1130)*

HY107 Portable Recompression Chamber:

a. Portable Chamber: The Paracel Transportable Recompression Chamber System provides an effective two-man evacuation, transport, treatment, and transfer under pressure capability in order to benefit a diver suffering a pressure related ailment requiring urgent hyperbaric treatment. This is the lightest, most transportable system available to the U. S. Navy. Required I/O is 16.

b. Engineering Change Proposals

c. Environmental Upgrade Package: This item modified existing systems with an environmental system to allow operation in both hot and cold extreme temperature environments. I/O is 16.

HY123 Flyaway Dive System (FADS) III: The FADS III is a matrix of components designed to support a manned diving to 300 fsw. It is made up of two major subsystems, the High Pressure (H.P.) Air System and the Mixed Gas System. The air system consists of a 5000 psi air rack using lightweight composite flasks, a portable diver's air console, and a 5000 psi air compressor packaged for flyaway applications. The mixed gas subsystem consists of H.P racks for containment of various gas mixes required for diving operations, a mixed gas diving console, and a gas transfer mixmaker system for charging mixed gas flasks. The matrix concept is designed to provide maximum flexibility in assembling equipment necessary to support a dive mission. Required I/O's are 20 High Pressure Air Systems and 4 Mixed Gas Systems.

HY132 Standard Recompression Chamber: The Standard Recompression Chamber is a standardized, conventional full-size chamber designed to be built using standard commercial specifications and standards. The chamber is capable of providing a full range of recompression treatment to two patients and two attendants. It will replace aging and difficult to maintain recompression chambers that will be retired due to fatigue and material flaws. Required I/O is 21 standard chambers and 1 chamber without gas storage.

HY176 Oil Free Compressors: This item replaces high pressure Air Compressors in existing diver's life support systems which have reached the end of their service life. Required I/O is 64.

HY177 Air Purification Units: This item is used when charging diver's life support system (DLSS) flasks or inserted inline in the DLSS to purify and monitor diver's breathing air. It will enhance diver's safety by providing constant monitoring of diver's breathing air and eliminate the need for the semi-annual air samples of all diver's breathing air compressors. Required I/O is 500 units.

HY179 Navy Experimental Diving Unit: NEDU's mission is to support the Fleet diver through test and evaluation of diving equipments and procedures as well as hyperbaric systems for NAVSEA, Navy, and DoD activities. Funding is to procure equipment for test, facilities atmospheric control, life support, and physiological systems. These systems not only ensure the safety and lives of NEDU sailors performing experimental dives, but ultimately support the combat readiness and mission success of the Fleet sailors who use the equipment tested at NEDU. In FY99 the NEDU was realigned from Prduction Support Facilities (BLI 1415).

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA- 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Diving and Salvage Equipment (BLI 1130)*

SALVAGE: (N869)

This request provides program support for the procurement of critical salvage and underwater ship repair items. Public Law 513 (80th Congress, 10 USC 7361 ET SEQ) authorizes the Secretary of the Navy to provide, by contractor or otherwise, necessary salvage and diving equipment, services and facilities for public, private, and military vessels upon such terms and conditions as he may, in his discretion, determine to be in the best interest of the United States.

The U. S. Navy Supervisor of Salvage maintains the Emergency Ship Salvage Material (ESSM) System which consists of a network of bases that maintain, control, and issue material for salvage operations, underwater ship husbandry operations, pollution abatement operations, ocean engineering projects, special authorized projects, and equipment for use in national emergencies. The major bases are located in Williamsburg, Virginia; Stockton, California; Singapore; and Livorno, Italy. Satellite bases having smaller allowances are maintained at Sasebo, Japan; Pearl Harbor, Hawaii; and Bahrain. This system provides the Nation's first line of defense for major pollution abatement operations and the Navy's second line of defense for salvage operations. The equipments to be procured are:

HY050 Synthetic Line: This line is used for lifting, mooring, towing, rigging, and in conjunction with the remotely operated vehicles at the salvage site. Required I/O is 200.

HY062 ORION/D2/CURV Sonar System: These sonars are used on the ORION, DEEP DRONE, and CURV III remotely operated vehicles to locate items lost on the sea floor, aircraft debris fields, sunken hull sections, and submerged obstacles. Total I/O is 8 (6 operational plus 2 spares).

HY116 Portable Submersible Pumps: The 6" hydraulic submersible salvage pump system is designed for high lift with high discharge pressure. The pumping system is packaged in containers for ease of shipment and handling at the casualty site. The pump with attached hoses can be lowered into flooded spaces through 12-1/2" or larger accesses or can be handcarried into confined spaces. The system includes a hydraulic power unit, hose, and all ancillary equipment. Required I/O is 53.

HY131 ROV Handling Systems: These systems are used to launch and recover remotely operated vehicles and to tend the deployed cable, compensate for ship motion, monitor cable tension, and store cable. Required I/O is 10 (5 operational and 5 spares).

HY134 Lift Line Spooler: Lift Line Spoolers are used to deploy lift lines in deep ocean salvage operations. They are designed for use by the ROVs. Required I/O is 6 (4 operational plus 2 spares).

HY135 U/W Ship Husbandry ROV: This is the first Remotely Operated Vehicle to be used to perform underwater ship husbandry tasks such as pre-cleaning, post-cleaning, paint condition assessment, and hull damage inspections. These vehicles will reduce the requirement for manned diving to conduct inspection work. Required I/O is 8.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA- 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Diving and Salvage Equipment (BLI 1130)*

HY136 30 KIP FADOSS: The 30 KIP FADOSS is used to salvage objects from deep water. The primary function is to reduce the dynamic loads that are encountered due to ship motion. These systems will handle recovery of equipment up to a weight of 30,000 pounds. Required I/O 4.

HY137 Electrical Protection Monitor: These systems will be used with underwater electric equipment to protect divers from electric shock hazards in the event a cable is cut or equipment is grounded. Required I/O is 16.

HY138 Salvage Air Van: The Salvage Air Van is equipped to support salvage operations requiring large quantities of compressed air for restoration of lost buoyancy. The van includes air hose storage systems, fittings, spare parts, tools, and other ancillary equipment used to support compressed lift operations. Required I/O is 5.

HY139 Digital Enhanced TV: This TV system greatly improves the resolution and therefore the utility of underwater inspections recorded in turbid waters. Because underwater visibility in all USN ports is poor, enhancing images is necessary to provide inspection results which can be accurately analyzed by topside maintenance engineers. Required I/O is 19.

HY140 ROV Control Package: The ROV Control Package is used to control the various functions of the CURV III, DEEP DRONE, and ORION ROVs. Required I/O is 6 (3 operational plus 3 spares).

HY141 U/W Ship Husbandry Inspection System: This hardware will permit rapid transmission of underwater inspection results to topside engineers for damage assessment. It will preclude the necessity of recording and forwarding video tapes for subsequent evaluation and allow engineers to direct inspections from remote sites. Required I/O is 5.

HY142 Salvage Air Compressor: Salvage Air Compressors are utilized to provide large quantities of compressed air for restoration of lost buoyancy. I/O is 5.

HY145 Cofferdam System: This system will contain a variety of cofferdams necessary to accomplish underwater repair tasks to hull plating, shafts, stern tubes and sea chests on several ship classes. The cofferdams are engineered structural habitats which provide a safe underwater dry environment for divers to work and require very little maintenance. Required I/O is 10.

HY146 Prop Grooming Kit: These kits will contain the tools necessary to repair minor propeller damage underwater. By accomplishing these repairs in-place, propeller removal and replacement can be avoided thereby saving maintenance funds and returning ships to service faster. Required I/O is 5.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA- 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Diving and Salvage Equipment (BLI 1130)*

HY147 ROV Telemetry System: The ROV Telemetry System is the communication link between the surface controller and the vehicle. Required I/O is 6 (3 operational plus 3 spares).

HY151 Closed Cycle Hull Cleaning System: This equipment will eliminate discharge of hull cleaning by-products into harbors. Current cleaning equipment cannot recover any of the discharge. This equipment will be required for environmental compliance. Required I/O is 5.

HY153 Tensiometer Systems: Tensiometers are used to measure the tension exerted on a beach gear ground leg or heavy lift system. One system consists of two load sensing units with associated rigging and read-out meters. Required I/O is 59.

HY154 Water Purifiers: Water Purifiers are capable of converting salty, brackish, or biologically polluted water into potable water. The systems are fully marinized for use aboard a ship of opportunity, and are complete with all necessary power sources, hoses, chemicals, and associated support equipment. Required I/O is 18.

HY155 15 KW Generators: These generators are used to fill the power gap between the existing 5 KW and 30 KW generators. They are used aboard a ship and shore-side to provide general purpose electrical power during salvage and debeaching operations. The generators are a system consisting of a diesel powered, portable generating unit, a power distribution panel, and associated distribution apparatus. Required I/O is 53.

HY156 Salvage Vans: These vans are modified ISO 8 ft x 8 ft x 20 ft shipping containers equipped to store and ship portable salvage equipment to a vessel of opportunity in times of National emergency and functions as a support van on station. Each van is complete with a humidity controlling device for prolonging equipment life during storage. The system includes all necessary rigging and handling equipment. Required I/O is 50.

HY158 ROV Propulsion Systems: ROV propulsion systems provide main propulsion and control of remotely operated vehicles. These consist of electric and hydraulic thruster motors, thrusters, controllers, and interconnect cabling and power supplies. Required I/O is 8.

HY159 Sonar Dome Repair Kits: Provides special underwater tools necessary to repair rubber and glass reinforced plastic (GRP) sonar domes. Repairs include both non-structural (correcting self-noise problems) operations and structural (correcting ruptured or cracked domes) operations. Kits also contain tools necessary to remove and replace dome in the event repair is not possible. I/O is 4.

HY160 Underwater Ship Husbandry Gas Free Equipment: Kits provide environmental monitoring equipment to provide diving supervisors with real time data on air quality within a confined space such as a cofferdam or ballast tank. Monitoring the air allows divers to remove their helmets once inside the area and thereby increase productivity and reduce fatigue. I/O is 16.

HY161 Underwater Shaft Repair Kit: Provides tools necessary to repair and replace propulsion shafts underwater thereby eliminating the requirement for dry-docking. Required I/O is 3.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA- 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Diving and Salvage Equipment (BLI 1130)*

HY162 Trash Pump System: The Trash Pump System consists of two each, portable, hydraulically driven, submersible pumps, complete with all necessary hydraulic and product delivery hoses. The pumps are capable of passing solid objects without damage to the system. Required I/O is 39.

HY163 Towing Load Cells: Towing load cells are systems designed to monitor towline tensions during open ocean towing evolutions. They include tension measuring devices, telemetry systems, power supplies and all software and hardware required to maintain and operate them. Required I/O is15.

HY164 Flyaway FADOSS System: This system consists of lightweight motion compensators, winches, rigging jewelry, and lines for lifting heavy objects off the sea floor. All of the components are designed to be flown to the salvage site and loaded aboard ships of opportunity. Required I/O is 10.

HY165 Underwater Welding Machines: Improved welding machines necessary to permit permanent underwater weld repairs to ship and submarine hull structure. Machines incorporated new technology to stabilize arc voltage and reduce equipment maintenance. I/O is 12.

HY166 ROV Tool Package: This tool package is utilized by remotely operated vehicles to accomplish work on objects on the sea floor and in the water column. These systems consist of dual manipulators, control systems, video inspection systems, range measuring systems, power supplies, hydraulic power units, an ancillary end effectors. I/O is 8.

HY167 Flyaway Weld Van: This van is a portable workstation outfitted to support underwater welding operations. It is designed to be self-supporting at remote worksites and is sized to allow for air transportation in a majority of commercial aircraft. This transportation scheme is necessary to support worldwide emergent repair operations cost effectively. I/O is 3.

HY168 SHT Replacement Kits: Submarine Special Hull Treatment Tiles sustain damage below the waterline which cannot currently be repaired without drydocking. Kits will provide tools to remove damaged tiles, prepare the steel hull surface and replace tiles. In-water repairs will be equivalent to drydock repairs. I/O is 5

HY169 UWSH Power Tools: These tools will replace the hydraulic tool sets designed and issued to Fleet divers in the 1970's with improved technology. This technology improvement will provide tools which are more environmentally compatible, offer greater power, lighter weight and reduced maintenance. I/O is 15.

HY170 LWT Hydraulic Power Unit (HPU): These units will provide hydraulic power to operate underwater diver tools such as impact wrenches, drills, and hull cleaning brushes. The HPU's are lightweight and portable to support mobile diving teams performing underwater ship husbandry repair tasks. Required I/O is 15.

HY171 Salvage Foam System: This system generates cast-in-place urethane foam to provide buoyancy necessary to reduce ground reaction in stranded vessels. The system consists of foam producing chemicals; blowing agents; chemical/blowing agent packaging, handling, storage, and transportation equipment; diver held foam mixing and application nozzle, chemical metering/delivery equipment, and necessary ancillary equipment. I/O is 6 systems.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA- 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Diving and Salvage Equipment (BLI 1130)*

HY172 Lightweight Beach Gear: Lightweight Beach Gear is a lightweight and highly portable system for exerting a retraction force on stranded vessels. The system shall include a ground leg consisting of anchors, stoppers, and interconnection lines; a purchase subsystem consisting of a block and tackle set, turning blocks, and purchase line; a modular winch; and all necessary interconnecting lines and fittings. Total I/O is106.

HY173 Digital Still Cameras: Underwater still cameras for divers use during hull damage inspections. Digital cameras will enable divers to quickly view images to ensure they are correct before suspending diving operations. Repair activities will then be given images which can be forwarded electronically for review by cognizant technical authorities. I/O is 20.

HY174 Wastersleeve Inspection Systems: A non-destructive, non-intrusive inspection system which is inserted into a sea chest to measure and record the wastersleeve material condition. This inspection information is used to support condition based maintenance decisions regarding the necessity to replace worn, deteriorated or damaged wastersleeves. Total I/O required is 8.

HY175 Closed Cycle Blasting: System grit blasts underwater hull surfaces in preparation for underwater painting. Blast equipment uses standard commercial abrasives and collects grit and paint to comply with environmental standards. Grit blast surface preparation is necessary to obtain adequate adhesion of underwater applied paints used to arrest corrosion. I/O is 6.

	97	98	99	00	01	02	03
Reserve	290	235	261	110	121	121	126

DIVING AND SALVAGE RESERVE EQUIPMENT - (N869)
In accordance with the Surface Warfare Plan of 26 July 1986 as amplified by CNO ltr 37/7U388746 of 29 Jun 1987, we are restructuring our Naval Reserve Procurement Plan to include outfitting with updated systems fully compatible with those used by the active forces. Dive system compatibility is imperative to ensure safety and readiness The equipments to be procured are:

HY105 Lightweight Dive System (LWDS): This system is completely self-contained, man-portable, and can be deployed from dockside or a ship of opportunity. The system will support two working divers and a standby diver to 60 feet of seawater (fsw) for a six hour mission performing ship husbandry, light salvage, and underwater inspection tasks. The LWDS consists of two subsystems; Diver Life Support System (DLSS) and Diver Equipment (see below for contents of subsystems). Required I/O is 14.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA- 1 : SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *Diving and Salvage Equipment (BLI 1130)*

DLSS:

1. Compressor Package - Compressor and prime mover mounted on a common frame; with external fuel tank and gauges.
2. Composite Flasks - Racks of composite HP cylinders; with manifolds and interconnecting hoses.
3. Volume Tank - Assembly mounted on separate frame; with interconnecting hoses.
4. Control Console - Suitcase size with air supply and pneumofathometer control.

Diver Equipment:

1. Full Facemask - Lightweight, low volume FFM with communications that interface with fielded communication sets. Each set includes three FFMs.
2. Harness Assembly - Diver harness with manifold block. Each set includes three Harness Assemblies.

HY178 H.P. Air Compressors: This item provides reserve commands with indigenous H.P. air compressors for use with their Lightweight Dive Systems procured in HY105. Required I/O is 14.

EQUIPMENT INSTALLATION (FMP) - (N869)
Funding is for the installation of equipment including Fleet Modernization Program installation, installation of training equipment, and installation of equipment in other shore activities.

WEAPONS SYSTEM COST ANALYSIS | **Weapon System** | **DATE:** February 1998

P-5

APPROPRIATION/BUDGET ACTIVITY | ID Code | **P-1 ITEM NOMENCLATURE/SUBHEAD**

Other Procurement, Navy

BA- 1 : SHIPS SUPPORT EQUIPMENT

Diving and Salvage Equipment (BLI 1130) **81HY**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	DIVING EQUIPMENT - (N873)													
HY106	Lightweight Dive System													
	a. System	A												
	b. 5000 PSI Flask Replacement	A												
	c. Engineering Change Proposals	A												
HY107	Portable Recompression Chamber													
	a. Portable Chamber	A				3	356.3	1,069						
	b. Engineering Change Proposals	A						143						
	c. Environmental Upgrade Package	A												
HY123	Flyaway Dive System III													
	a. High Pressure Air System	A							3	218.7	656	3	208.7	626
	b. Engineering Change Proposals	A												
	c. Mixed Gas System	A												
HY132	Standard Recompression Chamber													
	a. Standard Chamber	A				2	286	572	2	280.5	449	5	281	1,405
	b. Chmbr w/o Gas Storage/Comp	A				1	144	144						
HY179	Navy Experimental Diving Unit	A						0			0			263
	SUBTOTAL:							1,928			1,105			2,294
	SALVAGE EQUIPMENT - (N869)													
HY050	Synthetic Line	A							8	47.4	379			
HY062	ORION/D2/CURV Sonar System	A										2	251.5	503
HY131	ROV Handling System	A				1	1,174	1,174				1	592	592
HY134	Lift Line Spooler	A												
HY135	U/W Ship Husbandry ROV	A										2	534.5	1,069
HY136	30 KIP FADOSS	A												
HY137	Electrical Protection Monitor	A												
HY138	Salvage Air Van	A												
HY139	Digital Enhanced TV	A												
HY140	ROV Control Package	A				1	802	802						
HY141	U/W Ship Husbandry Inspection System	A				5	104.6	523						
HY142	Salvage Air Compressor	A				5	238.4	1,192						
HY145	Cofferdam System	A							9	49.8	448			
HY146	Propeller Grooming Kit	A							5	89.4	447			
HY147	ROV Telemetry System	A							1	914	914			
	SUBTOTAL							**3,691**			**2,188**			**2,164**

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA- 1 : SHIPS SUPPORT EQUIPMENT		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Diving and Salvage Equipment (BLI 1130)	81HY

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HY151	Closed Cycle Hull Cleaning System	A										2	484.5	969
HY167	Flyaway Weld Van	A							2	232	464			
HY170	LWT Hydraulic Power Unit	A												
	SUBTOTAL:							3,691			2,652			3,133
	RESERVE EQUIPMENT - (N869)													
HY105	Lightweight Dive System	A												
HY178	H.P. Air Compressors	A				4	72.5	290	3	78.3	235	3	87	261
	SUBTOTAL:							290			235			261
	EQUIPMENT INSTALLATION (FMP) - (N869)													
HYINS	Installation/Alteration (FMP)	A						1,529			756			0
	SUBTOTAL:							1,529			756			0
	TOTAL EQUIPMENT:							5,909			3,992			5,688
	TOTAL INSTALL:							1,529			756			0
	GRAND TOTAL							7,438			4,748			5,688
TOTAL														

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA- 1 : SHIPS SUPPORT EQUIPMENT	Diving and Salvage Equipment	81HY

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR (97)										
DIVING EQUIPMENT - (N873)										
HY107 Portable Recomp Chamber										
a. Portable Chamber	3	356.3	Arlington, VA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	02/98	YES	
HY132 Standard Recomp. Chamber										
a. Standard Chamber	2	286	Arlington, VA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	06/98	YES	
b. Chamber w/o Gas Storage/Comp	1	144	Arlington, VA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	08/98	YES	
SALVAGE EQUIPMENT - (N869)										
HY131 ROV Handling System	1	1174	Arlington, VA	06/30/95	C/CPAF	Oceaneering - Upper Marlboro, MD	03/97	09/98	YES	
HY140 ROV Control Package	1	802	Arlington, VA	06/30/95	C/CPAF	Oceaneering - Upper Marlboro, MD	03/97	05/98	YES	
HY141 U/W Ship Husb Inspec Sys	5	104.6	Arlington, VA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	07/97	YES	
HY142 Salvage Air Compressor	5	238.4	Arlington, VA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	03/98	YES	
RESERVE EQUIPMENT - (N869)										
HY178 H.P. Air Compressors	4	72.5	Arlington, VA	11/15/93	C/CPAF	GPC - Norfolk, VA	05/97	11/97	YES	
FISCAL YEAR (98)										
DIVING EQUIPMENT - (N873)										
HY123 Flyaway Dive System III										
a. H.P. Air System	3	218.7	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/98	03/99	YES	
HY132 Standard Recomp. Chamber										
a. Standard Chamber	2**	280.5	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/98	06/99	YES	

**HY132: Procuring one entire Standard Chamber @ $280,500. Also procuring Air Supply Racks @ $105,000 and an H.P. Air Compressor @ $63,000 for a second Standard Chamber.

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA- 1 : SHIPS SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE Diving and Salvage Equipment	SUBHEAD 81HY

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR (98)										
SALVAGE EQUIPMENT - (N869)										
HY050 Synthetic Line	8	47.4	Arlington, VA	11/15/93 (OPTION)	C/CPAF	GPC - Norfolk, VA	02/98	08/99	YES	
HY145 Cofferdam System	9	49.8	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/98	04/99	YES	
HY146 Propeller Grooming Kit	5	89.4	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/98	05/99	YES	
HY147 ROV Telemetry System	1	914	Arlington, VA	06/30/95 (OPTION)	C/CPAF	Oceaneering - Upper Marlboro, MD	12/97	11/99	YES	
HY167 Flyaway Weld Van	2	232	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/98	06/98	YES	
RESERVE EQUIPMENT - (N869)										
HY178 H.P. Air Compressors	3	78.3	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/98	11/98	YES	
FISCAL YEAR (99)										
DIVING EQUIPMENT - (N873)										
HY123 Flyaway Dive System III										
a. H.P. Air System	3	208.7	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/99	03/00	YES	
HY132 Standard Recomp. Chamber										
a. Standard Chamber	5	281	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	04/99	06/00	YES	
SALVAGE EQUIPMENT - (N869)										
HY062 ORION/D2/CURV Sonar	2	251.5	Arlington, VA	06/30/95 (OPTION)	C/CPAF	UNKNOWN	03/99	08/00	YES	
HY131 ROV Handling System	1	592	Arlington, VA	06/30/95 (OPTION)	C/CPAF	UNKNOWN	03/99	09/00	YES	
HY135 U/W Ship Husbandry RC	2	534.5	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/99	08/99	YES	
HY151 Closed Cycle Hull Clean	2	484.5	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	01/99	03/99	YES	
RESERVE EQUIPMENT - (N869)										
HY178 H.P. Air Compressors	3	87	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	05/99	11/99	YES	

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Model Series 322 TYPE MODIFICATION: ShipAlt ATS-1-25 1KP MODIFICATION TITLE: Towing System Modernization

DESCRIPTION/JUSTIFICATION:

Modernization of the towing system will enhance a main-mission capability of the ship by improving reliability, maintainability, and safety. The current system uses obsolete controls and drive systems which are unreliable and difficult to support logistically. High utilization of these ships is expected over the next 10-15 year period for towing deactivated, defueled nuclear submarines. The modernization does not utilize centrally procured material. The majority of the work will be labor, utilizing incidental materials procured by the installation contractor, to modernize existing hardware.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS			1	0.4	1	0.4	1	0.4	1	0.4													4	1.6
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT																								0.0
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST			1	1.1	1	0.8	1	1.1	1	0.4														3.4
TOTAL PROCUREMENT																								0.0

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **Model Series 322** MODIFICATION TITLE: Towing System Modernization

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **Contractor**
ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 4 Months
CONTRACT DATES: FY 1997: Various FY 1998: Various FY 1999: Various
DELIVERY DATE: FY 1997: Various FY 1998: Various FY 1999: Various

($ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1995 EQUIPMENT			1	1.1																				
FY 1996 EQUIPMENT					1	0.8																		
FY 1997 EQUIPMENT							1	1.1																
FY 1998 EQUIPMENT									1	0.4														
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 1 year 5 months		
HY050 Synthetic Line	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary			8			2	2	
Unit Cost			47.4			136	136	
Total Cost			379.2			272	272	
Asset Dynamics								
Beginning Asset Position	139	133	131	139	135	131	129	125
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding			8					
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding						2	2	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.	6	2		4	4	4	6	2
End of Year Asset Position	133	131	139	135	131	129	125	123
Inventory Objective or Current Authorized Allowance	200	200	200	200	200	200	200	200

Inventory Objective 200	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 1 year 5 months		
HY062 ORION/D2/CURV III Sonar System	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary				2				
Unit Cost				251.5				
Total Cost				503				
Asset Dynamics								
Beginning Asset Position	7	7	6	6	7	7	7	7
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding				2				
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.		1		1				1
End of Year Asset Position	7	6	6	7	7	7	7	6
Inventory Objective or Current Authorized Allowance	8	8	8	8	8	8	8	8

Inventory Objective 8	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 9 months		
HY107 Portable Recompression Chamber **Portable Chamber**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		3			2	2		
Unit Cost		356.3			394.5	406		
Total Cost		1069			789	812		
Asset Dynamics								
Beginning Asset Position	9	9	9	12	12	12	14	16
Deliveries from all prior year funding								
Deliveries from FY 1997 funding			3					
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding						2	2	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	9	9	12	12	12	14	16	16
Inventory Objective or Current Authorized Allowance	16	16	16	16	16	16	16	16

Inventory Objective 16	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 1 year		
HY123 FADS III **H.P. Air System**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary	2		3	3		2	2	2
Unit Cost	154.5		218.7	221		240	250	260
Total Cost	309		656	663		480	500	520
Asset Dynamics								
Beginning Asset Position	5	5	7	7	10	13	13	15
Deliveries from all prior year funding		2						
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding				3				
Deliveries from FY 1999 funding					3			
Deliveries from subsequent years' funding							2	2
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	5	7	7	10	13	13	15	17
Inventory Objective or Current Authorized Allowance	20	20	20	20	20	20	20	20

Inventory Objective 20	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 1 year		
HY131 ROV Handling System	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary	1	1		1				1
Unit Cost	319	1174		592				1468
Total Cost	319	1174		592				1468
Asset Dynamics								
Beginning Asset Position	2	2	3	3	3	4	3	3
Deliveries from all prior year funding		1						
Deliveries from FY 1997 funding			1					
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding					1			
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.			1			1		1
End of Year Asset Position	2	3	3	3	4	3	3	2
Inventory Objective or Current Authorized Allowance	10	10	10	10	10	10	10	10

Inventory Objective 10	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study		Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)			Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 1 year 2 months		
HY132 Standard Recompression Chamber Standard Chamber		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		1	2	2	5	4	5	2	
Unit Cost		238	286	280.5	297.2	333.8	314.8	284	
Total Cost		238	572	561	1486	1335	1547	568	
Asset Dynamics									
Beginning Asset Position		0	0	1	3	5	10	14	19
Deliveries from all prior year funding			1						
Deliveries from FY 1997 funding				2					
Deliveries from FY 1998 funding					2				
Deliveries from FY 1999 funding						5			
Deliveries from subsequent years' funding							4	5	2
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position									
Inventory Objective or Current Authorized Allowance		0	1	3	5	10	14	19	21
		21	21	21	21	21	21	21	21
Inventory Objective 21	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 1 year 3 months		
HY132 Standard Recompression Chamber Chamber w/o Gas Storage	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		1						
Unit Cost		144						
Total Cost		144						
Asset Dynamics								
Beginning Asset Position	0	0	0	1	1	1	1	1
Deliveries from all prior year funding								
Deliveries from FY 1997 funding			1					
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	1	1	1	1	1	1
Inventory Objective or Current Authorized Allowance	1	1	1	1	1	1	1	1

Inventory Objective 1	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 6 months		
HY135 Underwater Ship Husbandry ROV	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary				2				
Unit Cost				534.5				
Total Cost				1069				
Asset Dynamics								
Beginning Asset Position	0	0	0	0	2	2	2	2
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding				2				
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	2	2	2	2	2
Inventory Objective or Current Authorized Allowance	8	8	8	8	8	8	8	8

Inventory Objective 8	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 1 year 2 months		
HY140 ROV Control Package	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		1						
Unit Cost		802						
Total Cost		802						
Asset Dynamics								
Beginning Asset Position	3	3	3	4	4	4	4	4
Deliveries from all prior year funding								
Deliveries from FY 1997 funding			1					
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	3	3	4	4	4	4	4	4
Inventory Objective or Current Authorized Allowance	6	6	6	6	6	6	6	6

Inventory Objective 6	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 2 months		
HY141 UWSH Inspection System	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		5						
Unit Cost		104.6						
Total Cost		523						
Asset Dynamics								
Beginning Asset Position	0	0	5	5	5	5	5	5
Deliveries from all prior year funding								
Deliveries from FY 1997 funding		5						
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	5	5	5	5	5	5	5
Inventory Objective or Current Authorized Allowance	5	5	5	5	5	5	5	5

Inventory Objective 5	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 10 months		
HY142 Salvage Air Compressors	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		5						
Unit Cost		238.4						
Total Cost		1192						
Asset Dynamics								
Beginning Asset Position	0	0	0	5	5	5	5	5
Deliveries from all prior year funding								
Deliveries from FY 1997 funding			5					
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	5	5	5	5	5	5
Inventory Objective or Current Authorized Allowance	5	5	5	5	5	5	5	5

Inventory Objective 5	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 3 months		
HY145 Cofferdam System	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary			9					
Unit Cost			49.8					
Total Cost			448					
Asset Dynamics								
Beginning Asset Position	0	0	0	9	9	9	9	9
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding			9					
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	9	9	9	9	9	9
Inventory Objective or Current Authorized Allowance	10	10	10	10	10	10	10	10

Inventory Objective 10	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 3 months		
HY146 Propeller Grooming Kit	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary			5					
Unit Cost			89.4					
Total Cost			447					
Asset Dynamics								
Beginning Asset Position	0	0	0	5	5	5	5	5
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding			5					
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	5	5	5	5	5	5
Inventory Objective or Current Authorized Allowance	5	5	5	5	5	5	5	5

Inventory Objective 5	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 1 year 9 months		
HY147 ROV Telemetry System	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary			1					
Unit Cost			914					
Total Cost			914					
Asset Dynamics								
Beginning Asset Position	3	3	3	3	4	4	3	3
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding				1				
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.						1		
End of Year Asset Position	3	3	3	4	4	3	3	3
Inventory Objective or Current Authorized Allowance	6	6	6	6	6	6	6	6

Inventory Objective 6	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 2 months		
HY151 Closed Cycle Hull Cleaning System	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary	2			2				
Unit Cost	511			484.5				
Total Cost	1022			969				
Asset Dynamics								
Beginning Asset Position	0	2	2	2	4	4	4	4
Deliveries from all prior year funding	2							
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding				2				
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	2	2	2	4	4	4	4	4
Inventory Objective or Current Authorized Allowance	5	5	5	5	5	5	5	5

Inventory Objective 5	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 5 months		
HY167 Flyaway Weld Van	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary			2					
Unit Cost			232					
Total Cost			464					
Asset Dynamics								
Beginning Asset Position	0	0	0	2	2	2	2	2
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding			2					
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	2	2	2	2	2	2
Inventory Objective or Current Authorized Allowance	3	3	3	3	3	3	3	3

Inventory Objective 3	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

Exhibit P-20, Requirements Study	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1998		
P-1 Line Item Nomenclature Diving and Salvage Equipment (BLI 1130)		Admin Leadtime (after Oct 1): 4 months				Prod Leadtime: 6 months		
HY178 H.P. Air Compressors	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary		4	3	3	1	1	1	1
Unit Cost		72.5	78.3	89.3	113	125	126	131
Total Cost		290	235	268	113	125	126	131
Asset Dynamics								
Beginning Asset Position	0	0	0	4	7	10	11	12
Deliveries from all prior year funding								
Deliveries from FY 1997 funding			4					
Deliveries from FY 1998 funding				3				
Deliveries from FY 1999 funding					3			
Deliveries from subsequent years' funding						1	1	1
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	4	7	10	11	12	13
Inventory Objective or Current Authorized Allowance	14	14	14	14	14	14	14	14

Inventory Objective 14	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for BY1 Replacement:		Aircraft: TOAI:	
Assets Rqd for Combat Loads:	PY thru _____:	PY thru _____:		PY thru _____:		Vehicles Eligible for BY2 Replacement:		PAA: TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Augment:		Attrition Res:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv:	
TOTAL:								Storage:	
REMARKS:									

P-1 Shopping List Item No 27

BUDGET ITEM JUSTIFICATION SHEET P-40													DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE/LINE ITEM # *EOD UNDERWATER EQUIPMENT/BLI #1140*					
Program Element for Code B Items: 0603654N								OTHER RELATED PROGRM ELEMENTS 0603654N					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)	N/A	B	N/A	N/A	$5.2	$8.8	$8.2	$8.4	$7.3	$7.7	$7.1	N/A	53
SPARES COST (In Millions)	N/A			N/A	$0.2	$1.2	$1.0	$0.2	$0.2	$0.0	$0.0	N/A	2.8

PROGRAM DESCRIPTION/JUSTIFICATION:

This program supports Explosive Ordnance Disposal (EOD) Groups, Units and Detachments worldwide. This EOD diving program supplies EOD forces with the necessary diving and diving related equipment to fulfill assigned missions. The following are the major end items.

HZ006- GAS TRANSFER SYSTEM: This item provides a method for transferring and mixing breathing gas media into the MK 16 Underwater Breathing Apparatus (UBA) in the field.

HZ011-EOD INFLATABLE CRAFT: These crafts will provide EOD units with improved inflatable crafts to support MK 16 diving in an MCM environment. These crafts will be sturdy, yet lightweight and will consider low influence signature requirements.

HZ066-OUTFITTING EOD DETACHMENT: This line provides for the outfitting of diving systems/equipment which enhance mission capability for established EOD detachments.

HZ075-MOBILE FACILITIES: Provides oxygen clean environment for MK 16 UBA maintenance and a full size mobile recompression chamber for fly away EOD diving operations.

HZ076-DIVER EVALUATION UNIT: An underwater device used to train the EOD diver in underwater diving discipline.

HZ077-UPGRADED UNDERWATER BREATHING APPARATUS (UBA): Provides the product improvement for the MK 16 UBA to increase the Partial Pressure of Oxygen (PPO2) setpoint in order to decrease decompression time.

HZ078-FULL FACE MASK: Provides for Full Face Masks to be used with MK 16 UBA to provide facial protection during cold water diving and to increase safety for an unconscious diver.

HZ079-VERY SHALLOW WATER MINE COUNTERMEASURES (VSW MCM) INITIAL OUTFITTING: Provides for procurement of equipment and hardware to initial outfit the VSW MCM Unit. This equipment and hardware will allow for initial stand-up of the unit.

HZ080-C4I UPGRADES: Provides for the upgrade of existing EOD Mobile Communication Systems (MCS) to C4I requirements.

HZ081-UNDERWATER ACOUSTIC FIRING SYSTEM: Provides the capability to acoustically actuate an explosive charge from a stand off point to neutralize a mine or activiate a lift device.

HZ082-OBSTACLE AVOIDANCE SONAR: Provides EOD MCM and Area Search detachments with the capability to avoid mines ahead of their small craft during operations within a mine field (formerly Forward Looking Sonar).

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIO	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # *EOD UNDERWATER EQUIPMENT/BLI # 1140*

HZ830-PRODUCTION ENGINEERING: Review all technical data packages prior to procurement and provide procurement instruction to the procuring activity in support of the EOD unified procurement system. Provides production engineering support for all EOD production contracts.

HZ850-PRODUCT IMPROVEMENT: Engineering servcies to improve EOD Systems/Equipment in production to improve maintainablility, utilize current technology, and decrease cost.

HZ860-ACCEPTANCE, TEST, AND EVALUATION: Test, inspect, and accept first articles and, on a 100% basis, the production quantity of EOD tools and equipment being procured. These tools are man-rated, and proper functioning of each item must be verified.

HZTNG-INITIAL TRAINING: Provide training support packages which include curriculum material for Underwater EOD equipment

TRANSITION FROM GASOLINE: Provides for the replacement of current gasoline powered equipment with diesel powered equipment for use by EOD Detachments when deployed shipboard or when transported by aircraft.

DIVER U/W IMAGING: Provides a next generation replacement for the AN/PQS-2A Sonar which will provide increased accuracy for detection and classification of mine-like objects in reduced visibility. Will also provide diver with an underwater navigation capability.

DIVER HEADS UP DISPLAY: Provides low influence underwater diver mounted display which will provide video interface with other EOD systems (Underwater Imaging System, Underwater Navigation System and MK 16 UBA).

OUTFITTING EOD MOBILE UNIT: Provides for outfitting of diving system equipment which enhance mission capability for established EOD Mobile Units.

DIVER SUPPORT VEHICLE: Provides EOD Detachments with an underwater diver propulsion vehicle capable of transporting diver and associated equipment to a depth of 300 FSW in support of EOD operations. Additonally, the vehicle will enhance rapid area search and reduce time required at depth.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-1: SHIPS SUPPORT EQUIPMENT**		ID Code **B**	P-1 ITEM NOMENCLATURE/SUBHEAD **EOD UNDERWATER EQUIPMENT/71HZ**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SPONSOR N85													
HZ006	GAS TRANSFER SYSTEM	A												
HZ011	INFLATABLE CRAFT	A				4	54	216	4	55	222	4	57	229
HZ066	OUTFITTING EOD DET	A				2	349	698	3	356	1,070	5	365	1,829
HZ075	MOBILE FACILITIES	A				3	721	2,165	1	729	729			
HZ076	DIVER EVALUATION UNIT	A												
HZ077	UPGRAGED UBA	A							165	9	1,486	153	9	1,529
HZ078	FULL FACE MASK	A				289	2	722	121	2	303			
HZ079	VSW MCM INITIALLY OUTFITTING	A									2,937			2,007
HZ080	C4I UPGRADES	A									796			700
HZ081	U/W ACOUSTIC FIRING SYSTEMS	B												
HZ082	OBSTACLE AVOIDANCE	B										4	136	544
HZ830	PRODUCTION ENGINEERING	A						352			362			375
HZ850	PRODUCT IMPROVEMENT	A						681			495			510
HZ860	ACCEPTANCE, TEST & EVAL	A						287			318			328
HZTNG	INITIAL TRAINING	A						45			120			123
	TOTAL													
TOTAL								**5,166**			**8,838**			**8,174**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1998
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIPS SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE EOD UNDERWATER EQUIPMENT	SUBHEAD 71HZ

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR (97)										
HZ011	4	54			WR	SURFLANT,VA/SURFPAC,CA	2/97	2/98	YES	
HZ066	2	349			WR	SURFLANT,VA/SURFPAC,CA	2/97	6/97	YES	
HZ075	3	721.7			WR	CSS, PANAMA CITY, FL	2/97	11/97	YES	
HZ078	289	2.5			WR	NEODTD, INDIAN HEAD, MD	3/97	3/98	YES	
FISCAL YEAR (98)										
HZ011	4	55.5			WR	SURFLANT,VA/SURFPAC,CA	2/98	2/99	YES	
HZ066	3	356.6			WR	SURFLANT,VA/SURFPAC,CA	2/98	6/98	YES	
HZ075	1	729			WR	CSS, PANAMA CITY, FL	2/98	11/98	YES	
HZ077	165	9			WR	NEODTD, INDIAN HEAD, MD	6/98	6/99	YES	
HZ078	121	2.5			WR	NEODTD, INDIAN HEAD, MD	2/98	8/98	YES	
FISCAL YEAR (99)										
HZ011	4	57.2			WR	SURFLANT,VA/SURFPAC,CA	2/99	2/00	YES	
HZ066	5	365.8			WR	SURFLANT,VA/SURFPAC,CA	2/99	6/99	YES	
HZ077	153	9.9			WR	NEODTD, INDIAN HEAD, MD	2/99	2/00	YES	
FISCAL YEAR (99)										
HZ082	4	136			WR	NEODTD, INDIAN HEAD, MD	1/99	1/00	YES	

D. REMARKS

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40													DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE/LINE ITEM # STANDARD BOATS/21H0 BLI: 1210					
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY		A			13	3	9	20	10	17	41	52	113
EQUIPMENT COST (In Millions)					$4.4	$1.4	$1.4	$3.4	$3.1	$4.8	$13.0		$31.5
SPARES COST (In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

Boats are procured to fill allowances established by CNO and NAVSEA and to replace boats now in service which are beyond economical repair at shore activities and aboard ships. Total inventory objectives change based on Fleet requirements. P-23b and memo entries describe procurement plans to support the inventory objective as of this dated budget submit.

H0001 15m (50ft) WORKBOAT - (Steel) Used for all types of service, e.g., diving, pushers, ammo/cargo handling, etc. Service life is 25 years.

H0002 15m (50ft) UTILITY BOAT - (Fiberglass) Used for transporting crews and cargo on AE, AOE, AR, AS, CV, CVN, LSD, LHD, and at shore activities. Service life is 20 years.

H0005 7m (22ft) UTILITY BOAT - (Fiberglass) Used for general utility, supply and mail transport, at shore activities. Service life is 10 years.

H0006 8m (26ft) PERSONNEL BOAT - (Fiberglass) Used to transport personnel from ship to shore, as a mail carrier, and as a small cargo transport. Service life is 20 years.

H0009 14 ft PUNT - (Aluminum) Used on auxiliaries, combatants, carriers, and amphibious as work platforms for maintenance inspection of ships, hull, in drydock and at shore activities. Service life is 3 years.

H0013 7m (24ft) HARBOR SECURITY BOAT - (Aluminum) Used at shore-based activities and Naval Shipyards to provide physical security protection for waterfront perimeters. Service life is 20 years.

H0016 12m (40ft) PERSONNEL BOAT - (Fiberglass) Used for officer/personnel transportation on carriers and shore activities. Service life is 20 years.

H0018 12m (40ft) UTILITY BOAT - (Fiberglass) Carried as ship's boat or assigned to a shore activity to carry personnel and cargo. Service life is 20 years.

H0025 SOLAS ENCAPSULATED - (Fiberglass) Used on Military Sealift Command ships as enclosed lifeboats. Service life is 20 years.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # Standard Boats/21H0 BLI: 1210

H0028 7m (24ft) RIGID INFLATABLE BOAT (RIB) - (Fiberglass) Used as ships' lifeboats, rescue boats and liberty boats, and for general transportation on auxiliaries, combatants, carriers, amphibious, and shore activities. Currently being installed as replacements for presently assigned 26 ft. MWBs on combatant ships. Anticipated service life is 20 years.

H0030 22 ft EOD SUPPORT BOAT - (Fiberglass) Used for MK 16 UBA/Diving Training, Mammal Operations, Ordnance recovery, parachute insertion support and Command and Control. Service life is 10 years.

H0031 27 ft EOD SUPPORT BOAT - (Fiberglass) Used for area search, MK 5 Mammal Systems, diving training and operations, ordnance/mine recovery and Command and Control. Service life is 10 years.

H0032 32 ft EOD SUPPORT BOAT - (Fiberglass) Used for area search, MK5 Mammal Systems, diving training and operations, ordnance/mine recovery and Command and Control. Service life is 10 years.

H0033 13m (42ft) PERSONNEL BOAT - (Fiberglass) Used for officer/personnel transportation on carriers and shore activities. Service life is 20 years.

H0034 13m (42ft) UTILITY BOAT - (Fiberglass) Carried as ship's boat or assigned to a shore activity to carry personnel and cargo. Service life is 20 years.

H0830 PRODUCTION ENGINEERING - Used for development of technical data packages, technical support, Test and Evaluation, manual development and printing, trials, boat inspections, etc.

CLASSIFICATION: UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: February 1998

APPROPRIATION/BUDGET ACTIVITY	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD
Other Procurement, Navy	A	STANDARD BOATS/21H0 BLI: 1210
BA1: SHIPS SUPPORT EQUIPMENT		

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SPONSOR - N1													
H0830	PRODUCTION ENGINEERING							47			66			56
	SUBTOTAL							47			66			56
	SPONSOR - N4													
H0001	15M (50 FT) WORKBOAT													
H0002	15M (50 FT) UTILITY BOAT					4	331	1,324						
H0005	7M (22FT) UTILITY BOAT													
H0009	14 FT PUNT													
H0016	12M (40FT) PERSONNEL BOAT					2	258	515	1	267	267			
H0830	PRODUCTION ENGINEERING							147			104			
H0900	CONSULTING SERVICES							90			60			
	SUBTOTAL					6		2076	1		431			
	SPONSOR - N7													
H0830	PRODUCTION ENGINEERING													
	SUBTOTAL													
	SPONSOR - N85													
H0002	15M (50 FT) UTILITY BOAT					3	331	993						
H0005	7M (22FT) UTILITY BOAT											2	108.5	217
H0030	22' EOD SUPPORT BOAT											1	127.0	127
H0031	27' EOD SUPPORT BOAT											1	191.0	191
H0032	32' EOD SUPPORT BOAT													
H0830	PRODUCTION ENGINEERING							82						40
H0900	CONSULTING SERVICES							40						56
	SUBTOTAL					3		1115	0		0	4		631
SUBTOTAL			0		0	9		3,238	1		497	4		687

CLASSIFICATION: UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA1: SHIPS SUPPORT EQUIPMENT		ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD STANDARD BOATS/21H0 BLI: 1210	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SPONSOR - N86													
H0001	15M (50 FT) WORKBOAT													
H0005	7M (22FT) UTILITY BOAT											5	108.4	542
H0009	14 FT PUNT													
H0016	12M (40FT) PERSONNEL BOAT					2	258	515						
H0028	7M (24FT) RIGID INFLATABLE BOAT													
H0830	PRODUCTION ENGINEERING							40			85			40
H0900	CONSULTING SERVICES							39			90			30
	SUBTOTAL					2		594	0		175	5		612
	SPONSOR - N88													
H0001	15M (50 FT) WORK BOAT													
H0009	14 FT PUNT													
H0016	12M (40FT) PERSONNEL BOAT					2	258	515	2	266.5	533			
H0830	PRODUCTION ENGINEERING							60			93			50
H0900	CONSULTING SERVICES							39			100			40
	SUBTOTAL					2		614	2		726	0		90
	SUBTOTAL					4		1208	2		901	5		702
GRAND TOTAL			0		0	13		4,446	3		1,398	9		1,389

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 1998		
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA1: SHIPS SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE STANDARD BOATS			SUBHEAD 21H0	
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY97										
H0002 15M (50FT) UB	7	330.7	NAVSEA		C/FP	WILLARD MARINE, CA	JAN 96	OCT 97	YES	
H0016 12M (40FT) PE	6	258	NAVSEA		CFP	UNKNOWN	OCT 97	OCT 98	YES	
FY98										
H0016 12M (40FT) PE	3	266.5	NAVSEA		OPT	UNKNOWN	MAR 98	JUN 99	YES	
FY99										
H0005 7M (22FT) UB	7	108.4	NAVSEA		GSA	UNKNOWN	OCT 98	OCT 99	YES	
H0030 22' EOD SPT BOAT	1	127	NAVSEA		GSA	BOSTON WHALER, FL	OCT 98	FEB 99	YES	
H0031 27' EOD SPT BOAT	1	191	NAVSEA		GSA	BOSTON WHALER, FL	OCT 98	FEB 99	YES	

D. REMARKS

Exhibit P-20, Requirements Study	Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
Project Unit/Item H0001/15m (50ft) WORKBOAT	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY						4	1	11
Unit Cost						406.0	415.0	423.7
Total Cost						1624	415	4661
Asset Dynamics								
Beginning Asset Position	251	241	227	213	203	193	183	177
Deliveries from all prior year funding	0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding							4	1
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	10	10	10	10	10	10	10	10
Disposals/Retirements/Attritions/etc.	0	4	4	0	0	0	0	0
End of Year Asset Position	241	227	213	203	193	183	177	168
Inventory Objective/Current Authorized Allowance	221	221	221	221	221	221	221	221
DELTA	20	6	-8	-18	-28	-38	-44	-53

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Boats Eligible for Replacement
	PY thru _____:	PY thru _____:	PY thru _____:	BY1: 82 BY2: 82
	PY-1:	PY-1:	PY-1:	
	PY-2:	PY-2:	PY-2:	
	PY-3:	PY-3:	PY-3:	
TOTAL:				

REMARKS: Non Ready-for-Issue (RFI) condition = 43 boats

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study	Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
Project Unit/Item H0002/15m (50ft) UTILITY BOAT	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		7					2	
Unit Cost		330.7					310.5	
Total Cost		2315	0	0	0	0	621	0
Asset Dynamics								
Beginning Asset Position	103	95	87	86	81	81	81	81
Deliveries from all prior year funding	0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding			7					
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								2
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	8	8	8	5	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	95	87	86	81	81	81	81	83
Inventory Objective/Current Authorized Allowance	89	89	95	95	95	95	95	95
DELTA	6	-2	-9	-14	-14	-14	-14	-12

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Boats Eligible for Replacement			
	PY thru _____:	PY thru _____:		PY thru _____:		BY1: 9 BY2: 9			
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									

REMARKS: Non Ready-for-Issue (RFI) condition = 16 boats

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study	Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
Project Unit/Item H0005/7m (22ft) UTILITY BOAT	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	10	0		7	17	4	10	12
Unit Cost	104.1			108.3	115.0	117.0	119.0	123.0
Total Cost	1041	0		758	1955	468	1190	1476
Asset Dynamics								
Beginning Asset Position	420	405	400	385	370	362	384	373
Deliveries from all prior year funding	0	10	0	0	0	20	0	20
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding					7			
Deliveries from subsequent years' funding						17	4	10
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	15	15	15	15	15	15	15	15
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	405	400	385	370	362	384	373	388
Inventory Objective/Current Authorized Allowance	393	393	393	393	393	393	393	393
DELTA	12	7	-8	-23	-31	-9	-20	-5

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Boats Eligible for Replacement			
	PY thru _____:	PY thru _____:		PY thru _____:		BY1: 9 BY2: 9			
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									

REMARKS: Non Ready-for-Issue (RFI) condition = 12 boats

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study	Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
Project Unit/Item H0009/14 FT PUNT	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	0	0	0	0	0	0	0
Unit Cost								
Total Cost								
Asset Dynamics								
Beginning Asset Position	307	267	227	267	227	187	147	107
Deliveries from all prior year funding	0	0	80	0	0	0	0	0
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	40	40	40	40	40	40	40	40
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	267	227	267	227	187	147	107	67
Inventory Objective/Current Authorized Allowance	229	229	230	231	231	231	231	231
DELTA	38	-2	37	-4	-44	-84	-124	-164

Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Boats Eligible for Replacement			
	PY thru _____:	PY thru _____:		PY thru _____:		BY1: 151 BY2: 151			
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									

REMARKS: Non Ready-for-Issue (RFI) condition = 0 boats

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study	Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
Project Unit/Item H0013/7M (24FT) HARBOR SECURITY	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	0	0	0	0	0	0	8
Unit Cost								73.5
Total Cost								588
Asset Dynamics								
Beginning Asset Position	67	67	67	67	67	67	67	67
Deliveries from all prior year funding								
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	67	67	67	67	67	67	67	67
Inventory Objective/Current Authorized Allowance	67	67	67	67	67	67	67	67
DELTA	0	0	0	0	0	0	0	0

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Boats Eligible for Replacement
	PY thru _____:	PY thru _____:	PY thru _____:	BY1: BY2:
	PY-1:	PY-1:	PY-1:	
	PY-2:	PY-2:	PY-2:	
	PY-3:	PY-3:	PY-3:	
TOTAL:				

REMARKS: Non Ready-for-Issue (RFI) condition = 0 boats

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study	Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
Project Unit/Item H0016/12M (40FT) PERSONNEL BOAT	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	6	3		0	0	0	0
Unit Cost		257.7	266.7					
Total Cost		1546	800					
Asset Dynamics								
Beginning Asset Position	58	53	48	49	47	39	39	39
Deliveries from all prior year funding								
Deliveries from FY 1997 funding			6					
Deliveries from FY 1998 funding				3				
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	5	5	5	5	2	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	6	0	0	0
End of Year Asset Position	53	48	49	47	39	39	39	39
Inventory Objective/Current Authorized Allowance	43	43	43	43	43	43	43	43
DELTA	10	5	6	4	-4	-4	-4	-4

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Boats Eligible for Replacement
	PY thru _____:	PY thru _____:	PY thru _____:	BY1: BY2:
	PY-1:	PY-1:	PY-1:	
	PY-2:	PY-2:	PY-2:	
	PY-3:	PY-3:	PY-3:	
TOTAL:				

REMARKS: Non Ready-for-Issue (RFI) condition = 11 boats

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study		Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months					Prod Leadtime		
Project Unit/Item **H0026/70 FT PERSONNEL BOAT**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	0	0	0	0	1	4
Unit Cost								951.7	972.8
Total Cost								952	3891
Asset Dynamics									
Beginning Asset Position		6	6	6	6	6	6	6	2
Deliveries from all prior year funding		0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding									1
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.								4	
End of Year Asset Position		6	6	6	6	6	6	2	3
Inventory Objective/Current Authorized Allowance		6	6	6	6	6	6	6	6
DELTA		0	0	0	0	0	0	-4	-3
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Boats Eligible for Replacement			
	PY thru _____:	PY thru _____:		PY thru _____:		BY1: 0 BY2: 0			
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS: Non Ready-for-Issue (RFI) condition = 0 boats									

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study	Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
Project Unit/Item **H0030/22 FT EOD SUPPORT BOAT**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	0	0	1	0	0	0	0
Unit Cost				127.0				
Total Cost				127				
Asset Dynamics								
Beginning Asset Position	78	77	76	77	76	76	75	74
Deliveries from all prior year funding	0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding			2					
Deliveries from FY 1998 funding					1			
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	1	1	1	1	1	1	1	1
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	77	76	77	76	76	75	74	73
Inventory Objective/Current Authorized Allowance	77	77	77	77	77	77	77	77
DELTA	0	-1	0	-1	-1	-2	-3	-4

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Boats Eligible for Replacement
	PY thru _____:	PY thru _____:	PY thru _____:	BY1: 0 BY2: 0
	PY-1:	PY-1:	PY-1:	
	PY-2:	PY-2:	PY-2:	
	PY-3:	PY-3:	PY-3:	
TOTAL:				

REMARKS: Non Ready-for-Issue (RFI) condition = 0 boats

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study		Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months					Prod Leadtime		
Project Unit/Item **H0031/27 FT EOD SUPPORT BOAT**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	0	1	0	0	0	0
Unit Cost					191.0				
Total Cost					191				
Asset Dynamics									
Beginning Asset Position		24	23	22	21	20	20	19	18
Deliveries from all prior year funding		0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding						1			
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage		1	1	1	1	1	1	1	1
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		23	22	21	20	20	19	18	17
Inventory Objective/Current Authorized Allowance		23	23	23	23	23	23	23	23
DELTA		0	-1	-2	-3	-3	-4	-5	-6
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Boats Eligible for Replacement			
	PY thru _____:	PY thru _____:		PY thru _____:		BY1: 0 BY2: 0			
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS: Non Ready-for-Issue (RFI) condition = 0 boats									

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study		Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature			Admin Leadtime (after Oct 1): xx months				Prod Leadtime		
Project Unit/Item **H0032/32 FT EOD SUPPORT BOAT**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	0		1	1	1	1
Unit Cost						312.0	319.0	326.0	334.0
Total Cost						312	319	326	334
Asset Dynamics									
Beginning Asset Position		4	0	3	2	2	2	2	3
Deliveries from all prior year funding		0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding					1				
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding							1	1	1
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage		1	1	1	1	1	1	1	1
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	3	2	2	1	2	2	3
Inventory Objective/Current Authorized Allowance		0	3	3	3	3	3	3	3
DELTA		0	0	-1	-1	-2	-1	-1	0
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Boats Eligible for Replacement			
	PY thru _____:	PY thru _____:		PY thru _____:		BY1: 0 BY2: 0			
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS: Non Ready-for-Issue (RFI) condition = 0 boats									

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study	Approp Code/BA OTHER PROC, NAVY/BA1	Subhead 21H0	Date: FEBRUARY 1998
P-1 Line Item Nomenclature	Admin Leadtime (after Oct 1): xx months		Prod Leadtime

Project Unit/Item **H0033/13M (40 FT) PERSONNEL BOAT**	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY	0	0	0	0	2	1	2	0
Unit Cost					278.5	285.0	290.5	
Total Cost					557	285	581	
Asset Dynamics								
Beginning Asset Position	25	23	21	19	17	15	15	14
Deliveries from all prior year funding	0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding								
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from subsequent years' funding						2	1	2
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	2	2	2	2	2	2	2	0
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	23	21	19	17	15	15	14	16
Inventory Objective/Current Authorized Allowance	19	19	24	24	24	24	24	24
DELTA	4	2	-5	-7	-9	-9	-10	-8

Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Boats Eligible for Replacement
	PY thru _____:	PY thru _____:	PY thru _____:	BY1: 0 BY2: 0
	PY-1:	PY-1:	PY-1:	
	PY-2:	PY-2:	PY-2:	
	PY-3:	PY-3:	PY-3:	
TOTAL:				

REMARKS: Non Ready-for-Issue (RFI) condition = 1 boats

P-1 Shopping List Item No. 29

Exhibit P-20, Requirements Study		Approp Code/BA OTHER PROC, NAVY/BA1			Subhead 21H0		Date: FEBRUARY 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): xx months					Prod Leadtime		
Project Unit/Item **H0034/13M (40 FT) UTILITY BOAT**		PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary QTY		0	0	0	0		0	0	5
Unit Cost									297.0
Total Cost									1485
Asset Dynamics									
Beginning Asset Position		0	0	0	0	0	1	3	3
Deliveries from all prior year funding		0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding									
Other Gains							1	2	2
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		0	0	0	0	0	2	5	5
Inventory Objective/Current Authorized Allowance		0	0	0	0	1	3	6	8
DELTA		0	0	0	0	-1	-1	-1	-3
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Boats Eligible for Replacement			
	PY thru _____:	PY thru _____:		PY thru _____:		BY1: 0 BY2: 0			
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

P-1 Shopping List Item No. 29

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA-1: OTHER SHIPS SUPPORT EQUIPMENT**	**P-1 ITEM NOMENCLATURE/LINE ITEM #** OTHER SHIPS TRAINING EQUIPMENT LI:132000 81H5
Program Element for Code B Items:	**OTHER RELATED PROGRM ELEMENTS**

	Prior Years	ID Code	FY 1995	FY1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													**0**
EQUIPMENT COST (In Millions)	N/A		***N/A***		**$1.4**	**$1.8**	**$1.8**	**$3.9**	**$4.0**	**$15.3**	**$3.5**	**N/A**	**$31.7**
SPARES COST (In Millions)													**0**

PROGRAM DESCRIPTION/JUSTIFICATION:

The equipment procured under the Other Ships Training Equipment line supports Hull, Mechanical, and Electrical (HM&E) training requirement:

(H5265) Surface Sustaining TTE
Funds procure HM&E technical training equipment (TTE) identified by the Chief of Naval Education and Training (CNET) and the Surface Warfare Training Requirements Review (SWTRR) process, as approved by CNO. This TTE sustains a better quality of training and/or replaces equipment beyond economical repair.

(H5276) Subsurface Sustaining TTE
Funds procure Subsurface HM&E technical training equipment (TTE) identified by the Type Commander, Chief of Naval Education and Training (CNET) and the Submarine and Inergrated Undersea Sonor System (IUSS) Training Requirements Review (SITRR) process, as approved by CNO. This TTE sustains a better quality of training and/or replaces equipment beyond economical repair.

(H5ZZZ) BFTT (GNSS)
Funds will procure and install Generic Navy Stimulators/Simulators (GNSS), as part of the AN/USQ-T46 Battle Force Tactial Training (BFTT) System, on CVN 74 dnd CVN 75. The GNSS set for each aircraft carrier provies stimulus for AN/SPS-48, AN/SPS-49, AN/SPS-67, IFF, MK23 TAS and NSSMS.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: OTHER SHIPS SUPPORT EQUIPMENT		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD OTHER SHPS TRAINING EQUIPMENT LI: 132000 81H5	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SURFACE WARFARE N86)													
H5265	Surface Sustaining TTE					6	63	382	11	71	785	9	74	672
	SUBMARINE WARFARE (N87)													
H5276	Subsurface Sustainng TTE							1,011			988			1,170
	SUBTOTAL (N86)							382			785			672
	SUBTOTAL (N87)							1,011			988			1,170
TOTAL								**1,393**			**1,773**			**1,842**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1998

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-1: OTHER SHIPS SUPPORT EQUIPMENT	Other Ships Training Equipment	81H5

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
H5277										
Machinery Control						NAVSURFWARCEN				
Console Maint. TTE (FY96)	1	3,216	NAVICP	N/A	ID/IQ	PHILADELPHIA,PA	AUG 96	SEP 97	YES	
H5265										
Surface Sustaining										
Training TTE	1	63	NAVUNDSEADIV	N/A	FFP	NEWPORT RI	SEP 97	OCT 97	YES	
FISCAL YEAR 97										
Training TTE	1	63	NAVUNDSEADIV	N/A	FFP	NEWPORT RI	SEP 97	NOV 97	YES	
Training TTE	1	63	NAVUNDSEADIV	N/A	FFP	NEWPROT RI	SEP 97	DEC 97	YES	
Training TTE	1	63	NAVUNDSEADIV	N/A	FFP	NEWPORT RI	SEP 97	JAN 98	YES	
Training TTE	1	63	NAVUNDSEADIV	N/A	FFP	NEWPORT RI	SEP 97	JAN 98	YES	
Training TTE	1	63	NAVUNDSEADIV	N/A	FFP	NEWPORT RI	SEP 97	JAN 98	YES	
Training TTE (FY98)	4	71	NAVUNDSEADIV	N/A	FFP	NEWPORT RI	SEP 98	TBD	YES	
Training TTE (FY98)	7	71	NAVSEALOGCEN	N/A	FFP	UNIDYNE, NORFOLK, VA	SEP98	TBD	YES	
Training TTE (FY99)	3	74	NAVUNDSEADIV	N/A	FFP	NEWPORT RI	SEP 99	TBD	YES	
Training TTE (FY99)	6	74	NAVSEALOGCEN	N/A	FFP	UNIDYNE, NORFOLK, VA	SEP99	TBD	YES	
H5281										
BM Skill Training TTE						SEACOR				
(FY 96)			NAVSEALOGCEN	N/A	FFP	MOORESTOWN,NJ	NOV 96	JUL 97	YES	
			NAVSEALOGCEN	N/A	FFP	SEACOR MOORESTOWN,NJ	JAN 97	SEP 97	YES	
			NAVSEAOGCEN	N/A	FFP	UNIDYNE NORFOLK,VA	FEB 97	JUL 97	YES	
H5276										
SUBSURFACE										
SUSTAINING TTE			VARIOUS	N/A	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
(96-03)										
H5ZZZ										
BFTT (GNSS)										
FISCAL YEAR 00	1	2,201	NAVSEA ARLINGTON	MAY 97	CPIF	TBD	TBD	APR 00	YES	
FISCAL YEAR 01	1	2,292	NAVSEA ARLINGTON	MAY 97	CPIF	TBD	TBD	APR 01	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE **P-23**	A. APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy**	B. P-1 ITEM NOMENCLATURE **AN/USQ-T46 BFTT (GNSS)**	C. DATE **FEB 98**

		FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SCHOOLS/OTHER TRAINING	(P)	0																								
OTHER	(P)																									
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ASSETS ON HAND	(BP)	0																								
DELIVERY FY 96 & PRIOR	(P)	0																								
FY 96 & PRIOR	(P)	0																								
FY 97	(P)	0	0	0	0																					
FY 98	(P)					0	0	0	0																	
FY 99	(P)									0	0	0	0													
FY 00	(P)													0	1	0	0									
FY 01	(P)																	0	1	0	0					
FY 02	(P)																					0	0	0	0	
FY 03	(P)																									
To Complete	(P)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL ASSETS	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	2	2	2	
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	2	2	0	0

D. REMARKS	E. RQMT (QTY) 143	TOTAL RQMT 143	INSTALLE 143	ON HAND AS OF / /96 13	FY 99 & PRIOR UNDELIVERED 0	UNFUNDED 0
	1. APPN -					
	2. APPN -					
	3. PROCUREMENT LEADTIME	ADMIN	INITIAL ORDER		REORDER	

DD for 2447, JUN 86

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA-1: Ships Support Equipment**	**P-1 ITEM NOMENCLATURE/LINE ITEM #** ***PRODUCTION SUPPORT FACILITIES (141500)***
Program Element for Code B Items:	**OTHER RELATED PROGRAM ELEMENTS**

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					**$1.3**	**$0.3**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**		**1.6**
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

This budget submission reflects the minimum investment required for industrial plant equipment and other equipment necessary to support Navy managed facilities which are not Navy Working Capital Fund (NWCF) funded.

NAVY EXPERIMENTAL DIVING UNIT--KM003
The Navy Experimental Diving Unit's (NEDU) mission is to support the fleet diver through test and evaluation of diving equipments and procedures as well as hyperbaric systems for NAVSEA, Navy, and DoD activities. Funding is to procure equipment for test, facilities atmospheric control, life support, and physiological systems. These systems not only ensure the safety and lives of NEDU sailors performing experimental dives, but ultimately support the combat readiness and mission success of the fleet sailors who use the equipment tested at NEDU. Beginning in FY99 and through the out years the NEDU will be under the cognizance of Diving and Salvage Equipment (BLI 1130).

MAGNETIC SILENCING FACILITIES--KM006
The Magnetic Silencing Facilities' (MCF) mission is to measure, calibrate, and reduce magnetic signatures of surface ships and submarines. This requires the procurement of magnetic measurement systems (ranges), reduction systems, portable ranges and special systems for Mine Counter Measure vessels (MCMs).

NAVSEA HEADQUARTERS EQUIPMENT--KM010
Funding in this line provides automated information system requirements for the Naval Sea Systems Command. The Acquisition Center for Excellence serves as an interactive work place for program managers to assess new process concepts and define program objectives, operates as a virtual prototyping laboratory, and functions as an electronically accessible resource library for the acquisition community.,

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: February 1998
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-1: Ships Support Equipment**		ID Code **A**	P-1 ITEM NOMENCLATURE/SUBHEAD **PRODUCTION SUPPORT FACILITIES (141500) 81KM**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	Logistics (N-04)													
KM003	Navy Experimental Diving Unit							470			345			0
KM006	Magnetic Silencing Facilities Equipment							700			0			0
KM010	NAVSEA Headquarters Equipment							116			0			0
	Total Production Support Facilities							1286			345			0

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1998
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA: 1 SHIPS SUPPORT EQUIPMENT**	P-1 ITEM NOMENCLATURE/LINE ITEM # ***OPERATING FORCES IPE BLI#144500***
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)					$0.9	$0.9	$0.7	$1.0	$1.0	$1.0	$1.0	N/A	
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

The **Operating Forces IPE Program** funds are used to procure Industrial Plant Equipment to Fleet Maintenance Activities (FMAs) Afloat, including Battle Force Maintenance Activities (BFMA), and other ships.

IPE REPLACEMENT - The IPE Replacement Program maintains the infrastructure of repair capability on tenders and other ships. It supplies IPE to replace aging equipment to comply with EPA and OSHA regulations and to introduce new repair technology.

BFMA - The BFMA Program upgrades battle force and amphibious group leaders (CV/CVN and LHA/LHD) to the core repair capability. The BFMA repairs CASREPS, emergent jobs and routine work within their capability and capacity. NAVSEA is responsible for replacing the IPE on BFMA platforms and on other ships.

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System		DATE: FEBRUARY 1998					
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD: OPERATING FORCES IPE BLI#144500			81KN				
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS										
						FY 1997			FY 1998			FY 1999	
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	N43 LOGISTIC SUPPORT												
	BFMA IPE UPGRADE										436			201
	IPE REPLACEMENT							451						
	N86 SURFACE SUPPORT												
	IPE REPLACEMENT							442						
	BFMA IPE UPGRADE										432			472
TOTAL								**893**			**868**			**673**