DEPARTMENT OF THE NAVY FISCAL YEAR (FY) 2000/2001 BIENNIAL BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES FEBRUARY 1999

OTHER PROCUREMENT, NAVY BUDGET ACTIVITY 1

Exhibit P-1

Department of the Navy

FY 2000/2001 Procurement Program

APPROPRIATION: 1810N Other Procurement, Navy DATE: February 1999 _______ TOA, \$ IN MILLIONS (DOLLARS) -----S LINE IDENT FY 2000 ----FY 1998--- ----FY 1999---- E UNIT COST QUANTITY COST QUANTITY COST QUANTITY COST C NO ITEM NOMENCLATURE CODE _____ BUDGET ACTIVITY 01: Ships Support Equipment Ship Propulsion Equipment 1 0110 LM-2500 Gas Turbine 5.3 8.7 8.3 8.4 U 2 0120 Allison 501K Gas Turbine 6.4 6.7 8.4 8.3 U 3 0157 Steam Propulsion Improvement A . 5 – U 4 0180 Other Propulsion Equipment 10.1 11.1 - U Generators 5 0260 Other Generators 1.9 12.5 Α – U Pumps 6 0320 Other Pumps Α . 4 1.0 - U Propellers 7 0510 Submarine Propellers 7.9 – U 8 0540 Other Propellers and Shafts A 2.1 1.1 - U Navigation Equipment 9 0670 Other Navigation Equipment A 40.8 58.9 67.5 43.8 U Underway Replenishment Equipment 10 0740 Underway Replenishment Equipm A 6.6 7.4 15.6 11.0 U

^{*} ITEMS UNDER \$50,000 UNCLASSIFIED

Department of the Navy

Exhibit P-1

FY 2000/2001 Procurement Program

			(DOLLADG)		TOA, \$ IN		
NO ITEM NOMENCLATURE C		IDENT CODE	(DOLLARS) FY 2000 UNIT COST	FY 1998 QUANTITY COST	FY 1999 QUANTITY COST	FY 2000 QUANTITY COST	FY 2001 I
Perisco	opes						
11 0831	1 Sub Periscopes & Imaging E	qui A		25.3	31.7	65.0	20.6 (
Other S	Shipboard Equipment						
12 0910	O Firefighting Equipment	А		18.2	11.3	17.0	17.0 τ
13 0925	5 Command and Control Switch	boa A		8.4	10.1	12.3	5.7 (
14 0935	5 Pollution Control Equipmen	t B		116.3	129.5	113.5	54.2
15 0940	O Submarine Silencing Equipm	ent A		4.6	3.4	-	- 1
16 0941	1 Submarine Support Equipmen	t A		-	-	51.0	28.2
17 0945	5 Submarine Batteries	А		8.2	8.6	13.1	12.5
18 0949	9 SSN21 Class Support Equipm	ent A		6.3	15.4	-	- 1
19 0950	O Strategic Platform Support	Eq A		20.3	10.2	6.1	6.3
20 0955	5 DSSP Equipment	А		7.0	10.4	8.0	5.4
21 0970	0 LCAC			4.3	-	4.0	6.4
22 0975	5 Minesweeping Equipment	А		4.8	. 4	16.3	13.0
23 0980	O HM&E Items Under \$2 Million	n A		51.6	51.4	-	- 1
24 0981	1 Items less than \$5 Million			-	-	126.1	143.4
25 0983	3 Surface IMA	А		.5	7.7	-	- 1
26 0987	7 Radiological Controls	А		.2	-	-	

* ITEMS UNDER \$50,000 UNCLASSIFIED

Department of the Navy

Exhibit P-1

FY 2000/2001 Procurement Program

* ITEMS UNDER \$50,000

APPROPRIATION: 1810N Other Procurement, Navy DATE: February 1999 TOA, \$ IN MILLIONS (DOLLARS) ----- S LINE ----FY 1998---- ----FY 1999---- FY 2000---- E IDENT FY 2000 NO ITEM NOMENCLATURE CODE UNIT COST QUANTITY COST QUANTITY COST QUANTITY COST C 27 0988 Mini/Micromini Electronic Rep A . 5 . 5 28 0990 Submarine Life Support System A . 9 4.9 U Reactor Plant Equipment 29 1010 Reactor Power Units 106.0 226.4 - U 30 1020 Reactor Components 181.6 210.5 199.1 202.5 U Ocean Engineering 5.5 31 1130 Diving and Salvage Equipment A 5.1 5.7 5.7 U 32 1140 EOD Underwater Equipment 8.7 8.1 .3 .4 U Small Boats 33 1210 Standard Boats 6.0 1.4 3.1 2.5 U Training Equipment 34 1320 Other Ships Training Equipmen A 4.0 U 1.8 1.8 3.9 Production Facilities Equipment 35 1415 Production Support Facilities A . 3 – U 36 1445 Operating Forces IPE .9 . 7 4.5 2.7 U Other Ship Support 37 1480 Nuclear Alterations Α 62.2 94.1 108.9 96.5 U TOTAL Ships Support Equipment 724.2 954.4 858.7 703.5

Exhibit P-1R

Department of the Navy

FY 2000/2001 Procurement Program - Reserve Component

APPROPRIATION: 1810N Other Procurement, Navy						DATE: February 199					
			(DOLL 3DG)			TOF	A, \$ IN I	MILLIONS			
INE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2000 UNIT COST	FY 199	98 COST	FY 19 OUANTITY	099 COST	FY 20 OUANTITY	000 COST	FY 20 OUANTITY	001 E
	ACTIVITY 01: Ships Supp Engineering	oro nagarpine									
	-										
1 113	O Diving and Salvage Equi	pment(A			.2		.3		.1		.1 ፣

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

Budget Plan (amounts for PROCUREMENT actions programed)

Program by activities: Direct program: Direct program: Direct program:								
Program by activities: Direct programs 100.1011 Ships support equipment 172,750 954,401 858,709 703,500,2011 Ships support equipment 1,095,702 1,629,901 1,849,227 1,531,000,301 Aviations sumport equipment 204,148 243,679 216,237 215,000,301 Aviation support equipment 250,423 715,973 269,481 668,300,301 200,001 200,	Identification code 17-1810-0-1-051							
00.101	Program by activities:							
00.0201 Communications and electronics equipment 1,095,702 1,629,901 1,845,227 1,531,000,00,0301 Aviation support equipment 520,423 715,972 629,418 668,3 0.0501 Civil engineering support equipment 48,370 54,585 67,144 94,0 0.0601 Supply support equipment 54,583 89,537 139,628 180,2 0.0701 Personnel and command support equipment 136,986 74,063 67,598 67,500,0001 Spares and repair parts 219,654 246,506 276,130 180,2 0.0901 Total direct program 3,007,616 4,008,915 4,100,091 3,640,1 0.001 Total direct program 3,007,616 4,008,915 4,100,091 3,640,1 0.001 Total direct program 49,428 42,000 42,000 42,000 42,000 0.001 Total direct program 49,428 42,000 42,000 42,000 42,000 0.001 Total 3,057,044 4,050,915 4,142,091 3,682,1 0.001 Total funds(-) -1,417 -42,000 -42,0	Direct program:							
204,148 243,679 215,277 215,00.00.0401 Ordnance support equipment 520,423 715,972 629,418 668,3 00.0501 Civil engineering support equipment 548,870 54,856 67,144 94,0 00.0501 Supply support equipment 548,878 89,537 139,628 180,2 00.0701 Personnel and command support equipment 136,986 74,063 67,588 67,508 6	00.0101 Ships support equipment	727,750	954,401	858,709	703,509			
00.0301	00.0201 Communications and electronics equipment	1,095,702	1,629,901	1,845,227	1,531,094			
00.0501 Civil engineering support equipment 54,583 67,144 94,0 00.0501 Supply support equipment 54,583 89,537 139,628 180,2 00.0701 Personnel and command support equipment 136,986 74,063 67,588 67,5 00.0801 Spares and repair parts 219,654 246,506 276,130 180,2 00.9101 Total direct program 3,007,616 4,008,915 4,100,091 3,640,1 00.9101 Total direct program 49,428 42,000 42,000 42,00 00.0010 Total 3,057,044 4,050,915 4,142,091 3,682,1 Financing:		204,148	243,679	216,237	215,043			
00.0501 Civil engineering support equipment 54,583 67,144 94,0 00.0501 Supply support equipment 54,583 89,537 139,628 180,2 00.0701 Personnel and command support equipment 136,986 74,063 67,588 67,5 00.0801 Spares and repair parts 219,654 246,506 276,130 180,2 00.9101 Total direct program 3,007,616 4,008,915 4,100,091 3,640,1 00.9101 Total direct program 49,428 42,000 42,000 42,00 00.0010 Total 3,057,044 4,050,915 4,142,091 3,682,1 Financing:		520.423	715.972	629.418	668.357			
10.001 Total direct program 3,007,616 4,008,915 4,100,091 3,640,1		48 370	54 856	67 144	94 062			
10.001 Total direct program 3,007,616 4,008,915 4,100,091 3,640,1		54 583	89 537	139 628	180 239			
10.001 Total direct program 3,007,616 4,008,915 4,100,091 3,640,1		136 086	74 063	67 508	67 570			
10.001 Total direct program 3,007,616 4,008,915 4,100,091 3,640,1		210,500	246 506	276 120	100 270			
10.001 Reimbursable program	00.0001 Spares and repair parts	219,034	240,500	276,130	100,279			
Financing: Offsetting collections from: 11.0001 Federal funds(-)	00.9101 Total direct program	3,007,616	4,008,915	4,100,091	3,640,153			
Total Total 3,057,044 4,050,915 4,142,091 3,682,11	01.0101 Reimbursable program							
Offsetting collections from: 11.0001 Federal funds(-) 14.0001 Non-Federal sources(-) Recovery of prior year obligations Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 22.14003 Available to finance new budget plans 22.14000 Tunobligated balance available, end of year: 21.4002 For completion of prior year budget plans 22.1001 Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance available, end of year: 26.4000 Available to finance subsequent year budget plans 28.500 Unobligated balance expiring 30.0001 Budget authority 30.0001 Appropriation Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred to other accounts (-) Transferred from other accounts (-)	10.0001 Total							
11.0001 Federal funds(-)	Financing:							
14.0001 Non-Federal sources(-) 17.0001 Recovery of prior year obligations Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans 22.1001 Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 20.101 Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance expiring 26.0001 Budget authority 27.0001 Budget authority: 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 40.0001 Transferred from other accounts (-) 40.0001 Transferred from other account	Offsetting collections from:							
17.0001 Recovery of prior year obligations Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans 21.4009 Reprograming from/to prior year budget plans 22.1001 Unobligated balance transferred to other accounts Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance expiring 39.0001 Budget authority Budget authority: 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred from other accounts (-) Transferred from other accounts 17,700 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -28,500 -3,640,1	11.0001 Federal funds(-)	-1,417	-42,000	-42,000	-42,000			
Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans 21.4009 Reprograming from/to prior year budget plans 22.1001 Unobligated balance transferred to other accounts Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance expiring Budget authority: Budget authority: 8udget authority: 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred to other accounts (-) 70.0001 Transferred from other accounts	14.0001 Non-Federal sources(-)	-48,011						
Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans 21.4009 Reprograming from/to prior year budget plans 22.1001 Unobligated balance transferred to other accounts Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance expiring Budget authority: Budget authority: 8udget authority: 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred to other accounts (-) 70.0001 Transferred from other accounts	17.0001 Recovery of prior year obligations							
21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans 21.4009 Reprograming from/to prior year budget plans 22.4000 Reprograming from/to prior year budget plans 22.1001 Unobligated balance transferred to other accounts Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance expiring 3.028,416 3,980,415 4,100,091 3,640,1 Budget authority: 40.0001 Appropriation Budget authority: 40.0001 Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred from other accounts Transferred from other accounts 30,663 3,500								
21.4003 Available to finance new budget plans								
21.4009 Reprograming from/to prior year budget plans 22.1001 Unobligated balance transferred to other accounts Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance expiring 39.0001 Budget authority Budget authority: 40.0001 Appropriation Appropriation Appropriation rescinded (unob bal) Appropriation rescinded (unob bal) Appropriation pursuant to P.L. 105-56 (-), 8035 Transferred to other accounts Transferred from other accounts 30,663 3,500 -20,391 11,177 11,177 28,500 28,500 28,500 3,028,416 3,980,415 4,100,091 3,640,1 -28,500 -56,735 -56,735 -56,735 -76,735 -76,735 -76,735 -77,700		-7 700	-28 500					
22.1001 Unobligated balance transferred to other accounts			20,500					
Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance expiring 39.0001 Budget authority Budget authority: 40.0001 Appropriation Appropriation rescinded (unob bal) 40.3601 Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred to other accounts (-) Transferred from other accounts 3,500 28,500 3,028,416 3,980,415 4,100,091 3,640,1 4,100,091 3,640,1 -28,500 -56,735 -82,017 30,663 3,500								
24.4002 For completion of prior year budget plans 24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance expiring 39.0001 Budget authority Budget authority: 40.0001 Appropriation Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred to other accounts (-) 42.0001 Transferred from other accounts 28,500 28,500 3,028,416 3,980,415 4,100,091 3,640,1 -28,500 -28,500 -56,735 -82,017 30,663 3,500		11,177						
24.4003 Available to finance subsequent year budget plans 25.0001 Unobligated balance expiring 39.0001 Budget authority Budget authority: 40.0001 Appropriation Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred to other accounts (-) Transferred from other accounts 28,500 9,214 3,028,416 3,980,415 4,100,091 3,640,1 4,100,091 3,640,1 -28,500 -56,735 -82,017 -82,017 -82,007								
25.0001 Unobligated balance expiring 9,214 39.0001 Budget authority Budget authority: 40.0001 Appropriation Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred to other accounts (-) 42.0001 Transferred from other accounts 9,214 3,028,416 3,980,415 4,100,091 3,640,1 -28,500 -28,500 -56,735 -82,017 42.0001 Transferred from other accounts 3,136,505 4,005,415 4,100,091 3,640,1 -28,500 -82,017 -82,017		20 500						
39.0001 Budget authority: Budget authority: 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred to other accounts (-) 42.0001 Transferred from other accounts 3,028,416 3,980,415 4,100,091 3,640,1 -28,500 -28,500 -56,735 -82,017 -82,017 -82,007		•						
39.0001 Budget authority Budget authority: 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 41.0001 Transferred to other accounts (-) 42.0001 Transferred from other accounts 3,028,416 3,980,415 4,100,091 3,640,1 -28,500 -28,500 -56,735 -56,735 -82,017 -82,017 -82,007	25.0001 Unobligated balance expiring							
Budget authority: 40.0001 Appropriation 3,136,505 4,005,415 4,100,091 3,640,1 40.3601 Appropriation rescinded (unob bal) -28,500 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 -56,735 41.0001 Transferred to other accounts (-) -82,017 42.0001 Transferred from other accounts 30,663 3,500		3,028,416						
40.0001 Appropriation 3,136,505 4,005,415 4,100,091 3,640,1 40.3601 Appropriation rescinded (unob bal) -28,500 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 -56,735 41.0001 Transferred to other accounts (-) -82,017 42.0001 Transferred from other accounts 30,663 3,500								
40.3601 Appropriation rescinded (unob bal) -28,500 40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 -56,735 41.0001 Transferred to other accounts (-) -82,017 42.0001 Transferred from other accounts 30,663 3,500	40.0001 Appropriation	3,136,505	4,005,415	4,100,091	3,640,153			
40.7601 Reduction pursuant to P.L. 105-56 (-), 8035 -56,735 41.0001 Transferred to other accounts (-) -82,017 42.0001 Transferred from other accounts 30,663 3,500		, , , , , , , , , , , , , , , , , , , ,			, , ,			
41.0001 Transferred to other accounts (-) 42.0001 Transferred from other accounts -82,017 30,663 3,500		-56.735	-,					
42.0001 Transferred from other accounts 30,663 3,500	<u>-</u>	•						
			3.500					
	11.0001 11.001101 11.001101 400041100							
43.0001 Appropriation (adjusted) 3,028,416 3,980,415 4,100,091 3,640,1	43.0001 Appropriation (adjusted)		3,980,415	4,100,091	3,640,153			

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

Obligations

Identifi	cation code 17-1810-0-1-051	1998 actual		2000 est.		
P	rogram by activities:					
	Direct program:					
00.0101	Ships support equipment	730,410	803,087	845,223	739,332	
00.0201	Communications and electronics equipment	1,127,427	1,479,892	1,756,499	1,583,160	
00.0301	Aviation support equipment	222,704	210,650	212,051	216,653	
00.0401	Ordnance support equipment	511,296	210,650 612,449	212,051 611,088	664,897	
00.0501	Civil engineering support equipment	46.899	46.682	62,833 127,586 76,319	88.063	
00.0601	Supply support equipment	57.524	74.718	127.586	169.612	
00.0701	Personnel and command support equipment	85,983	122.715	76.319	67.896	
00.0801	Spares and repair parts	220,864	204,354	263,425	197,969	
00.9101	Total direct program			3,955,024		
01.0101	Reimbursable program			42,526		
10.0001	Total			3,997,550		
F	inancing:					
	Offsetting collections from:					
11.0001	Federal funds(-)	-4,242	-42,000	-42,000	-42,000	
14.0001	Non-Federal sources(-)	-46,448				
17.0001	Recovery of prior year obligations	-9,138				
	Unobligated balance available, start of year:					
21.4002	For completion of prior year budget plans	-439,651	-437,055	-886,423	-1,030,964	
21.4003	Available to finance new budget plans	-7,700	-28,500			
21.4009	Reprograming from/to prior year budget plans					
22.1001	Unobligated balance transferred to other accounts	11,177				
	Unobligated balance available, end of year:					
24.4002	For completion of prior year budget plans	437,055	886,423	1,030,964	943,535	
24.4003	Available to finance subsequent year budget plans	28,500				
25.0001	Unobligated balance expiring	9,214				
39.0001	Budget authority			4,100,091		
	Budget authority:					
40.0001	Appropriation	3,136,505	4,005,415	4,100,091	3,640,153	
40.3601	Appropriation rescinded (unob bal)	=,===,=00	-28,500	,,	-,,	
40.7601	Reduction pursuant to P.L. 105-56 (-), 8035	-56,735	,-00			
41.0001	Transferred to other accounts (-)	-82,017				
42.0001	Transferred from other accounts		3,500			
43.0001	Appropriation (adjusted)	3,028,416	3,980,415	4,100,091	3,640,153	

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

Obligations

Identification code 17-1810-0-1-051	1998 actual	1999 est.	2000 est.	2001 est.
Relation of obligations to outlays:				
71.0001 Obligations incurred	2,998,960	3,559,547	3,955,550	3,727,582
72.1001 From Federal sources: Receivables and unpaid, unfilled orders, SOY	-89,947	-78,045	-78,045	-78,045
72.4001 Obligated balance, start of year	3,407,474	3,193,644	3,249,253	3,563,053
74.1001 From Federal sources: Receivables and unpaid, unfilled orders, EOY	78,045	78,045	78,045	78,045
74.4001 Obligated balance, end of year	-3,193,644	-3,249,253	-3,563,053	-3,492,582
77.0001 Adjustments in expired accounts (net)	-230,320			
78.0001 Adjustments in unexpired accounts	-9,138			
90.0001 Outlays (net)	2,961,430	3,503,938	3,641,750	3,798,053

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

Identification code 17-1810-0-1-051	1998 actual	1999 est.	2000 est.	2001 est.
Direct obligations:				
125.101 Advisory and assistance services	20,243	25,686	25,286	25,804
Purchases goods/services from Government accounts				
125.301 Purchase of goods/services from Government accounts	50,825	48,754	56,614	56,259
125.303 Purchases from revolving funds	647,649	708,534	799,399	737,514
126.001 Supplies and materials	109,613	133,007	105,941	58,389
131.001 Equipment	2,174,777	2,638,566	2,967,784	2,849,616
199.001 Total Direct obligations	3,003,107	3,554,547	3,955,024	3,727,582
Reimbursable obligations:				
231.001 Equipment	46,543	47,000	42,526	42,000
299.001 Total Reimbursable obligations	46,543	47,000	42,526	42,000
999.901 Total obligations	3,049,650	3,601,547	3,997,550	3,769,582

Comparison of FY 1998 Financing as reflected in FY 1999 Budget with 1998 Financing as Shown in the FY 2000 Budget

(\$ In Thousands)

	Financing Per	Financing Per	Increase (+) or
	FY 1999 Budget	FY 2000 Budget	Decrease (-)
Program Requirements (Total)	\$3,030,074	\$3,057,044	+\$26,970
Program Requirements (Service Account)	(\$2,988,074)	(\$3,007,616)	(+19,542)
Program Requirements (Reimbursable)	(\$42,000)	(\$49,428)	(+7,428)
Appropriation (Adjusted)	\$2,982,574	\$3,028,416	+\$45,842

Explanation of Changes in Financing

The Fiscal Year 1998 program has changed since the presentation of the FY 1999 budget as noted below:

1. <u>Program Requirements</u>. There has been a net increase to the appropriation (adjusted) of (+\$45,842). This net change is comprised of an increase in program requirements (+\$19,542) plus an increase in reimbursable authority of (+\$7,428).

Comparison of FY 1998 program requirements as reflected in the FY 1999 Budget with FY 1998 program requirements as shown in the FY 2000 Budget

Summary of Requirements (\$ in Thousands)

	Total Program Requirements per FY 1999 Budget	Total Program Requirements per FY 2000 Budget	Increase (+) or Decrease (-)
Ships Support Equipment	\$721,811	\$724,150	+\$2,339
Communications and Electronic Equip	1,165,616	1,141,796	-23,820
Aviation Support Equipment	188,669	204,148	+15,479
Ordnance Support Equipment	517,909	520,423	+2,514
Civil Engineering Support Equip	46,404	51,970	+5,566
Supply Support Equipment	51,902	54,583	+2,681
Personnel and Command Support Equip	79,788	90,892	+11,104
Spares and Repair Parts	215,975	219,654	+3,679
Total Fiscal Year Program	\$2,988,074	\$3,007,616	+\$19,542

Explanation by Budget Activity

(\$ In Thousands)

^{1. &}lt;u>SHIP SUPPORT EQUIPMENT (+\$2,339)</u> - Net increase reflecting (-\$8,300) FY 1998 Congressional recissions and internal reprogrammings (+\$10,639) including (+\$4,606) for Counter Drug Interdiction.

Explanation by Budget Activity (Continued)

(\$ In Thousands)

- 2. <u>COMMUNICATIONS & ELECTRONIC EQUIPMENT (-\$23,820)</u> Net decrease reflecting (-\$2,300) FY 1998 Congressional recission, decrease for economic assumptions (-\$7295), offsets for higher priority Navy programs, (-\$7829), and internal reprogramming actions of (-\$6396).
- 3. <u>AVIATION SUPPORT EQUIPMENT (+\$15,479)</u> Net increase reflecting (+\$17,779) Congressional adjustments, and FY 1998 recisions (-\$2,300).
- 4. ORDNANCE SUPPORT EQUIPMENT (+\$2,514) Net increase reflecting FY 1998 recisions (-\$15,000), and Congressional adjustments (+\$18,514).
- 5. <u>CIVIL ENGINEERING SUPPORT (+\$5,566)</u> Net increase reflecting Congressional adjustments (+\$4,500), and internal realignments (+\$1,566).
- 6. <u>SUPPLY SUPPORT EQUIPMENT (+\$2,691)</u> Net increase reflecting Congressional adjustments (-\$1,279), internal realignments (-\$330), and adjustment for Automated Teller Machines at Sea (+\$4,300).
- 7. <u>PERSONNEL & COMMAND SUPPORT (+\$11,104)</u> Net increase reflecting Congressional adjustments (+\$8,000), economic assumptions (-\$932), and increases for high priority Navy programs including paperless acquisition (+\$4,036).
- 8. <u>SPARES & REPAIR PARTS (+\$3,679)</u> Net increase reflecting economic assumptions (-\$1,381), and internal realignments (+\$5,060).

Comparison of FY 1999 Financing as reflected in FY 1999 Budget with 1999 Financing as Shown in the FY 2000 Budget

(\$ In Thousands)

	Financing Per	Financing Per	Increase (+) or
	FY 1999 Budget	FY 2000 Budget	Decrease (-)
Program Requirements (Total)	\$3,979,737	\$4,050,915	+\$71,178
Program Requirements (Service Account)	(\$3,937,737)	(\$4,008,915)	(+71,178)
Program Requirements (Reimbursable)	(\$42,000)	(\$42,000)	0
Appropriation (Adjusted)	\$3,937,737	\$3,980,415	+\$42,678

Explanation of Changes in Financing

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

1. <u>Program Requirements</u>. There has been a net increase to the appropriation (adjusted) of +\$42,678. This net change is comprised of an increase in program requirements (+\$71,178), less rescissions of (-\$28,500).

Comparison of FY 1999 program requirements as reflected in the FY 1999 Budget with FY 1999 program requirements as shown in the FY 2000 Budget

Summary of Requirements (\$ in Thousands)

	Total Program	Total Program	
	Requirements per	Requirements per	Increase (+) or
	FY 1999 Budget	FY 2000 Budget	Decrease (-)
Ships Support Equipment	\$963,074	\$954,401	-\$8,673
Communications and Electronic Equip	1,530,802	1,629,901	+99,099
Aviation Support Equipment	245,663	243,679	-1,984
Ordnance Support Equipment	674,703	715,972	+41,269
Civil Engineering Support Equip	69,902	54,856	-15,046
Supply Support Equipment	108,905	89,537	-19,368
Personnel and Command Support Equip	65,660	74,063	+8,403
Spares and Repair Parts	279,028	246,506	-32,522
Total Fiscal Year Program	\$3,937,737	\$4,008,915	+\$90,546

Explanation by Budget Activity (\$ in Thousands)

- 1. Ships Support Equipment (-\$8,673) Net changes reflect FY 1998 Congressional adjustments (-\$8,673).
- 2. <u>Communications and Electronics Equipment (+\$99,099)</u> Net changes reflect FY 1998 Congressional reductions (-\$61,730), Congressional increases(+\$155,206), and DoN internal realignments (+\$5,623).

Comparison of FY 1999 program requirements as reflected in the FY 1999 Budget with FY 1999 program requirements as shown in the FY 2000 Budget

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

- 3. <u>Aviation Support Equipment (-\$1,984)</u> Changes reflect FY 1998 Congressional reductions (-\$9,551), Congressional increases(+\$18,000), and DoN offsets for higher priority programs (-\$6,465).
- 4. <u>Ordnance Support Equipment (+\$41,269)</u> Changes reflect FY 1998 Congressional reductions (-\$7,960), Congressional increases(+\$47,800), and DoN internal realignments (+\$1,429).
- 5. <u>Civil Engineering Support Equipment (-\$15,046)</u> Changes reflect FY 1998 Congressional reductions (-\$7,260), and DoN offsets for higher priority programs (-\$7,786) .
- 6. <u>Supply Support Equipment (-\$19,368)</u> Changes reflect FY 1998 Congressional reductions (-\$27,417), and DoN realignments for Automated Teller Machines at Sea (+\$8,049).
- 7. <u>Personnel and Command Support (+\$8,043)</u> Changes reflect Congressional reductions (-\$297), Congressional increases (+\$6,500), and DoN realignments for Paperless Acquisition (+\$2,200).
- 8. Spare and Repair Parts (-\$32,522) Changes reflect FY 1998 Congressional reductions (-\$32,522).

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BUDGET ITEM JUSTIFICATION SHEET										DATE:			
P-40										February 1999			
						P-1 ITEM NO	MENCLATUR	E/LINE ITEM #					
OTHER PROCURE	MENT, NA	AVY									LM2500 GAS	TURBINE (81	GA) (0110)
BA-1: Ships Supp	ort Equip	ment											
Program Element for Code B Items:						OTHER RELA	ATED PROGR	AM ELEMENT	rs				
	Prior	ID										То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)			\$5.3	\$8.7	\$8.3	\$8.4	\$8.5	\$8.7	\$8.9	\$9.0			\$65.8
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 developedas a result of the Component ImprovementProgram (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.

Estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.

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BUDGET IT	EM JUSTIFICATION SHEET		DATE:	
	P-40 CONTINUATION		February 1999	
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCL	ATURE/LINE ITEM #	
OTHER PROCUREMENT, NAVY	BA1: SHIPS SUPPORT EQUIPMENT	LM2500 GAS TURBIN	NE (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 99/00 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 98 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.

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BUDGET IT	EM JUSTIFICATION SHEET		DATE:
	P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	BA1: SHIPS SUPPORT EQUIPMENT		
		LM2500 G	AS 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 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 99 support period, the MTBR is projected to be 23,099 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 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 21. 12 units have been Procured in Prior years, and 2 are budgeted between FY 1998 and FY 2000. 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.

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BUDGET IT	EM JUSTIFICATION SHEET		DATE:
	P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	BA1: SHIPS SUPPORT EQUIPMENT		
		LM250	0 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 assembly (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.

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.

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	WEAPONS	SYSTE	M COST AN	IALYSIS				Weapon Sy	stem			DATE:		
	P-5			PRO	GRAM COS								Februar	y 1999
Other	PRIATION/BUDGET ACTIVITY Procurement, Navy SHIPS SUPPORT EQUIPMENT					ID Code		NOMENCLA LM2500 G			A) (0110)			
			TOTAL CO	ST IN THO	USANDS O	F DOLLAR	<u> </u>							
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000				
OODL		Jouc	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	А			3,657			4,269			4,109			
GA010	GAS GENERATOR	А			0	1	2,466	2,466	1	2,511	2,511			
GA012	ENGINEERING SYSTEM MOD	А			1,153			1,366			1,175			
GA014	SPECIAL SUPPORT EQUIPMENT	А			66			47			48			
GA830	PRODUCTION ENGINEERING				444			516			490			
	-													
	GRAND TOTAL				5,320			8,664			8,333			
				•		•							•	

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ther Procureme A 1: SHIPS SUI		-	IENT		LM2500 GAS 1	TURBINE (0110)			81	GA
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	E METHOD CONTRACTOR AWARD			DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABL
FY99										
(GA010)	1	2,466	NAVSEA		SS/OPTION	General Elec Cinn,Ohio	Mar-99	Mar-01	YES	
FY00										
(GA010)	1	2,511	NAVSEA		SS/OPTION	General Elec Cinn,Ohio	Jan-00	Jan-02	YES	
REMARKS										

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		BU	DGET ITEM	JUSTIFICA	TION SHE	ĒΤ				DATE:			
				P-40							February 1999		
APPROPRIATION/BUD OTHER PROCURE	_							P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	ŧ		
BA-1: Ships Suppo	ort Equip	ment							Allison 5	01-K Gas T	urbine (81G	F) (0120)	
Program Element for C	ode B Item	s:						OTHER RELATED PROGRAM ELEMENTS					
	Prior	ID										То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		Complete	Total
QUANTITY													
EQUIPMENT COST									_				
(In Millions)			\$6.4	\$6.7	\$8.4	\$8.3	\$9.0	\$9.1	\$9.2	\$9.5			\$66.6
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 and DD963 Class ships. The 501-K34 is an upgraded version used on the DDG 51 Class ships and is not interchangeable with the 501-K17. The stock rotating spares program provides an engine as a single assembly for the replacement 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 types of 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: Eight in FY 94 through FY 98
- 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.

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BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40 CONTINUATION	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	
BA-1: SHIPS SUPPORT EQUIPMENT	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 14,472 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 days 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. 14 units have been Procured in Prior years, and 2 units are included in the budget from FY 1999 - FY 2000.

- B. Modification Program (GF007)
- 1. Procurement of improved hardware for installation in the 501-K17 engine is essential to maintain, at a minimum, the 14,472 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. "Procurement of key Allison 501-K17 readiness drivers to improve the engine availability. TMA/TMI analyses of gas turbine performance data have targeted necessary upgrades to correct marine gas turbine (MGT) deficiencies, including effusion cooled liners, liquid fuel valves, improved starters, gearbox/bearing improvements and split outer combustion casings. Improves operational reliability of MGT engines. Targets high failure rate system components to improve MGT engine readiness. Remedies Fleet's TOP surface ship maintenance and reliability issue". 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

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BUDGET ITEM JUSTIFICATION SHEET	DATE:	
P-40 CONTINUATION	February 1999	
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #	
OTHER PROCUREMENT, NAVY		
BA-1: SHIPS SUPPORT EQUIPMENT	Allison 501-K Gas Turbine (81GF) (0120)	

(Special Support Equipment cont)

incorporate new modifications that will enhance the life expectancy of the engine. 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 required. Unit cost varies procuring Mod Kits.

- 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.

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	WEAPO	NS SYSTE	M COST AN	IALYSIS				Weapon Sy	ystem			DATE:		
		P-	5			1	1						February 1	1999
	PRIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM	NOMENCLA	ATURE/SUE	BHEAD				
	Procurement, Navy Ships Support Equipment							Allison 50)1-K Gas T	iurhine (8	1GF) (012	0)		
<u> </u>	отпро опрроте Ечатритете		TOTAL CO	ST IN THO	USANDS (DF DOLLAR	<u> </u>	Amount	71 IX Ous 1	urbire (o	7101) (012	<u>.</u>		
						1			1			T		
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000				
CODE		Code		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
			QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
GF001	501-K34		1	1,263	1,263	1	1,131	1,131	1	1,143	1,143			
GF007	MODIFICATION PROGRAM				4,132			5,314			6,933			
GF009	SPECIAL SUPPORT EQUIP (SSE)				157			164			202			
GF830	PRODUCTION ENGINEERING				881			100			100			
	GRAND TOTAL				6,433	1	1	6,709		1	8,378			1

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BUDGET PROCUE	REMEN	NT HISTO	RY AND PLAN	NING EXHIB	IT (P-5A)	Weapon System		A. DATE	F.I. 4000	
B. APPROPRIAT	ION/B	UDGET A	CTIVITY		C. P-1 ITEN	M NOMENCLATURE	<u> </u>		February 1999 SUBHEAD	
Other Procuremen										
BA-1: Ships Supp	ort E	quipment	<u> </u>	·	ļ.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	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 98										
GF001	1	1,263	NAVSEA		*SS/BASIC	Allison Indianapolis, IN	Aug-98	Feb-00	YES	
FY 99										
GF001	1	1,131	NAVSEA		*SS/OPTION	Allison Indianapolis, IN	May-99	Nov-01	YES	
FY 00										
GF001	1	1,143	NAVSEA		*SS/OPTION	Allison Indianapolis, IN	May-00	Nov-02	YES	
D DEMVDKS					1		1		1	

D. REMARKS

*Sole Source Justification: Original Equipment Manufacturer (OEM)

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		BU	DGET ITEM	JUSTIFICA	TION SHEE	T				DATE:			
				P-40							February 1999)	
APPROPRIATION/BUD	GET ACTIVI	TY						P-1 ITEM NOI	MENCLATURE	/LINE ITEM #			
OTHER PROCURE	MENT, NA	VY											
BA-1: Ships Suppo	ort Equipn	nent							STEAM	I PROPULSI	ON IMPRO\	/EMENT 81k	(Q/0157
Program Element for C	ode B Items	s:					OTHER RELATED PROGRAM ELEMENTS						
	Prior	ID										То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		Complete	Total
QUANTITY													
EQUIPMENT COST													
(In Millions)			\$0.5	\$0.6	0*	0*	0*	0*	0*	0*			\$1.1
SPARES COST													
(In Millions)													
	UDTIONIU	ICTICIO	ATION										

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.

*This program was consolidated with P-1 #24, Items Under \$5 Million, BLI:0981, in FY 2000.

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													_
		BUD	GET ITEM JUSTIFICA	TION SHEE	T				DATE:				
			P-40						F	ebruary 199	99		
APPROPRIATION/BUD	GET ACTIV	ITY					P-1 ITEM NO	MENCLATURI	LINE ITEM #				
OTHER PROCURE	MENT, NA	VY											
BA-1: Ships Suppo	ort Equipn	nent						OTHER PR	OPULSION E	QUIPMENT (8	1GG) (0180)		
Program Element for C	ode B Item	s:					OTHER RELA	ATED PROGR	AM ELEMENT	S			
	Prior	ID									То		
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total	-
OLIANTITY													
QUANTITY EQUIPMENT COST		-											
			044.0	640.4	0.*	0.*	0.4	0.*	0.*	0.*		CO4 4	
(In Millions)			\$11.0	\$10.1	0*	0*	0*	0*	0*	0*		\$21.1	
SPARES COST													
(In Millions)													
													1

PROGRAM DESCRIPTION/JUSTIFICATION:

OTHER PROPULSION EQUIPMENT (81GG):

Other Propulsion Equipment includes: Solar Marine Gas Turbine (MGT) Modification Program (GG024) 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/MHC Diesel Engine Improvement Program (GG052) to improve reliability and maintainability of installed MCM and MHC diesel engines; Integrated Ship Control System (ISCS) (GG053) 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.

*This program was consolidated with P-1 #22, Minesweeping Equipment, BLI:0975, in FY 2000.

P-1 SHOPPING LIST

ITEM NO. 4 PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED

UNCLASSIFIED

		BUI	DGET ITEM	JUSTIFICA	TION SHE	ET				DATE:		
				P-40							Feb-99	
APPROPRIATION/BUD	GET ACTIV	ΊΤΥ						P-1 ITEM NO	MENCLATUR	E/LINE ITEM #		
OTHER PROCURE	MENT, N	AVY										
BA-1: Ships Supp	ort Equip	ment							OTHER	R GENERAT	ORS (81G6) (0260)	
Program Element for C	Code B Item	s:						OTHER RELA	ATED PROGR	M ELEMENTS	;	
	Prior	ID									То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY												0
EQUIPMENT COST												
(In Millions)			\$1.9	\$12.5	0*	0*	0*	0*	0*	0*		\$14.4
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.

*This program was consolidated with P-1 #24, Items Under \$5 Million, BLI:0981, in FY 2000.

P-1 SHOPPING LIST

ITEM NO. 5 PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED

		BUI	DGET ITEM	JUSTIFICA	DATE:									
	JREMENT, NAVY upport Equipment for Code B Items: Prior ID Years Code FY 1998 FY 1999 FY 2000									FEBRUARY 1999				
APPROPRIATION/BUD	GET ACTIV	ITY						P-1 ITEM NOMENCLATURE/LINE ITEM #						
OTHER PROCURE	MENT, NA	VY							OTHER PUM	PS (81GP) (03	20)			
BA-1: Ships Supp	ort Equipi	ment												
Program Element for Code B Items:								OTHER RELATED PROGRM ELEMENTS						
	Prior	ID									То			
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total		
QUANTITY												0		
EQUIPMENT COST														
(In Millions)			\$0.4	\$1.0	0*	0*	0*	0*	0*	0*		\$1.4		
SPARES COST														
(In Millions)												0		

PROGRAM DESCRIPTION/JUSTIFICATION:

OTHER PUMPS -

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

*This program was consolidated with P-1 #24, Items Under \$5 Million, BLI: 0891, in FY 2000.

P-1 SHOPPING LIST PAGE NO. 1 CLASSIFICATION:

ITEM NO. 6 PAGE NO. 1 UNCLASSIFIED

UNCLASSIFIED

	BU	DGET ITEM	I JUSTIFICA	DATE:										
BA-1: SHIPS SUPPORT EQUIPMENT Program Element for Code B Items: N/A Prior ID Years Code FY 1998 FY 1999 FY 2000 FY 2 QUANTITY EQUIPMENT COST (In Millions) A \$0.0 \$7.9 \$0.0 \$0							February 1999							
APPROPRIATION/BUD	GET ACTIV	'ITY						P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	!			
OTHER PROCUREMENT, NAVY														
BA-1: SHIPS SUPPORT EQUIPMENT							SUBMARINE PROPELLERS BLI: 051000 SBHD: 81GQ							
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS						
			N/A					N/A						
	Prior	ID										То		
	Years	Code		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total	
QUANTITY													0	
EQUIPMENT COST														
(In Millions)		Α		\$0.0	\$7.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	7.9	
SPARES COST														
(In Millions)													0	

PROGRAM DESCRIPTION/JUSTIFICATION:

GQ012 - SSN 21 PROPULSOR - Quantity represents one aft fixed assembly, one rotor, and one additional rotor assembly. Based on experiencegained 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.

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 7

PAGE NO. 1

UNCLASSIFIED CLASSIFICATION:

	WEAPONS		Weapon System				DATE:							
		P	-5			lin o i							February	1999
	PRIATION/BUDGET ACTIVITY Procurement, Navy					ID Code	P-1 IIEM	NOMENCLA	ATURE/SUL	BHEAD				
	SHIPS SUPPORT EQUIPMENT					Α	SUB	MARINE I	PROPELI	LERS BL	I: 051000	SBHD: 8	31 <i>G</i> Q	
			TOTAL CO	OST IN THO	USANDS C	F DOLLAR	₹:							
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000		FY 2001		
OODL		Jour	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	Submarines (N87) SSN 21 Propulsor Propulsor Rotating Assembly	А			0	1	7,904	7,904			0			0
TOTAL					0			7,904			0			0
DD FORM	M 2446, JUN 86			P-1 SHOPE	PING LIST							CLASSIFIC	CATION:	

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUF	REME	NT HISTO	ORY AND PLAN	INING EXHIB	BIT (P-5A)	Weapon System	A. DATE				
					· ,	. ,		February 1999			
B. APPROPRIAT	ION/B	UDGET A	ACTIVITY		C. P-1 ITE	M NOMENCLATURE		SUBHEAD			
Other Procurement, Navy											
BA-1: SHIPS SUP	PORT	EQUIPN	MENT			SUBMARINE PROPEL		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 (99) GQ012 Propulsor Rotating Assy	1	7,904	NAVSEA	N/A	WR*	NFPC, PHILADELPHIA PA	10/98	4/01	YES		
D DEMARKS		1	1	1	1	1	1	1	1		

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

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

Exhibit P-20, Requirements Study	Approp Co	de/BA		Subhead 81GQ		Date: February 1999			
P-1 Line Item Nomenclature	TIOTO BITT	Admin Lea	dtime (after		months	Prod Leadtime: 31 months			
Submarine Propellers			a (a	.,		Trea Edacimie. Or menine			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
Propulsor Rotating Assembly	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary QTY	0	1	0						
Unit Cost	0	7904	0						
Total Cost	0	7904	0						
Asset Dynamics									
Beginning Asset Position	0	0	1						
Deliveries from all prior year funding		1							
Deliveries from FY 1999 funding									
Deliveries from FY 2000 funding									
Deliveries from FY 2001 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						
Inventory Objective/Current Authorized Allowance									
Propulsor Rotating Assembly: 2									
La contract of the state of the	0.11	T	D:						
Inventory Objective Actual Training Expenditures	Other than	ı raınıng I	Disposals]]]					
DV there	Usage		(Vehicles/C	Juier)					
PY thru	PY thru		PY thru						
:	D)/ 4:		:						
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

Page No. 4 Exhibit P-20 Requirements Study

Exhibit P-20, Requirements Study	Approp Co	de/BA		Subhead 81GQ		Date: February 1999			
P-1 Line Item Nomenclature	TIOTO DATE	Admin Lea	dtime (after		months	Prod Leadtime: 36 months			
Submarine Propellers		, tarriii Loa	atimo (anoi	001 17. 01		Trod Eddaline. Go months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
Propulsor Aft Fixed Assembly	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary QTY	0	0	0						
Unit Cost	0	0	0						
Total Cost	0	0	0						
Asset Dynamics									
Beginning Asset Position	0	0	0						
Deliveries from all prior year funding			1						
Deliveries from FY 1999 funding									
Deliveries from FY 2000 funding									
Deliveries from FY 2001 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						
Inventory Objective/Current Authorized Allowance									
Propulsor Aft Fixed Assembly: 1									
Inventory Objective Actual Training Expenditures	Other than	Training	Dianagala						
Inventory Objective Actual Training Expenditures	Usage		Disposals (Vehicles/0) Other)					
PY thru	PY thru		PY thru						
1 1 1110	i i iiiu								
PY-1:	PY-1:		PY-1:						
PY-2:	PY-2:		PY-2:					1	
PY-3:	PY-3:		PY-3:						
TOTAL:								1	
REMARKS:	1	1	ı	1	1	1	1	1	

P-1 Shopping List Item No 7

Page No. 5 Exhibit P-20 Requirements Study

	В	UDGET	ITEM JUS	TIFICATION	SHEET		DATE:						
			P-4	40						February 1999	•		
APPROPRIATION/BU	DGET ACTIV	ITY					P-1 ITEM NOMENCLATURE/LINE ITEM #						
OTHER PROCURI	EMENT, NA	VY					OtherPropell	ers and Shafts	s (0540)				
BA-1: Ships Supp	ort Equipm	nent											
Program Element for Code B Items:							OTHER RELATED PROGRAM ELEMENTS						
	N/A												
	Prior	ID									То		
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total	
QUANTITY			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	
EQUIPMENT COST													
(In Millions)			\$2.1	\$1.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3.2	
SPARES COST													
(In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

Starting with the FY 2000 budget, this program was consolidated into the Items less than \$5 million - Line Item 24.

P-1 SHOPPING LIST ITEM NO. 8 PAGE NO. 1 CLASSIFICATION:

UNCLASSIFIED

		BUI	OGET ITEM	JUSTIFICA	TION SHE	ET				DATE:			
				P-40							February 1999	9	
APPROPRIATION/BUD OTHER PROCURE								P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	1		
OPN/BA-1: SHIPS	SUPPOR	T EQUI	IPMENT						OTHER N	AVIGATION	N EQUIPME	NT/067000	
Program Element for C	ode B Item	s:						OTHER RELA	ATED PROGR	AM ELEMENT	·s		
	Prior	ID										То	
	Years	Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY													0
EQUIPMENT COST													
(In Millions)		Α		\$40.8	\$58.9	\$67.5	\$43.8	\$58.2	\$31.0	\$18.8	\$18.7		\$294.0
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 1998 and outyear maintenance component funds satisfy depot and organizational maintenance requirements of existing AN/WSN-2 and AN/WSN-5 navigation systems. Specifically, these funds cover the procurement of major components such as Inertial Measuring Units (IMUs), gyroscopes, accelerometers, and depot test equipment. These components are essential to the operation and performance of AN/WSN-2/5 inertial navigation systems. Procurements associated with these components ensure the operational availability and performance of the navigation systems to support ship and combat system mission requirements. Units procured support the pipeline requirements of AN/WSN-2/5 inertial navigation systems given the Fleet population and usage rates. Procurement of maintenance components for AN/WSN-2/5 will continue during transition to AN/WSN-7 Ring Laser Gyro Navigator (replacement for AN/WSN-5 only). Depot test equipment funds support checkout and testing of these major components in a system configuration to verify performance prior to being dubbed "ready for issue".

GW013: FY 1998 and outyear funds for Navigation Field Change Kits procure reliability and maintainability improvements and corrections for various conventional navigation equipment including the 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) components. These improvements are required to keep Fleet-installed equipment operating to a basic level.

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 9 PAGE NO. 1

DD Form 2454, JUN 86

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY		
OPN/BA-1: SHIPS SUPPORT EQUIPMENT	OTHER NAV	IGATION EQUIPMENT/067000

GW029: FY 1998 and out funds are required to support procurement and implementation of Engineering Change Proposals (ECPs)/Field Change (FC) Kits, alterations and update of associated technical documentation which provide reliability and maintainability improvements, corrections and upgrades for various Inertial Navigation Systems (AN/WSN-2, AN/WSN-3, AN/WSN-5, AN/WSN-7) and Aircraft Inertial Alignment Systems (AIAS and CVNS). Additionally, funds support procurement of hardware and software changes to the navigation suite required to integrate with Ring Laser Gyro Navigator (AN/WSN-7). Current product improvements include:

- Field Change #1 to the AN/WSN-2 provides product improvement changes and additions to the basic system equipment which will improve retainability, maintainability and sustainability of the hardware.
- 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.
- Field Change #8 to the AN/WSN-5 incorporates modifications to the AN/WSN-5 Low Level Serial operational program to correct interface and program deficiencies experienced in the Fleet and identified during OTL-148 investigation.
- Field Change #9 to the AN/WSN-5 incorporates modifications to the AN/WSN-5 GPS operational program to improve the navigation digital data outputs correcting problems and providing enhancements to TOMAHAWK missile alignments.
- CA-64(XN-1)/U shipalt replaces 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 replaces the Input/Output console on RLGN backfitted ships thereby improving interface to the AN/WSN-7.
- CVNS Operational Software upgrade corrects outstanding PPRs and testing including correction to SSW-1D Damping Mode Indication.

Additionally, AN/WSN-7 operational improvement field change initiatives include AN/WSN-2 replacement, NAVSSI IDS modification; Lever Arm definition; Voyage Management System (VMS)/CDU integration; BFTT integration; vertical deflection compensation; CDU enhancements; and ATM implementation.

GW031: FY 1998 and 1999 Dual Miniature Navigation System (DMINS) ECP/documentation funds procure DMINS field changes, replace obsolete automated test equipment/computer at the DMINS Repair Depot, procure Inertial Measuring Unit (IMU) reliability improvements and update of DMINS technical documentation.

P-1 SHOPPING LIST

ITEM NO. 9 PAGE NO. 2

CLASSIFICATION:

UNCLASSIFIED

DD Form 2454, JUN 86

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLA	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY		
OPN/BA-1: SHIPS SUPPORT EQUIPMENT	OTHER NAV	IGATION EQUIPMENT/067000

GW035: FY 1998 and out year Ring Laser Gyro Navigator (RLGN) - AN/WSN-7 funds support the acquisition and implementation of Ring Laser Gyro (RLG) technology for Fleet shipboard use. Congress mandated competitive procurement of a single RLGN system for surface and sub-surface 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, lower 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-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 153 shipsets (2 systems per shipset) for backfit on 49 submarines (AN/WSN-3), 88 surface combatants (AN/WSN-5), 9 carriers (CVNS), 4 flagships (2 AGFs and 2 LCCs) and 3 LBTFs. Procurement began in FY95, using FY95 and prior AN/WSN-2/5 Field Chan funds (GW029) and installation began in FY97 on board CG 47 Class ships. SPAWAR, Norfolk will coordinate the AIT teams for surface ships. Shipsets will be installed as shown on the P-3A.

GW830: FY 1998 and outyear funds are required for AN/WSN-2/5/7 and Aircraft Carrier Navigation System (CVNS) production engineering efforts which provide the necessary management/technical support for hardware/software 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 1998 and outyear Installation funding identified supports installation of OL-405 I/O Consoles (Shipalt 370) on board CG 47 Class ships and installation of RLGN system on board surface combatants (CG 47, DDG 51 and DD 963 Classes), submarine platforms (SSN 688) and aircraft carriers.

P-1 SHOPPING LIST

ITEM NO. 9

PAGE NO. 3

CLASSIFICATION:

UNCLASSIFIED

DD Form 2454, JUN 86

	WEAPONS	SYSTE	M COST AN	IALYSIS				Weapon Sy	stem			DATE:		
		P-	5				T						February	1999
	OPRIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM	NOMENCLA	TURE/SUE	BHEAD				
	Procurement, Navy 3A-1: SHIPS SUPPORT EQUIPM	FNT						OTHER NA	AVIGATIO	N FOLID	MENT/067	000		
OF N/L		LIVI	TOTAL CO	ST IN THO	USANDS C	F DOLLAR		OTHER IV	AVIGATIO	IN EQUIF	VILIN 17007	000		
COST	ELEMENT OF COST	ID		FY 1998			FY 1999			FY 2000			FY 2001	
CODE		Code		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
			QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
GW006 GW013 GW029 GW031 GW035 GW830	SUBMARINES AN/WSN-2 MAINTENANCE COMPONENTS NORFOLK NAVIGATION FC KITS AN/WSN-2/7 ECP/FC KITS DMINS RING LASER GYRO NAVIGATOR (AN/WSN-2/7 PROCUREMENT SUB-TOTAL INSTALLATION OF EQUIPMENT (FMP) INSTALLATION SUB-TOTAL TOTAL - Submarines		2	865	133 0 5,950 67 1,730 365 8,245 2,263 2,263	7	897	166 1,230 4,100 60 6,279 431 12,266 0	21	912	171 245 3,450 0 19,152 671 23,689 1,206 1,206			
GW006 GW013 GW014 GW029 GW035 GW830	SURFACE SHIPS AN/WSN-2/5 MAINTENANCE COMPONENT NORFOLK NAVIGATION FC KITS AN/WSN-5 I/O CONSOLE AN/WSN-2/5/7 ECP/FC KITS RING LASER GYRO NAVIGATOR (AN/WSN-2/5/7 PROCUREMENT SUB-TOTAL INSTALLATION OF EQUIPMENT (FMP) INSTALLATION SUB-TOTAL TOTAL - Surface Ships	А	2 14	73 908.6	2,251 265 146 5,154	19	949	4,874 3,266 0 8,985	20	966	3,623 274 0 6,742 19,320 742 30,701 6,659 6,659 37,360			
	MOMO HINIO			D. A. CLIODE								CL ASSIEIG		

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 9 PAGE NO. 4

	WEAPONS	SYSTE	M COST AN	IALYSIS				Weapon Sy	/stem			DATE:		
		P.	-5										February	1999
	OPRIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM	NOMENCLA	ATURE/SUE	BHEAD				
	Procurement, Navy													
OPN/B	A-1: SHIPS SUPPORT EQUIPM	ENT						OTHER N	<u> AVIGATIO</u>	N EQUIP	MENT/067	000		
			TOTAL CO	ST IN THO	USANDS C	F DOLLAR	₹!							
COST	ELEMENT OF COST	ID		FY 1998			FY 1999			FY 2000			FY 2001	
CODE		Code												
				UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
			QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
	AIRCRAFT CARRIERS				2 207			2.457			4 740			
	CVNS/WSN-7 ECP/FC KITS				3,387			3,457			1,748			
	DMINS ECP/DOCUMENTATION		4	004	124	0	004	60	0	0.40	0			
	RING LASER GYRO NAVIGATOR (AN/WSN		4	894	3,576	2	931	1,862	2	948	1,896			
GVV830	PROD ENGINEERING FOR CVNS/AN/WSN				368	4		338			111			
	PROCUREMENT SUB-TOTAL				7,455			5,717			3,755			
GW5IN	INSTALLATION OF EQUIPMENT (FMP)				0			385			1,506			
	INSTALLATION SUB-TOTAL				0			385			1,506			
	TOTAL - Aircraft Carriers				7,455			6,102			5,261			
								·						
	TOTAL - PROCUREMENT				37,120			53,988			58,145			
	TOTAL - INSTALLATION				3,645			4,952			9,371			
	GRAND TOTAL				40,765			58,940			67,516			
				I						Ì				

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

BUDGET PROCU	JREME	NT HIST	ORY AND PLAN	NING EXHIB	IT (P-5A)	Weapon System		A. DATE	=	
					` ,	. ,			Februa	ry 1999
B. APPROPRIA	TION/B	UDGET	ACTIVITY		C. P-1 ITE	M NOMENCLATURI			SUBHEAD	
Other Procureme	ent. Na	vv								
OPN/BA-1: SHIP	•	•	OHIDMENT		OTHER NAVI	GATION EQUIPMENT/00	27000		81GW	
OFINDA-I. SHIF	3 301	TORTE	QUIFIVILINI			JATION EQUIPMENT/00	7000	DATE OF		IF NO
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE		SPECS AVAILABLE NOW	WHEN AVAILABLE
1998										
7 <i>996</i> GW014 - OL-405 GW035 - RLGN	2	73	SPAWAR, Norfolk VA		WR	SPAWAR, Norfolk VA	02/98	09/98	YES	
Submarine	2	865.0	NAVSEA, Arlington VA	12/97	FFP	Sperry, Charlottesville VA	04/98	10/99	YES	
Surface	14	908.6	NAVSEA, Arlington VA	12/97	FFP	Sperry, Charlottesville VA	04/98	10/99	YES	
Carrier	4	894.0	NAVSEA, Arlington VA	12/97	FFP	Sperry, Charlottesville VA	04/98	10/99	YES	
1999 GW035 - RLGN										
Submarine	7	897.0	NAVSEA, Arlington VA	12/98	FFP	Sperry, Charlottesville VA	04/99	10/00	YES	
Surface	19	949.0	NAVSEA, Arlington VA	12/98	FFP	Sperry, Charlottesville VA	04/99	10/00	YES	
Carrier	2	931.0	NAVSEA, Arlington VA	12/98	FFP	Sperry, Charlottesville VA	04/99	10/00	YES	
2000 GW035 - RLGN										
Submarine	21	912.0	NAVSEA, Arlington VA	12/99	FFP	Sperry, Charlottesville VA	04/00	10/01	YES	
Surface	20	966	NAVSEA, Arlington VA	12/99	FFP	Sperry, Charlottesville VA	04/00	10/01	YES	
Carrier	2	948.0	NAVSEA, Arlington VA	12/99	FFP	Sperry, Charlottesville VA	04/00	10/01	YES	
D DEMVDKS										

D. REMARKS

GW035 - Unit costs between Surface, Submarine and Carrier configurations vary due to additional combat system interfaces required on surface ships and additional circuit cards required for aircraft alignment (Carrier system).

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 9 PAGE NO. 6

CLASSIFICATION: UNCLASSIFIE	ED .			
РЗА	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 1997			<u>′ 1998</u>		<u>′ 1999</u>		Y 2000		/ <u>2001</u>		2002		<u>/ 2003</u>		2004		<u>′ 2005</u>		2006	0.77	TC	_	OTAL
FINANCIAL PLAN (IN MILLIONS)	QTY	<u> </u>	QTY	\$	QTY	\$	QTY	\$	QTY	<u> </u>	QTY	<u>\$</u>	QTY	\$	QTY	\$	QIY	\$	QIY	\$	QTY	\$ T	QTY	\$
RDT&E																							0	0.000
<u>PROCUREMENT</u>																								
INSTALLATION KITS																							0	0.000
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT	9	0.622	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	8	0.179	1	0.027	1	0.024	1	0.025																0.255
TOTAL PROCUREMENT	17	0.801	3	0.173	1	0.024	1	0.025	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	11	1.023

P-1 SHOPPING LIST

CLASSIFICATION:

P3A (Continued)	JNCLASSIF	יובט				INDIVIDUA	L MOD	IFICATION	(Conti	nued)														
MODELS OF SYSTE	MS AFFEC	TED: _	N/WSN	I- 5				_ M	ODIFIC	ATION TIT	LE:	OL-405 IN	NPUT/O	UTPUT CO	NSOLE						_			
INSTALLATION INFO	ORMATION	:																						
METHOD OF IMPLEI		N: Indus																						
ADMINISTRATIVE LE			2 Mo					PRODUC	TION LI	EADTIME:	-		9 Mor		.									
CONTRACT DATES:		FY 1998:	02/					FY 1999:							/ 2000:				_					
DELIVERY DATE:		FY 1998:	09/	98				FY 1999:		-				F	/ 2000:	-			-					
										(\$ in N							_		_				1	
Cost:		Prior Years	Qty	FY 1998 \$	Qty	FY 1999 \$	Qty	FY 2000 \$	Qty	FY 2001 \$	Qty	FY 2002 \$	Qty	FY 2003 \$	Qty	Y 2004 \$	Qty	['] 2005 \$	Qty	Y 2006 \$	Qty	mplete \$	Qty	Total \$
PRIOR YEARS		8 0.17		0.027	Qiy	J J	Qty	Ψ	Qty	, p	Qiy	Ψ	Qty	Ψ	Qty	Φ	Qty	Ф	Qty	Ф	Qty	Ψ		0.206
FY 1998 EQUIPMEN	NT				1	0.024	1	0.025															2	0.049
FY 1999 EQUIPMEN	NT																						0	0.000
FY 2000 EQUIPMEN	NT																						0	0.000
FY 2001 EQUIPMEN	NT																						0	0.000
FY 2002 EQUIPMEN	NT																						0	0.000
FY 2003 EQUIPMEN	NT																						0	0.000
FY 2004 EQUIPMEN	NT																						0	0.000
FY 2005 EQUIPMEN	NT																						0	0.000
FY 2006 EQUIPMEN	NT																						0	0.000
TO COMPLETE																							0	0.000
																							11	
INSTALLATION S	CHEDULF.	SHIP	AVAIL A	BILITIES																				
	FY 1998	FY 19		1	FY 2000		F۱	<u> 2001</u>		FY 2002		F	Y 2003		FY:	2004		FY 2005	i	TC				
	& Prior		3 4		2 3		1 2	3 4			3 4		2 3	4 '		3 4		2 3			TOT			
In Out	9		0 0		0 0 0 1	0 0	0 0	0 0	0 0		0 0	_	0 0	0 0		0 0		0 0	0	-	11			

PAGE 8

P-3A
CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION:

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

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 DEVEL	OPMENT N	MILESTO	NES:																					
	FY 1997	& Prior	FΥ	′ 1998	FY	1999	FΥ	2000	FY	2001	FY	2002	FΥ	2003	F١	Y 2004	F١	2005	FY	2006		TC	Т	OTAL
	QTY	\$	QTY			\$	QTY		QTY		QTY		QTY			\$	QTY			\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.000
<u>PROCUREMENT</u>																								
INSTALLATION KITS																							0	0.000
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT	27*	11.248	20	18.026	28*	26.172	43	40.368													0	0.000	118	95.814
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	ships	ets to be	usec	d at the l	 LBTF n	ot requiri	ng insta	all dolla	ars. FY	94/95 a	ssets	were pro	cured	with AN	WSN-	2/5 Field	Chan	ge Doll	ars (G\	N029).		0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST	4	1.132	8	3.645	13	4952.0	20	9.371																19.100
TOTAL PROCUREMENT	31	12.380	28	21.671	41	31.124	63	49.739	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	118	114.914

P-1 SHOPPING LIST CLASSIFICATION:

CLASSIFICATION: UNCLAS	SIFIED)																						
P3A (Continued)					ı	MDIVIDU	JAL MODII	FICATIO	N (Con	tinued)														
MODELS OF SYSTEMS AFFE	ECTED	: <u>AN</u>	/WSN-	-3, AN/W	SN-5 a	nd CVNS	S	МС	DIFICA	TION TI	TLE:	RLGN										_		
INSTALLATION INFORMATION METHOD OF IMPLEMENTAT		AIT					_																	
ADMINISTRATIVE LEADTIME			6 Mon	iths			_ PR	ODUCT	ION LEA	ADTIME	:		18 Mor	nths										
CONTRACT DATES:		998:	04/9					1999:	_	04/99					FY 20		04/0							
DELIVERY DATE:	FY 1	998:	10/9	9			FY	1999:	_	10/00					FY 20	00:	10/0	01		_				
01	Di	- \/		V 4000		(1000		000			(\$	n Millions		EV 0000	. 1	F)/ 00	24		V 0005		E)/ 0000	T. O		T-1-1
Cost:	Qty	or Years \$	Qty	Y 1998 \$	Qty	Y 1999 \$	Qty PY 2	\$	Qty	Y 2001 \$	Qty	FY 2002	Qty	FY 2003 \$		FY 20	\$	Qty	Y 2005 \$	Qty	FY 2006 \$	To Compl Qty	\$ Qty	Total / \$
PRIOR YEARS	Q(y		8					φ	Qty	φ	Qty	Φ	Qty	Ф	G	rty	φ	Qty	φ	Qiy	Φ	Qty	2	
FY 1998 EQUIPMENT							20 9.3	371															2	
FY 1999 EQUIPMENT																								0.000
FY 2000 EQUIPMENT																								0.000
FY 2001 EQUIPMENT																								0.000
FY 2002 EQUIPMENT																								0.000
FY 2003 EQUIPMENT																								0.000
FY 2004 EQUIPMENT					\perp																			0.000
FY 2005 EQUIPMENT					1																	0 0.	000	0.000
FY 2006 EQUIPMENT					-																	0 0.	000	0.000
TO COMPLETE																						0 0.	000	0.000
																							4	5
INSTALLATION SCHEDUL	.E:	SHIP AV	/AILAE	3 <u>ILITIES</u>																				
FY 1998 & Prior	1	FY 1999 2 3	4	1 2	2000			3 4		FY 20 2	3 4	1	FY 2003 2 3	4	1	FY 2004 2 3	4	1	FY 2005 2	<u>3</u> 4	TC	TOTA	L	
In 12 Out 12	3 1	5 2 3 3		6 9 7 3		3 6 3 4	7 9			10 3	4 5 7 11	17 21	0 2 2 2	2 19	14 0	0 0 0 0	0 14	0		0 0	0	150 150		
																					D.	-3 A		

		I	BUDGET ITEM	M JUSTIFICAT	ION SHEET					DATE:			
				P-40						February 1999			
APPROPRIATION/BUD	GET ACTIV	ITY						P-1 ITEM NO	MENCLATURE/	LINE ITEM#			
OTHER PROCUREME	NT, NAVY								UNDERWAY R	EPLENISHMEN	NT EQUIPMENT	Г (81GO) 0740)
BA-1: Ships Support E	quipment												
Program Element for Co	ode B Items:					OTHER RELA	ATED PROGRA	M ELEMENTS					
	Prior	ID										То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		Complete	Total
QUANTITY													
EQUIPMENT COST													
(In Millions)			\$6.6	\$7.4	\$15.6	\$11.0	\$8.3	\$7.6	\$6.4	\$6.5			\$69.4
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, unrealiable Stream System with modern, reliable Navy Standard Stream Systems on AOE 1 Class. ShipAlts AOE-761K, 762K and 764K apply.

T-AE STREAM MODERNIZATION (G0044) - This item replaces 25 year old, unreliable Stream systems with modern, reliable Navy Standard Stream Systems on T-AE 26 Class. This work will be performed by AIT Team.

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.

P-1 SHOPPING LIST CLASSIFICATION:
DD Form 2454, JUN 86 ITEM NO. 10 PAGE NO. 1
UNCLASSIFIED

CLASSI		ASSIFIED										1		
	WEAPON:		I COST AN	ALYSIS				Weapon Sy	rstem			DATE:		
ΔPPR(OPRIATION/BUDGET ACTIVITY	P-:	5			ID Code	P-1 ITEM	NOMENCI /	ATURE/SUB	HEAD		F	ebruary 19	99
	rocurement, Navy					ID Code					OUIPMEN	Γ (81G0/074	0)	
	HIPS SUPPORT EQUIPMENT							ONDERWA		01	I QUII III III	. (0100/071	0)	
			TOTAL CO	ST IN THO	USANDS C	F DOLLAR	S							
				=>/		1			ı	=1/2222				
COST CODE	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000				
OODL		Oodc		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
			QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
GO011	STREAM EQUIPMENT MODS	Α	31	39,032	1,210	25	40,400	1,010	74	40,540	3,000			
GO043	AOE STREAM MODERNIZATION	Α	2	1520.5	3,041	1	1,400	1,400	1	1,400	1,400			
GO044	T-AE STREAM MODERNIZATION	Α												
	PRODUCTION ENGINEERING STREAM EQUPMENT MODS	A A			768	12	5,750	400 69			603			
	TOTAL EQUIPMENT				5,019		3,133	2,879			5,003			
	TOTAL EQUIT MENT				0,010			2,070			0,000			
G05IN	INSTALLATION				1,571			4,512			10,635			

DD FORM 2446, JUN 86
P-1 SHOPPING LIST
CLASSIFICATION:
ITEM NO. 10 PAGE NO. 2 UNCLASSIFIED

7,391

15,638

6,590

GRAND TOTAL

BUDGET PROCUREMEN		TORY AND	PLANNING EXHIBIT (P-	5A)		Weapon System		A. DATE		
					1 -				February 1999	
B. APPROPRIATION/BU	-	ACTIVITY	,			NOMENCLATURE	EQLUDIA:		SUBHEAD	00
Other Procurement, Navy BA 1: SHIPS SUPPORT		MENT				UNDERWAY REPLENISHMENT	EQUIPME	IN 1/0/40	81	J 0
BA 1. OHII O OOI I OKT	LQUII	IVILIAI			CONTRACT			DATE OF	SPECS	IF NO
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	WHEN
FISCAL YEAR		COST (000)	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FY98										
G0011	31	39,032	NAVSEA		WR	NSWC PORT HUENEME, CA	DEC 97	SEP 98	YES	
GO043	2	1,520.5	PORT HUENEME, CA		RCP	SYSTEMS CONTROL, MI	FEB 98	AUG 99	YES	
FY 99										
GO011	12	5,750	NAVSEA		WR	NSWC PORT HUENEME, CA	DEC 98	SEP 99	YES	
GO011	25	40,400	PORT HUENEME, CA		RCP	UNKNOWN	DEC 98	SEP 99	YES	
GO043	1	1,400	NAVSEA		WR	NSWC PORT HUENEME, CA	JAN 99	JUL 00	YES	
FY 00										
GOO11	74	40,540	PORT HUENEME, CA		RCP/OPT	UNKNOWN	DEC 99	SEP 00	YES	
GOO43	1	1,400	NAVSEA		WR	NSWC PORT HUENEME, CA	JAN 00	JUL 01	YES	
D REMARKS										

D. REMARKS

CLASSIFICATION: UNCLASSIFIED																					Fe	bruary 19	99
P3A		INDIVID																					
MODELS OF SYSTEM AFFECTED:	STREAM UN	NREP MO	DS EQU	IPMENT	(G0011)	TYPE N	MODIFICAT	ΓΙΟN:					_	MODIF	ICATION	TITLE:	UNDER	WAY RE	PLENIS	HMENT	EQUIPM	ENT
DESCRIPTION/JUSTIFICATION:																							
Various Stream Equipment Mods including I/O	g limit switches	, NATO K	(its, and	Hauling '	Winch Fr	iction Dr	ums.																
DEVELOPMENT STATUS/MAJOR DEVELO	PMENT MILE	STONES:	:		N/A		FINANC	CIAL PLAN	: (TOA \$ I	IN MILLI	ONS)			=									
	FY 1996 & P QTY	rior \$	FY QTY	1997 \$	FY QTY	1998 \$	FY QTY	′ 1999 \$	FY 2 QTY	2000 \$	FY 20 QTY	001 \$	FY QTY	2002	FY 2003 QTY \$	FY : QTY	2004 \$	FY 2 QTY	2005 \$	T QTY	C \$	QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS)																							*
RDT&E																							
PROCUREMENT																							
INSTALLATION KITS																						ļ	
INSTALLATION KITS NONRECURRING																							
EQUIPMENT	42	1.9	9	0.3	31	1.2	37	1.1	74	3.0	19	0.4	16	0.4								228	8.3
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER																							
OTHER																							
OTHER																							
INTERIM CONTRACTOR SUPPORT																							
INSTALL COST		1.8		3.8		0.7		2.9		1.4		4.1											14.7
TOTAL PROCUREMENT	42	3.7	9	4.1	31	1.9	37	4.0	74	4.4	19	4.5	16	0.4						01.400	FIO 4 T: 0	228	23.0
								P-1	SHOPPI	NG LIST										CLASSI	FICATIO	/IN:	

PAGE NO 4 ITEM NO. 10

228 23.0

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLAS	SIFIED																					F	ebruary 1999
P3A (Continued)				INDI	VIDUA	L MODI	IFICATIO	N (Cont	inued)														
MODELS OF SYSTEMS AFFE	ECTED:	STREAM UNR	EP MOD E	QUIPMENT	(G001	11)	МС	DIFICA	TION TITLE	:	UNDERV	VAY RE	PLENISHMEN	IT EQU	JIPMENT					_			
INSTALLATION INFORMATIO	ON:																						
METHOD OF IMPLEMENTAT		AIT				•																	
ADMINISTRATIVE LEADTIME	<u> </u>	Months				F	PRODUC	TION LE	ADTIME:	_		9 Mon		_									
CONTRACT DATES:	FY 1998:	Dec-97					FY 1999:	-	Dec-98				Dec-99		FY 2001:	Dec-00							
DELIVERY DATE:	FY 1998:	Sep-98	3			F	FY 1999:	-	Sep-99		F	Y 2000:	Sep-00		FY 2001:	Sep-01	_						
										(\$ ir	Millions)												
Cost:	Prior Year	s FY 1	1997	FY 19	98	FY	1999		FY 2000		Y 2001		FY 2002		FY 2003	FY	2004	F	Y 2005	To Comp	lete		Total
	Qty \$	Qty	\$		\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	22 1.8	20	3.0																			42	4.8
FY 1997 EQUIPMENT		g	0.8																			9	0.8
FY 1998 EQUIPMENT				31 0.7																		31	0.7
FY 1999 EQUIPMENT						37	2.9															37	2.9
FY 2000 EQUIPMENT								74	1.4													74	1.4
FY 2001 EQUIPMENT										19	4.1											19	4.1
FY 2002 EQUIPMENT																				16	1.2	16	1.2
FY 2003 EQUIPMENT																							
FY 2004 EQUIPMENT																							
FY 2005 EQUIPMENT																							
TO COMPLETE																							
INSTALLATION SCHEDUL FY 1998 & Prior In 82 Out 82	1 2	XVAILABILITIE 7 1999 3 4 0 37 0 37	<u>F</u>		0	FY 20 2 0 0	001 3 4 0 19 0 19	0	0	3 4 0 0 0 0	1 2	FY 2003 2 3 0 0	4 1 0 0 0 0	0	FY 2004 3 4 0 0 0 0	1 0 0		3 4 0 0 0 0	16 16	TOT/ 228 228	3		
																				3A			
									1	0 P/	GE 5						С	LASSIF	ICATION	: UNCLAS	SIFIED		

P3A MODELS OF SYSTEM AFFECTED:		INDIVID	UAL MODIFICAT	FION															999
MODEL C OF CVCTEM AFFECTED.			0712111021110711	ION															
MODELS OF SYSTEM AFFECTED:	AOE STREAM	M MODE	RNIZATION (G00	043)	-	TYPE N	ODIFICAT	TION:	_			_		MODIF	ICATION TITLE:	UNDERWAY R	EPLENISHMENT	EQUIPM	ENT
DESCRIPTION/JUSTIFICATION:																			
Replacement of 25 year old Non-Navy Stan I/O	dard Equipmer	nt.																	
DEVELOPMENT STATUS/MAJOR DEVELO	PMENT MILES	STONES:		N/A		FINANC	IAL PLAN	I: (TOA \$ IN I	MILLIC	DNS)									
	FY 1996 & Pr QTY	rior \$	FY 1997 QTY \$	FY QTY	1998 \$	FY QTY	1999	FY 2000 QTY	0	FY 2001 QTY \$		Y 2002 / \$	FY QTY	2003	FY 2004 QTY \$	FY 2005 QTY \$	TC QTY \$	QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS)	<u> </u>		<u> </u>			Ψ				<u> </u>					Q V	<u> </u>	<u> </u>		Ψ
RDT&E																			
PROCUREMENT																			
INSTALLATION KITS																			
INSTALLATION KITS NONRECURRING																			
EQUIPMENT				2	3.0	1	1.4	1 1	1.4									4	5.8
EQUIPMENT NONRECURRING																			
ENGINEERING CHANGE ORDERS																			
DATA																			
TRAINING EQUIPMENT																			
SUPPORT EQUIPMENT																			
OTHER																			
OTHER																			
OTHER																			
INTERIM CONTRACTOR SUPPORT																			
INSTALL COST				AP	0.8	AP	1.6	g	9.0	4.9		4.2							20.5
TOTAL PROCUREMENT					3.8		3.0	2 10 1 SHOPPING	0.4	1 4.9	1	4.2					CLASSIFICATION	4	26.3

ITEM NO. 10 PAGE NO. 6

CLASSIFICATION: UN	ICLASS	IFIED)																						Febru	ıary 1999
P3A (Continued)							INDIVIE	UAL MO	DIFICAT	ION (Co	ntinued)															
MODELS OF SYSTEMS	S AFFE	CTED): <u>AO</u> I	E STREAM	M MODE	RNIZAT	ION (G0	043)	_ N	MODIFIC.	ATION TITL	E:	UNDE	RWAY F	REPLENI	SHMENT	EQ	UIPMENT					_			
INSTALLATION INFOR		_	AIT																							
ADMINISTRATIVE LEA		_		Months				_	PRODU	CTION L	EADTIME:			18 Mc	onths											
CONTRACT DATES:		FY 19		FEB 98					FY 1999		JAN 99				0: <u>Jan-0</u>	0		FY 2001	:							
DELIVERY DATE:	ı	FY 19	998:	AUG 99			=		FY 1999) :	JUL 00			FY 2000	0: <u>Jul-0</u>	<u>1</u>		FY 2001	:							
	1									1			Millions)			_				.,					1	
Cost:			Years		1997		FY 1998		Y 1999		FY 2000		FY 2001		FY 200			FY 2003		Y 2004		2005		mplete	04	Total
PRIOR YEARS		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	, \$	· Q	lty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 1997 EQUIPMENT	-																									
FY 1998 EQUIPMENT	-					AP	0.8	AP	1.6	2	9.0														2	11.4
FY 1999 EQUIPMENT												1	4.9												1	4.9
FY 2000 EQUIPMENT														1	4.2	2									1	4.2
FY 2001 EQUIPMENT																										
FY 2002 EQUIPMENT																										
FY 2003 EQUIPMENT	-																						_			
FY 2004 EQUIPMENT																										
FY 2005 EQUIPMENT	-																									
TO COMPLETE																										
INSTALLATION SCI	JEDI II E		CUID AV	NII ADII IT	TE C																					
FY	1998		FY 19	99		FY 200			2001		FY 2002			FY 200				Y 2004		FY 20		<u>TC</u>	TO 1			
In &			0 0	<u>4</u> 0		2 3 0 0		$\frac{1}{0} \frac{2}{0}$		4 1 1 0		3 4 0 1		2 3 0 0			0	3 4 0 0	1 0	2 3		0	тот	AL 4		
Out	-	0	0 0	0		0 0		1 0		0 1		0 0		0 0			0	0 0	0	0 0		0		4		
																						P	-3A			

																		Fe	bruary 19	999
	INDIVID	UAL MO	DIFICAT	TION																
TAE STREA	M MODE	RNIZATI	ON(G004	44)		TYPE MODIFICAT	ΓΙΟN:				=		MODIFI	CATION TITLE:	UNDER	WAY RE	PLENIS	HMENT	EQUIPM	IENT
Stream Systems	s with mod	lern relial	ole Navy	Standard	d Stream	n Systems on AOE	1 Class. Shipalt	s AOE 761,	762K and	d 764K a	pply.									
OPMENT MILE	STONES:			N/A		FINANCIAL PLAN	: (TOA \$ IN MIL	LIONS)			_									
						FY 1999 OTY \$	FY 2000 QTY \$							FY 2004 OTY \$						TOTAL \$
							, , , ,									Ť				
								1	1.4	1	1.4	1	1.2						3	4.0
										AP	0.5		4.6	4.7		4.8				14.6
						_		1	1.4	1	1.9	1	5.8	4.7		4.8				18.6
	Stream System: LOPMENT MILE FY 1996 & F QTY	TAE STREAM MODE! Stream Systems with mod LOPMENT MILESTONES: FY 1996 & Prior QTY \$	TAE STREAM MODERNIZATION Stream Systems with modern reliat LOPMENT MILESTONES: FY 1996 & Prior FY QTY \$ QTY	TAE STREAM MODERNIZATION(G00. Stream Systems with modern reliable Navy LOPMENT MILESTONES: FY 1996 & Prior FY 1997 QTY \$ QTY \$	LOPMENT MILESTONES: N/A FY 1996 & Prior FY 1997 FY 7 QTY \$ QTY \$ QTY	TAE STREAM MODERNIZATION(G0044) Stream Systems with modern reliable Navy Standard Stream LOPMENT MILESTONES: N/A FY 1996 & Prior FY 1997 FY 1998 QTY \$ QTY \$ QTY \$ QTY \$	TAE STREAM MODERNIZATION(G0044) Stream Systems with modern reliable Navy Standard Stream Systems on AOE LOPMENT MILESTONES: N/A FINANCIAL PLAN FY 1996 & Prior QTY QTY QTY QTY QTY QTY QTY QT	TAE STREAM MODERNIZATION(G0044) Stream Systems with modern reliable Navy Standard Stream Systems on AOE 1 Class. Shipalt LOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA \$ IN MILE FY 1996 & Prior PY 1997 PY 1998 FY 1999 PY 2000 QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ AND ADDRESS OF THE PRIOR	TAE STREAM MODERNIZATION(G0044) Stream Systems with modern reliable Navy Standard Stream Systems on AOE 1 Class. Shipalts AOE 761, LOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA \$ IN MILLIONS) FY 1996 & Prior QTY \$ QTY	TYPE MODIFICATION:	TYPE MODIFICATION:	TAE STREAM MODERNIZATION(G0044) TYPE MODIFICATION: Stream Systems with modern reliable Navy Standard Stream Systems on AOE 1 Class. Shipalts AOE 761, 762K and 764K apply. LOPMENT MILESTONES: NA FINANCIAL PLAN: (TOA \$ IN MILLIONS) FY 1996 & Prior FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 ATY S AT	TAE STREAM MODERNIZATION(G0044) Stream Systems with modern reliable Navy Standard Stream Systems on AOE 1 Class. Shipalits AOE 761, 762K and 764K apply. LOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA \$ IN MILLIONS) FY 1996 & Prior GTY GTY GTY GTY GTY GTY GTY GT	TAE STREAM MODERNIZATION(G0044) TYPE MODIFICATION: Stream Systems with modern reliable Navy Standard Stream Systems on AOE 1 Class. Shipalts AOE 761, 762K and 764K apply. LOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA \$ IN MILLIONS) FY 1996 & Prior PY 2001 PY 2002 PY 2003 QTY S	TAE STREAM MODERNIZATION(G0044) TYPE MODIFICATION:	TAE STREAM MODERNIZATION(G0044) TYPE MODIFICATION: MODIFICATION TITLE: UNDER Stream Systems with modern reliable Navy Standard Stream Systems on AOE 1 Class. Shipalts AOE 761, 762K and 764K apply. Comment milestones: NA	TAE STREAM MODERNIZATION(G0044) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY RE Stream Systems with modern reliable Navy Standard Stream Systems on AOE 1 Class. Shipatls AOE 761, 762K and 764K apply. STREAM MODERNIZATION(G0044) TYPE MODIFICATION: NA FINANCIAL PLAN: (TOA \$ IN MILLIONS) FY 1996 & Prior OTY S	TAE STREAM MODERNIZATION(G0044) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENS Stream Systems with modern reliable Navy Standard Stream Systems on AOE 1 Class. Shipalts AOE 761, 762K and 764K apply. Comment milestones:	TAE STREAM MODERNIZATION(G0044) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENISHMENT Stream Systems with modern reliable Navy Standard Stream Systems on AOE 1 Class. Shipalts AOE 761, 762K and 764K apply. Copyright of the content o	TAE STREAM MODERNIZATION(G0044) TYPE MODIFICATION: MODIFICATION TITLE: UNDERWAY REPLENSHMENT EQUIPMENT OF A COLUMN STREAM Systems on AOE 1 Class. Shipaits AOE 761, 762K and 764K apply. Common

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CLASSIFICATION: UNC	LASSIFII	ED																					Februa	ry 1999	
P3A (Continued)						INDIVIDU	JAL MO	DIFICATI	ON (Co	ntinued)															
MODELS OF SYSTEMS	AFFECTI	ED: <u>T-A</u>	AE STREAM	MODERI	NIZATIO	ON (G004	14)	M	ODIFIC	ATION TI	TLE:	UNDER	WAY F	REPLENIS	SHEMEN	T EQUIP	MENT				_				
NSTALLATION INFORM		. Al	т				_																		
ADMINISTRATIVE LEAD			9 Months					PRODU	CTION L	EADTIME	:		24 Mc	nths											
CONTRACT DATES:	FY	1998:						FY 1999	:					F	Y 2000:			FY200	1:						
DELIVERY DATE:	FY	1998:				:		FY 1999	:					F	Y 2000:			FY200	1:						
											(\$ in Mill	ions)					·								
Cost:		r Years 90		1997		Y 1998	_	Y 1999		FY 2000		FY 2001	_	FY 2002		FY 2003		FY 2004	_	FY 2005		Complete		Total	
PRIOR YEARS	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qt	у \$	Qty	\$	Qty	\$	Qty	\$	
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT																									
FY 1999 EQUIPMENT																									
FY 2000 EQUIPMENT																									
FY 2001 EQUIPMENT													AP	0.5	1	4.6							1	5.1	1
FY 2002 EQUIPMENT																		1 4.7					1	4.7	7
FY 2003 EQUIPMENT																			1	4.8			1	4.8	3
FY 2004 EQUIPMENT																					<u> </u>				
FY 2005 EQUIPMENT																									
TO COMPLETE																									
INSTALLATION SCHI	EDULE:	SHIP AV			Y 2000		EV	2001		FY 200	n2] [E	Y 2003		E	Y 2004		FY 20	05	<u>TC</u>					
& P	rior 1	2 3	4	1 3	2 3	4 1	2	3 4	1 1	2	3 4	1	2 3	4	1 2	3		2	3 4			TAL			
In (0 0				0 0	0 0			0 0	0	0 0 0 0		1 0 0 1		0 1 0 0) 1) 0				3			
																				P	-3A				

CLASSIFICATION: UNCLASSIFIED																			Fet	oruary 199	99
РЗА	INI	DIVIDU	AL MOI	DIFICAT	TION																
MODELS OF SYSTEM AFFECTED:	SADDLE WI	NCH (G	(20003)			=	TYPE MODIFICA	TION:						MODIFI	CATION	TITLE:	UNDERWAY R	EPLENIS	HMENT I	EQUIPME	ENT
DESCRIPTION/JUSTIFICATION:																					
Replacement of 25 year old Non-Navy Star	ndard Equipme	nt.																			
DEVELOPMENT STATUS/MAJOR DEVELO	OPMENT MILES	STONE	S:		N/A		FINANCIAL PLAN	I: (TOA \$	IN MII	LLIONS)		:									
	FY 1996 & P		FY 1 QTY	997	FY QTY	1998 \$	FY 1999 QTY \$	FY 2 QTY		FY 2001 QTY \$	FY 2 QTY	2002	FY: QTY	2003 \$	FY: QTY	2004 \$	FY 2005 QTY \$	T QTY	rc \$	T QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS)	QII	Ψ	QII	Ψ	QII	Ψ	QII y	QII	Ψ	QII ş	QII	Ψ	QII	Ψ	QII	Ψ	QII y	QII	, J	QII	Ψ
RDT&E																					
PROCUREMENT																					
INSTALLATION KITS																					
INSTALLATION KITS NONRECURRING																					
EQUIPMENT	35	6.0											6	0.3						41	6.3
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER																					
OTHER																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
INSTALL COST		8.0									AP	0.1		1.2	AP	0.01	1.3				10.6
TOTAL PROCUREMENT	35 1	14.0											6	1.5		0.01	1.3			41	16.8

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CLASSIFICATION: UI	NCLASSIF	IED																											Febru	ary 1999	j
23A (Continued)								INDIVIDU	JAL MO	DIFICAT	TION ((Contin	ued)																		
MODELS OF SYSTEM	IS AFFEC	TED:	SAE	DDLE WI	NCH ((G0003	3)			_	MODI	IFICAT	ION TITLE	:	UND	ERWA	/ RE	PLENISH	MENT	EQUIP	MENT										
NSTALLATION INFO			SHII	PYARD					_																						
ADMINISTRATIVE LEA		_		Months	i		_					ON LEA	DTIME:			18	Mon		_												
CONTRACT DATES: DELIVERY DATE:		Y 199 Y 199								FY 199		_				_			2000: 2000:	_		_	FY 2001: FY 2001:		_						
																-				_		_									
0		D	V	_	V 400	_		V 4000		V 4000				\$ in Mil				V 2002	1	EV 20	20		-V 2004		2005		T- C-			Tatal	
Cost:		ty	Years \$	Qty	Y 199	\$	Qty	Y 1998 \$	Qty	Y 1999 \$		Qty	/ 2000 \$	Qty	FY 200 \$			Y 2002 \$	Qty	FY 20	\$	Qty	FY 2004 \$	Qty	2005		Qty	mplete \$	Qty	Total \$	-
PRIOR YEARS	_	29 :		Qty		Ψ	Qty	Ψ	Qty	Ψ		жıу	Ψ	Qty	Ψ			0.1		1.2	Ψ	QLY	Ψ	Qty	ð		Qty	Ψ	35	4.3	}
FY 1997 EQUIPMENT	г																														
FY 1998 EQUIPMENT	г																														
FY 1999 EQUIPMENT	Г																														
FY 2000 EQUIPMENT	г																														
FY 2001 EQUIPMENT	г																														
FY 2002 EQUIPMENT	г																														
FY 2003 EQUIPMENT	Г																					AP	0.01	6	1.2				6	1.21	1
FY 2004 EQUIPMENT	Г																														
FY 2005 EQUIPMENT	Γ																														
TO COMPLETE																															
INSTALLATION SC	HEDULE:	s	HIP AVA	NLABILI [*]	TIES_																										
	Y 1998		FY 19				Y 2000			2001			FY 2002			FY 20			-	FY 2004			FY 200		<u>TC</u>						
In	29	0	2 3 0 0	0		0 0		0 (0 2	0	0		0	3 4 0 0	0	0		0 0	0	0	0	0	$\frac{2}{6}$ $\frac{3}{0}$	0	0			41			
Out	29	0	0 0	0		0 0	0	0 (0 0	0	0	0	0	0 0	0	0	0	0 6	0	0	0	0	0 0	6	0			41			
																										P-3	A				
												IT	EM NO. 10) PA	GE 11	1							CL	ASSIFIC/	TION:	UNC	LASSI	FIED			

CLASSIFICATION: UNCLASSIFIED		INDIVID	DUAL MO	DIFICAT	TION																Fe	bruary 19	999
MODELS OF SYSTEM AFFECTED:	SLIDING PADEY	′ES (G00)12)				TYPE N	MODIFICA	TION:				_		MODIF	CATION	I TITLE:	UNDEF	RWAY R	EPLENIS	HMENT	EQUIPM	ENT
DESCRIPTION/JUSTIFICATION:																							
Replacement of 25 year old Non-Navy St I/O	andard Equipment.																						
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT MILESTO	NES:			N/A		FINANC	CIAL PLAN	I: (TOA \$ IN M	ILLIONS)			_										
	FY 1996 & Prior QTY	\$	FY QTY	1997 \$	FY 1! QTY	998 \$	FY QTY	′ 1999 \$	FY 2000 QTY \$	FY 2 QTY	2001	FY: QTY	2002 \$	FY 2 QTY	2003 \$	FY QTY	2004 \$	FY QTY	2005 \$	T QTY	C \$	QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS)																							*
RDT&E																							
PROCUREMENT																							
INSTALLATION KITS																							
INSTALLATION KITS NONRECURRING																							
EQUIPMENT	2	0.3										2	0.3			2	0.3	2	0.3			8	1.2
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER																							
OTHER																							
OTHER																							
INTERIM CONTRACTOR SUPPORT																							
INSTALL COST									AP 0.2	AP	1.1		1.2	AP	0.01		1.2				2.4		6.1
TOTAL PROCUREMENT	2	0.3							0.2		1.5	2	1.5	0	0.01	2	1.5	2	0.3		2.4	8	7.7
								P-1 S	HOPPING LIS	PAGE NO) 12	,								CLASS	FICATIO	N: UNCLAS	SSIFIED

LASSIFICATION: UNCLA	SSIFIE	D				I	NDIVIDI	JAL MC	DIFICAT	ION (Co	ntinued)														Februa	ry 1999
MODELS OF SYSTEMS AF	FECTE	D: <u></u> \$	LIDING PA	ADEY	ES (G00	112)			_	MODIFIC	ATION TITLE:		UNDE	ERWAY	′ RE	PLENISH	MENT	EQUIPMEN	г							
NSTALLATION INFORMAT	ION:																									
METHOD OF IMPLEMENTA			HIPALT																							
DMINISTRATIVE LEADTIN	ИE:		6 Months	s					PROD	JCTION I	LEADTIME:			18	Mon	ths										
CONTRACT DATES:	FY	1998:							FY 199					_			2000:			FY 200	1:					
DELIVERY DATE:	FY	1998:							FY 199	9:	-			=		FY	2000:	·		FY 200	1:					
											(\$	in Mil	lions)													
Cost:	Pri	or Years	F	Y 199	7	F١	1998	ı	Y 1999		FY 2000		FY 2001	1	F۱	Y 2002		FY 2003		FY 2004	F۱	2005	To C	omplete		Total
	Qty	\$	Qty		\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	(Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS										AP	0.2	AP	0.01		2	1.1									2	1.31
FY 1997 EQUIPMENT																										
FY 1998 EQUIPMENT																										
FY 1999 EQUIPMENT																										
FY 2000 EQUIPMENT																										
FY 2001 EQUIPMENT																										
FY 2002 EQUIPMENT																	AP	0.01		1.2					2	1.21
FY 2003 EQUIPMENT																										
FY 2004 EQUIPMENT																							2	1.2	2 2	1.2
FY 2005 EQUIPMENT																							2	1.2	2 2	1.2
TO COMPLETE																										
INSTALLATION SCHEDU FY 199 & Prio In 0	8	<u>FY</u> 2				<u>/ 2000</u> 30	0	0 2		4 1 0 0	0 2	4 0		FY 20 2 0	3	4 1 0 0	2				0005 3 4 0 0	<u>TC</u>	то	TAL 8		
Out 0	0	0	0 0		0 0	0	0	0 0	0	0 0	0 0		2 AGE 13	0	0	0 0	0	0 0	0	-	2 0	4 P	-3A	8		

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		BU	DGET ITEM	JUSTIFICA	TION SHE	ΕT				DATE:			
				P-40							February 199	9	
APPROPRIATION/BUD	GET ACTIV	ITY						P-1 ITEM NO	MENCLATUR	E/LINE ITEM			
OTHER PROCURE	MENT, N	AVY											
BA 1: SHIP SUPPO	RT EQUI	PMENT	T							Submarine Perisc	opes & Imaging Eq	uipment BLI: 08310	00 SBHD: H1PL/81I
Program Element for C	ode B Item	s:						OTHER RELA	ATED PROGR	AM ELEMENT	S		
								N/A					
	Prior	ID										То	
	Years	Code		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY													
EQUIPMENT COST													
(In Millions)	N/A	Α		\$25.3	\$31.7	\$65.0	\$20.6	\$14.9	\$13.1	\$13.3	\$13.6		\$197.6
SPARES COST													
(In Millions)													

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 submarines.

The Type 18 Periscope Inventory Objective is 63 units: This is the quantity required for ship installation (49), 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 59 units. This is the quantity required for ship installation (50), spares (7), trainers (1), and configuration control model (1).

PL001/X1 - 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 equipment's include 35 mm Cameras, High Resolution Video Cameras, Video and Photographic Screening Systems, AR-165B Reader/Printers, equipment's 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 equipment's 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.

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BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM
OTHER PROCUREMENT, NAVY	Submarine Periscop	es & Imaging Equipment BLI: 083100
BA 1: SHIP SUPPORT EQUIPMENT		

- PL011 FY-2000 funding continues procurement of the following Type 18 Field Change Kits: Heated Head Window replacement, Precision Focus, ADF/HPI Upgrade, SSIXS Antenna, Eyepiece Box/Mast Connector Interface, Early Warning Receiver Upgrade, Antenna Stack Sensitivity Upgrade, Fairing Closure Cap Seal, Fairing Hoist Cylinder Base Alignment Upgrade, Periscope Lifting Rod Alignment Upgrade, Periscope Hoisting Yoke/Rod Interface Upgrade and Upper Dashpot Upgrade.
- PL012 FY-2000 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 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 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 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.

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BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM
OTHER PROCUREMENT, NAVY		
BA 1: SHIP SUPPORT EQUIPMENT	Submarine Periscop	es & Imaging Equipment BLI: 083100

PL020 - Procures Photonics System in FY99 for SSN 688 Class Submarine backfit.

PLXXX - EHF Periscope High Power Amplifier (HPA) - The HPA is a 250W amplifier that supplies the power for the EHF low data rate submarine antenna system. Combined with the EHF Periscope antenna and the AN/USC-38 EHF terminal communications equipment group or FOT it provides the submarine force a secure anti-jam, low probablility of intercept communications asset.

EHF Periscope Antenna - This is a submarine 5 1/4" antenna mounted on a periscope that provides the submarine access to the EHF MILSTAR satellite system. Combined with the AN/USC-38 EHF terminal communications equipment groupor FOT and the HPA it provides the submarine force a secure anti-jam, low probablility of intercept communications asset.

EHF Follow-On Terminal (FOT) - The FOT is an advanced AN/USC-38 EHF terminal communications equipment group that Integrates the LDR/MDR terminal into one VME drawer. The FOT is the replacement LDR/MDR terminal for those platforms without an AN/USC-38 LDR terminal. Combined with the EHF Periscope antenna and the HPA it provides the submarine force a secure anti-jam, low probability of intercept communications asset.

PL5IN/X1 - Funding is for the installation of Fleet Modernization Program Equipment Only

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

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	WEAPON		I COST AN	ALYSIS				Weapon Sys	stem			DATE:		
Other	PRIATION/BUDGET ACTIVITY Procurement, Navy SHIP SUPPORT EQUIPMENT	P-:	5			ID Code		 NOMENCLA ⁻ ne Perisco _l			uinment 6		ebruary 199	99
DA I.	SHIP SUPPORT EQUIPMENT		TOTAL CO	ST IN THOU	USANDS OI	 F DOLLARS		ne Periscop	bes and ii	naging Eq	uipment s	опи: п п	L/OIPL	
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000			FY 2001	
-			QTY	UNIT COST	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
PL001	(SUBMARINE WARFARE (N87) Type 8B MOD 3 Periscope (SSN)	А	7	1,134	7,936	4	1,074	4,296	8	1,072	8,578			
PL006	Type 18 Imaging Components	Α			1,517			8,007			4,351			
PL007	Type 18 Periscope ADF Mod	А	7	1,065	7,452			0			0			
PL011	Periscope Field Change Kits	А			877			1,734			2,842			
PL012	Periscope Special Support Equipment	А			445			452			451			
PL015	Periscope Interim Contractor Support	А			531			3,683			3,738			
PL016	Periscope Training	А			50	,		137			139			
PL017	Periscope E&E Adapt. Ship Containers	А			38			0			0			
PL018	Periscope EPB Shipping Containers	А			9			0			0			
PL019	Periscope Shipping Containers	А			63			0			0			
PL020	Photonics Backfit	А				1	6,517	6,517			0			
PL830	Periscope Production Engineering	A			2,285			2,321			2,311			
PL900	Consulting Services	A			663			643			653			
PLX1X	Type 8 Periscopes	A							7	1,180	8,259			
PLXX1	EHF Periscope HPA	A							7	809.9	5,669			
PLXX2	EHF Periscope Antenna	A							15	400	6,000			
PLXX3	EHF FOT	A							10	1,350	13,500			
. 2.010	Total Equipment Total Install				21,866 3,423			27,790 3,942	.0	1,000	56,491 8,548			
TOTAL	<u> </u>				25,289			31,732			65,039			
	M 2446, JUN 86			P-1 SHOPP		-						CLASSIFIC	ATION:	

BUDGET PROCUI	REMEN	NT HISTO	ORY AND PLAN	NING EXHIB	IT (P-5A)	Weapon System		A. DATE		ry 1999
B. APPROPRIAT	ION/B	UDGET A	ACTIVITY		C. P-1 ITEI	M NOMENCLATUR	E		SUBHEAD	
Other Procurement BA -1 SHIP SUPP	•	•	NT		SUBMARINE I	PERISCOPES & IMAGI	NG EQUIP	MENT		H1PL/81PL
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
FY98 PL001										
Type 8B Mod 3 Periscope	7	\$1,134	NUWC, Newport	OPTION	FP	Kollmorgen Northampton, MA.	1/98	3/99	YES	N/A
PL007										
Type 18 Periscope ADF	7	\$1,065	NUWC, Newport	OPTION	FP/O	SPERRY Charlottesville, VA.	3/98	3/99	YES	N/A
FY99 PL001										
Type 8B Mod 3 Periscope	4	\$1,074	NUWC, Newport	9/98	FP/O	Kollmorgen Northampton, MA.	3/99	5/00	YES	N/A
PL020 Photonics Backfit	1	\$6,517	NAVSEA	9/98	FP/O	Kollmorgen Northampton, MA.	3/99	3/01	YES	N/A
FY00 PL001/X1										
Type 8B Mod 3 Periscope	15	\$2,252	NUWC, Newport	9/99	FP	Kollmorgen Northampton, MA.	3/00	3/02	YES	N/A
D. REMARKS	1			1	1					

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

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1

UNCLASSIFIED CLASSIFICATION

A. DATE PROCUREMENT HISTORY AND PLANNING February 1999 B. APPROPRIATION/BUDGET ACTIVITY C. P-1 ITEM NOMENCLATURE SUBHEAD **BA-1 SHIP SUPPORT EQUIPMENT** H1PL/81PL SUBMARINE PERISCOPES & IMAGING EQUIPMENT CONTRACTOR CONTRACT RFP DATE SPECS DATE ELEMENT OF COST FY LOCATION ISSUE AWARD OF FIRST QTY UNIT REVISIONS COST AND METHOD AVAILABLE LOCATION OF PCO DELIVERY CODE DATE COST & TYPE DATE NOW AVAILABLE PLXX1 EHF PERISCOPE HPA 00 SS/FFP/OPT 7 Raytheon, MA SPAWAR Nov-95 Nov-96 809.9 YES N/A PLXX2 EHF PERISCOPE ANTENNA 00 Raytheon, MA SS/FFP/OPT SPAWAR Nov-95 Nov-96 15 400 YES N/A PLXX3 EHF FOT 00 Raytheon, MA SS/FFP/OPT SPAWAR Nov-95 Feb-97 10 1,350 YES N/A D. REMARKS

DD FORM 2446, JUN 87

P-1 Shopping List-Item No 11

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Exhibit P-5A

UNCLASSIFIED CLASSIFICATION

CLASSIFICATION: UNCLASSIFIE	D																							
P3A		INDIVI	DUAL	MODIFI	CATI	ON																		
MODELS OF SYSTEM AFFECTED:	Type 8 Pe	eriscope				-	TYP	E MODIF	ICATIO	ON:	Shipa	alt		_			MOE	DIFICAT	T NOI	ITLE:	Туре	8B Mod 3		
DESCRIPTION/JUSTIFICATION:																								
Provides EHF Satellite Communications.																								
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT.	MILEST	ONES	S:										=										
	FY 1995 QTY	\$ Prior	<u>F\</u> QTY	<u>/ 1996</u> ′ \$	F) QTY	<u>1997</u> \$	QTY	Y 1998 \$	QTY	Y 1999 \$	FY QTY	2000 \$	ET QTY	Y 2001 ′ \$	<u>FY</u> QTY	<u>/ 2002</u> * \$	<u>F\</u> QTY	<u>2003</u>		2004	OTY	TC \$	QTY <u>T</u>	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	<u> </u>	_	1		<u> </u>		<u> </u>		<u> </u>		1	<u> </u>	Ī		1	_	Ţ.,		1		Ţ.,		<u> </u>	
RDT&E																								
<u>PROCUREMENT</u>																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	13	34.9	7	7.7	8	8.5	3	3.2	4	4.3	10	11.2											45.0	69.9
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					3	3.2															5.0	5.4
OTHER: Spares*					1	1.1	1	1.1			5	5.6											7.0	7.8
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST	7	2.1	6	2.0	7	3.1	4	1.8	7	2.3	4	1.4											35.0	12.6
TOTAL PROCUREMENT	16	39.7	7		10		7	7.5	4	4.3	15	16.8											59.0	86.8
*A total of 12 systems are land based units	and will n	ot be ins	talled	on 688 (Jass	Sub-		P-1	SHOP	PING LIST	l										CLA	SSIFICATION	JN:	

marines. There is 1 trg. equipment, 1 Configuration Control Model, 5 Trident Paybacks and 7 spares.

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P3A (Continued)						INDIVIDU	JAL M	ODIFICAT	TION ((Continued)													
MODELS OF SYSTEMS	AFFECT	TED: Typ	e 8B F	Periscope				_ MO	DIFIC	CATION TIT	LE:	Type 8	B Mod	13							_			
INSTALLATION INFORM METHOD OF IMPLEMEN			ITs				=																	
ADMINISTRATIVE LEAD			6 Moi	nths			-	PRODU	CTIO	N LEADTIM	F.	1.	4 Mor	nths										
CONTRACT DATES:		1998:	1/9					FY 1999		3/99					 Y 2000:									
DELIVERY DATE:	FY	′ 1998:	3/9	9				FY 1999	:	5/00				F	Y 2000:				_					
										(\$ in I	Millior	ne)												
Cost:	Р	rior Years		FY 1996	F	Y 1997	F	Y 1998	F	- (Ψ III I		Y 2000	F	Y 2001	F	Y 2002	F	Y 2003	F	2004	To Co	mplete	Т	otal
	Qty		Qty	T	Qty		Qty	\$	Qty		Qty		Qty		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS		7 2.	.1	6 2.	0																		13	4.1
FY 1996 EQUIPMENT					7	3.1																	7	3.1
FY 1997 EQUIPMENT							4	1.8	4	1.3													8	3.1
FY 1998 EQUIPMENT									3	3 1.0													3	1.0
FY 1999 EQUIPMENT											2	1 1.	4										4	1.4
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
TO COMPLETE																								
8 P	EDULE: 1997 Prior 20 0	FY 19 2 3 0 2	98 3 4 2 2	1 2	4	4 3 3 2	2			FY 2001 2 3 0 0 0 0	4 0 0	1 2	0	4 1	0 0	2003 - 3 4 0 0 0 0	0	FY 2004 2 3 0 0 0 0	0	TC 0 0	TOT 4	1		
																				P-	3A			

P3A		INDIVID	UAL	MODIF	ICATI	ON																		
MODELS OF SYSTEM AFFECTED:	Type 18B	Periscon	e				TYP	E MODIF	ICATIO	DN.	Shipa	ılt					МОГ	IFICAT	ION T	ITI F	Type	: 18 Video l	Ingrade	
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	т опосор				-					Оппро			•							.,,,,,	10 11000	opg.uuo	
DESCRIPTION/JUSTIFICATION:																								
Provides replacement of obsolete Type 18	s Periscop	e video (compo	nents v	vith a	aigitai ir	nagınç	g upgrade	Э.															
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT	MILEST	ONES	· ·																				
														-										
	FY 1995 QTY		FY QTY	1996 \$		<u>1997</u> \$	<u>F</u> QTY	<u>Y 1998</u> \$	F\ QTY	<u>′ 1999</u> \$	<u>FY</u> QTY	2000 \$	<u>FY</u> QTY	<u>/ 2001</u> \$		<u>/ 2002</u> ′\$		<u>2003</u>		<u>2004</u> \$	OTV	<u>TC</u> \$	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	QII	Ψ	QII	Ψ	T	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	T T	Ψ	QII	Ψ	QII	Ψ
RDT&E																								
<u>PROCUREMENT</u>																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT					2	0.4	3	0.6	29	5.8	16	3.2											34	10.0
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT									1	0.2													1	0.2
SUPPORT EQUIP. (CCM & Swing Sets)									1	0.2													1	0.2
OTHER: Spares									6	1.2													6	1.2
OTHER:																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST							5	0.2	9	0.1	20	0.2											34	1
	1	1	1		1	l .	1		1		1		1	1	1	1	1		1	1	1		1	

P-1 SHOPPING LIST

TOTAL PROCUREMENT

UNCLASSIFIED

CLASSIFICATION:

P3A INDIVIDUAL MODIFICATION Type 18B Periscope	CLASSIFICATION: UNCLASSIFIE	D																								
DEVELOPMENT STATUSMALOR DEVELOPMENT MILESTONES: Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception and instantaneous direction findings. Provides wide band with reception of the provides wide band with reception for the provides wide band with reception of the provides wi	P3A		INDIVID	DUAL	MODIF	ICATI	ON																			
Provides wide band with reception and instantaneous direction findings Provides wide band with reception and instantaneous direction findings Provides Provid	MODELS OF SYSTEM AFFECTED:	Type 18E	3 Periscop	е			_	TYP	E MODIF	ICATI	ON:	Shipa	alt					MOE	DIFICAT	ION T	ITLE:	Туре	e 18 ADF			
DEVELOPMENT STATUSAMAJOR DEVELOPMENT MILESTONES: PY 1995 & Prior PY 1995 PY 1996 PY 1996 PY 1997 PY 1996 PY 1997 PY 1998 PY 2001 PY 2001 PY 2001 PY 2002 PY 2003 PY 2003 PY 2004 PY 200	DESCRIPTION/JUSTIFICATION:																									
FINANCIAL PLAN (IN MILLIONS) FINANCIAL PLAN (Provides wide band with reception and ins	stantaneo	us directi	on fine	ding.																					
FINANCIAL PLAN (IN MILLIONS) A	DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT	MILEST	ONES	3:																					
FINANCIAL PLAN (IN MILLIONS) ROTAE ROTAE ROTAE ROTAE ROTAE ROTACHEMINT INSTALLATION KITS SOCIAL STANLATION KITS NONRECURRING SOCIAL STANLATION KITS NO		FY 1995	& Prior	<u>F</u>)	1996	FY	1997	<u>F</u>	Y 1998	<u>F</u>	Y 1999	FY	2000	ΕY	2001	F	Y 2002	<u>F</u>)	2003	FY	2004		<u>TC</u>		TOTAL	
ROTAE PROCUREMENT INSTALLATION KITS INSTALLATION KITS OTHER SUPPORT EQUIPMENT 33 30.9 2 2 3 4 4 7 7 7 9 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1	EINANGIA ELAN (INIMILLIANO)	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	′ \$	QTY	\$	QTY	\$	QTY	<u> </u>	QTY		\$
PROCUREMENT INSTALLATION KITS INSTALLATION KITS NONRECURRING SOLUTION AND STALLATION KITS NONRECURRING SOLUTION AND SOLU	FINANCIAL PLAN (IN MILLIONS)																								+	
NSTALLATION KITS	RDT&E																									
NSTALLATION KITS NONRECURRING	PROCUREMENT																									
EQUIPMENT 33 30.9 2 2.3 4 4.7 7 7.9	INSTALLATION KITS																									
EQUIPMENT NONRECURRING ENGINEERING CHANGE ORDERS DATA TRAINING EQUIPMENT 3 2.8	INSTALLATION KITS NONRECURRING																									
ENGINEERING CHANGE ORDERS DATA TRAINING EQUIPMENT 3 2.8	EQUIPMENT	33	30.9	2	2.3	4	4.7	7	7.9															46		45.7
DATA Image: Contractor support 3 2.8 3 3 3 3 3 <	EQUIPMENT NONRECURRING																									
TRAINING EQUIPMENT 3 2.8	ENGINEERING CHANGE ORDERS																									
SUPPORT EQUIP. (CCM & Swing Sets)	DATA																									
OTHER: (LBU/GFE) 3 2.8 3 3 2.8 3 3 2.8 3 3 3 3 3 3 3 3 3	TRAINING EQUIPMENT	3	2.8																					3		2.8
OTHER: OTHER	SUPPORT EQUIP. (CCM & Swing Sets)	4	3.8																					4		3.8
OTHER INTERIM CONTRACTOR SUPPORT INSTALL COST 35 2.6 7 0.4 7 0.3 6 0.3 8 0.4 2 0.1 0.0 0.0 0.0 0.0 0.0 0.0	OTHER: (LBU/GFE)	3	2.8																					3		2.8
INSTALL COST 35 2.6 7 0.4 7 0.3 6 0.3 8 0.4 2 0.1	OTHER:																									
INSTALL COST 35 2.6 7 0.4 7 0.3 6 0.3 8 0.4 2 0.1 65 4.1 TOTAL PROCUREMENT 43 40.4 2 2.3 4 4.7 7 7.9 0 0.0 0 0.0 0 56 55.2	OTHER																									
TOTAL PROCUREMENT 43 40.4 2 2.3 4 4.7 7 7.9 0 0.0 0 0.0 56 55.2	INTERIM CONTRACTOR SUPPORT																									
	INSTALL COST	35	2.6	7	0.4	7	0.3	6	0.3	8	0.4	2	0.1											65		4.1
	TOTAL PROCUREMENT	43	40.4	2	2.3	4	4.7	7					0.0									CL A	COLETO			55.2

CLASSIFICATION: U	JNCLASS	IFIE)																										
P3A (Continued)								IN	IDIVIDU	JAL M	ODIFICA	TION ((Conti	nued))														
MODELS OF SYST	EMS AFF	ECTE	D: Typ	pe 18	BB Pe	riscope	Э				_ MC	DIFIC	OITA	N TITL	LΕ:	Type 18	ADF									_			
INSTALLATION INFO										_																			
METHOD OF IMPLE				AITs_	4 41-					_	DDODL	OTIO		DTIME	- .	4.0		- 41											
ADMINISTRATIVE L CONTRACT DATES		-	1998:		Month 3/98	S	-				PRODU FY 1999		N LEA	וואוווט	=: -	12	2 Mo	ntns	EV	2000:									
DELIVERY DATE:	•		1998:		3/99						FY 1999		-							2000:				_					
Cost:		Dric	or Years	<u> </u>	EV	1996		EV	1997		Y 1998		Y 199		Millions	(2000 s)	1 .	Y 200	1		Y 2002	1 -	Y 2003		Y 2004	- To (Complete	т-	Total
Cost.		Qty	5 Tean		Qty	\$	(Qty	\$	Qty	\$	Qty		\$ \$	Qty	\$	Qty			Qty	\$	Qty		Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS		37		2.6	7		0.4	5	0.2					0.1		0.1		,	,	Giy	Ψ	Qty	Ψ	Giy	Ψ	Qty	Ψ	54	
FY 1996 EQUIPME	NT							2	0.1																			2	0.1
FY 1997 EQUIPME	NT									4	0.2																	4	0.2
FY 1998 EQUIPME	NT											7	,	0.3														7	0.3
FY 1999 EQUIPME	NT																												
FY 2000 EQUIPME	NT																											-	
FY 2001 EQUIPME	NT																												
FY 2002 EQUIPME	NT																												
FY 2003 EQUIPME	NT																												
FY 2004 EQUIPME	NT																												
TO COMPLETE																													
NOTE: Prior Year E	quipment .	Asset	ts inclu	de fo	rmer	GFE ui	nits a	and a	ssets fro	om ded	commissio	ning b	oats.																
INSTALLATION S	CHEDUL FY 1997	E:	SHIP .		LABI	LITIES <u>F</u>	Y 19	999		FY:	2000		FY	2001		FY	′ 2002	2		FY	2003		FY 200)4	TC				
	& Prior	1	2		4				4 1			1	2		4	1 2			1	2			2 3			TO			
In Out	49 49	1		2	2	1	1		3 1 3 1	1 1	0 0	0	0		0 0	0 0			0	0	0 0		0 0		0		5 5		
																									P-	3A			

CLASSIFICATION: UNCLASSIFIE P3A		NDIVID	UALI	MODIF	ICATI	ON															
MODELS OF SYSTEM AFFECTED:	Submarine	Perisco	pes & I	maging	Equip.	=	TYPI	E MODIF	ICATI	ON:	Shipa	ılt			MOD	IFICATI	ON TITLE:	Pho	tonics Mas	t	
DESCRIPTION/JUSTIFICATION:																					
Procures the Photonics system for backfit	on SSN 68	8 Class	Subn	narine.																	
 DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT N	MILEST	ONES	i:																	
	FY 1995 8					<u>′ 1997</u> \$		<u>Y 1998</u> \$		<u>Y 1999</u> \$		2000 \$	2001 \$	2002 \$		2003 \$	<u>FY 2004</u> QTY \$		<u>TC</u> ′ \$	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)		7		•		,		·		*			•	•		*					
RDT&E																					
PROCUREMENT																					
INSTALLATION KITS																					
INSTALLATION KITS NONRECURRING																					
EQUIPMENT									1	6.5										1	6.5
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT (Conf. Model)																					
OTHER: (LBU/GFE)																					
OTHER:																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
INSTALL COST																					
TOTAL PROCUREMENT								P-1	1	6.5									SSIFICATI	1	6.5

UNCLASSIFIED

ITEM NO. 11 PAGE NO 12

February 1999

MODIFICATION TITLE: COST CODE: MODELS OF SYSTEMS AFFECTED: DESCRIPTION/JUSTIFICATION: EHF Periscope High Power Amplifier (HPA)

Installation of EHF Periscope HPA

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FINANCIAL PLAN: (8 in millions)

THVALVOIAL FLALV. (0 III Hillinois)	PY	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	TC	3	Total
RDT&E	Qty \$	Qty \$	Qty \$	Qty \$	Qty \$	Qty \$	Qty \$	Qty \$	Qty \$	Qty \$	Qty \$	Qty	\$
ROLLEMENT: Kit Quantity Installation Kits Installation Kits Nonrecurring Equipment Equipment Nonrecurring Engineering Change Orders Data Training Equipment					7 5.6							7	5.6
Support Equipment Other													
Interm Contractor Support Installation of Hardware PRIOR YR EQUIP FY 97 EQUIP FY 98 EQUIP FY 99 EQUIP FY 00 EQUIP FY 01 EQUIP FY 02 EQUIP FY 03 EQUIP FY 04 EQUIP FY 05 EQUIP FY 05 EQUIP FY 05 EQUIP FY 06 EQUIP FY 07 EQUIP FY 08 EQUIP												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
FY TC EQUIP TOTAL INSTALLATION COST	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
TOTAL PROCUREMENT COST	0.0		0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0		5.6
METHOD OF IMPLEMENTATION:				ADMINI	STRATIVE LEADT	IME: 2 mon	ths	PROCUREMENT L	EADTIME:	14 months			
CONTRACT DATES:	FY 1998:	N/A			FY 1999:	N/A		FY 2000:	Nov-95		FY 2001:	N/A	
DELIVERY DATES:	FY 1998:	N/A			FY 1999:	N/A		FY 2000:	Nov-96		FY 2001:	N/A	
INSTALLATION SCHEDULE: PY	1 2	Y 99 3 4	11	FY 00 2 3	4	1 2	FY 01 3 4	<u> </u>					
INPUT													
OUTPUT													
	F	Y 02		FY 03		,	FY 04		FY 05				
INSTALLATION SCHEDULE:	1 2	3 4	1	2 3	4	1 2	3 4	11	2 3	4	TC		TOTAL
INPUT													0
OUTPUT													0
Notes/Comments													

P-1 Shopping List-Item No 11 PAGE NO. 13

Exhibit P-3A

UNCLASSIFIED CLASSIFICATION MODIFICATION TITLE: COST CODE: MODELS OF SYSTEMS AFFECTED: DESCRIPTION/JUSTIFICATION: EHF Periscope Antenna

Installation of EHF Periscope Antenna

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FINANCIAL PLAN: (\$ in millions)

		PY		FY 97		Y 98	FY 99		FY		FY (FY		FY 0		FY 04		FY 05		C		otal
RDT&E	Qty	/ S	C	Qty \$	Qty	\$	Qty	S	Qty	\$	Qty	\$	Qty	S	Qty	\$	Qty \$	(Qty \$	Qty	\$	Qty	\$
PROCUREMENT:																							
Kit Quantity Installation Kits																							
Installation Kits Nonrecurring																							
Equipment									15	6.0												15	6.0
Equipment Nonrecurring Engineering Change Orders																							
Data																							
Training Equipment Support Equipment																							
Other																							
Interm Contractor Support Installation of Hardware																						0	0.0
PRIOR YR EQUIP																						0	0.0
FY 97 EQUIP																						0	0.0
FY 98 EQUIP FY 99 EQUIP																						0	0.0
FY 00 EQUIP																						0	0.0
FY 01 EQUIP FY 02 EQUIP																						0	0.0
FY 02 EQUIP FY 03 EQUIP																						0	0.0
FY 04 EQUIP																						0	0.0
FY 05 EQUIP FY TC EQUIP																						0	0.0
TOTAL INSTALLATION COST		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 PROCUREMENT COST METHOD OF IMPLEMENTATION:		0.0	<u> </u>	0.0		0.0		0.0 MINIS	TRATIVE	6.0 LEADTIN	ME: 2	0.0 2 month	s	0.0	PROCURE	0.0 MENT LE	0.0 EADTIME:		0.0 months		0.0	1	6.0
CONTRACT DATES:	FY 19	98:	N/A	A					FY 1999:		N/A				F	Y 2000:	Nov	-95		FY 2001		N/A	
DELIVERY DATES:	FY 19	98:	N/A	A					FY 1999:		N/A				F	Y 2000:	Nov	-96		FY 2001		N/A	
INSTALLATION SCHEDULE: PY	1	2	FY 99	3 4		1	FY 00 2	3	4		1	FY 2	3	4									
INSTALLATION SCHEDULE.				3 4	_		L	3				L	3	4	-								
INPUT																							
O.L. WILLIAM																							
OUTPUT																							
			FY 02				FY 03						04				FY 05						
INSTALLATION SCHEDULE:	1	2		3 4		1	2	3	4		1	2	3	4		1	2 3		4	TC			TOTAL
INPUT																							0
OUTPUT																							0
Notes/Comments																							

P-1 Shopping List-Item No 11 PAGE NO 14

Exhibit P-3A

UNCLASSIFIED CLASSIFICATION

INPUT
OUTPUT
Notes/Comments

February 1999

MODIFICATION TITLE: EHF FOT COST CODE: MODELS OF SYSTEMS AFFECTED: DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)																	
	1 .	PY	FY S		FY 98	FY 99	FY 00		FY 01	FY 02		FY 03	FY 04	FY 05	TC	1 .	Total
RDT&E PROCUREMENT: Kit Quantity Installation Kits Installation Kits Nonrecurring Equipment Equipment Nonrecurring Engineering Change Orders Data	Qt	y S	Qty	S	Qty S	Qty \$	4,00	13.5	Qty S	Qty	S	Qty \$	Qty S	Qty S	Qty S	Qt	
Training Equipment Support Equipment Other Interm Contractor Support Installation of Hardware* PRIOR YR EQUIP FY 97 EQUIP FY 98 EQUIP FY 99 EQUIP FY 00 EQUIP FY 01 EQUIP FY 02 EQUIP FY 02 EQUIP FY 03 EQUIP FY 05 EQUIP FY 05 EQUIP FY 06 EQUIP FY 07 EQUIP FY 08 EQUIP FY 08 EQUIP FY 09 EQUIP																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
TOTAL INSTALLATION COST TOTAL PROCUREMENT COST		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
METHOD OF IMPLEMENTATION:		0.0	1	0.0	0.0		STRATIVE LE		2 month			PROCUREMENT LE		17 months	0.	U	13.3
CONTRACT DATES:	FY 19	998:	N/A				FY 1999:	N/	A			FY 2000:	Nov-9	5	FY 2001:	N/A	
DELIVERY DATES:	FY 19	998:	N/A				FY 1999:	N/	A			FY 2000:	Feb-9	7	FY 2001:	N/A	
INSTALLATION SCHEDULE: PY	1		7.99 3	4	1	FY 00 2 3	4		1 2	7 01 3	4						
INPUT																	
OUTPUT																	
INSTALLATION SCHEDULE:	1	E) 2	(02 3	4	1	FY 03 2 3	4		F) 1 2	7 04 3	4	1	FY 05 2 3	4	TC		TOTAL

P-1 Shopping List-Item No 11

PAGE NO 15

Exhibit P-3A

UNCLASSIFIED CLASSIFICATION

			BUDGET ITE	M JUSTIFICAT	TION SHEET					DATE:		
				P-40						Febr	uary 1999	
APPROPRIATION/BUI	OGET ACTIV	/ITY						P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	-	
OTHER PROCUREME	NT, NAVY											
BA-1: Ships Support	Equipment								Fire	e Fighting Equpme	nt 81HB/0910	
Program Element for	Code B Item	ıs:						OTHER REL	ATED PROGR	RAM ELEMENTS		
	Prior	ID									То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY												
EQUIPMENT COST												
(In Millions)			\$18.2	\$11.3	\$17.0	\$17.0	\$17.2	\$9.6	\$9.7	\$9.8		\$109.8
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 53. Thirty one are included in the Budget Years. Twenty Two are to be procured in subsequent years. Unit cost varies.

PRODUCTION ENGINEERING - (HB830): 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.

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.

P-1 SHOPPING LIST CLASSIFICATION:
DD Form 2454, JUN 86 ITEM NO. 12 PAGE NO. 1
UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED WEAPONS SYSTEM COST ANALYSIS DATE: Weapon System P-5 February 1999 APPROPRIATION/BUDGET ACTIVITY ID Code P-1 ITEM NOMENCLATURE/SUBHEAD Other Procurement, Navy BA-1: Ships Support Equipment Fire Fighting Equpment 81HB/0910 TOTAL COST IN THOUSANDS OF DOLLARS COST **ELEMENT OF COST** ID FY 1998 FY 1999 FY 2000 CODE Code UNIT TOTAL UNIT TOTAL UNIT TOTAL UNIT TOTAL QTY COST QTY QTY COST COST QTY COST COST COST COST COST **N85 EXPEDITIONARY WARFARE HB008 BREATHING APPARATUS** 5 1 763 763 518.4 2,592 HB830 PRODUCTION ENGINEERING 164 344 SUBTOTAL (N85) 2,936 927 **N86 SURFACE WARFARE** HB008 **BREATHING APPARATUS** 3 562.666 1,688 321.750 1,287 9 278.9 2,510 HB830 PRODUCTION ENGINEERING 1,273 483 495 SUBTOTAL (N86) 2,961 1,770 3,005 **N88 AIR WARFARE** HB008 **BREATHING APPARATUS** 1,017 1,017 1216.0 1,216 HB830 PRODUCTION ENGINEERING 200 SUBTOTAL (N86) 1,217 1,216 **TOTAL EQUIPMENT** 5,105 1,770 7,157 HB5IN INSTALLATION OF EQUIPMENT **N85 EXPEDITIONARY WARFARE** 550 1,368 0 N86 SURFACE WARFARE 11,494 8,586 7,374 N87 SUBMARINE WARFARE 0 924 N88 AIR WARFARE 1.011 0 1,132 TOTAL INSTALLATION 13,055 9,510 9,874 **GRAND TOTAL** 18,160 11,280 17,031

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

DD FORM 2446, JUN 86

CLASSIFICATION: UNCLASSIFIED

						Weapon System		A. DATE	Esh	m. 1000
PROPRIATION/BUDGET ACTIVITY	,				C. P-1 ITEM I	NOMENCLATURE			Februa SUBHEAD	ry 1999
Other Procurement, Navy										
BA-1: Ships Support Equipment	1	ı				G EQUIPMENT 0910		DATE OF	81HB	IE NO
Cost Element/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABI
		(000)								
FY 98										
185 EXPEDITIONARY WARFARE										
HB008										
Fire Fighting Breathing Apparatus	1	763	NSWC CSS, FL		WR	GSA SCHEDULE COTS	Apr-98	Sep-98	YES	
N86 SURFACE WARFARE										
HB008										
Fire Fighters Breathing Apparatus	3	562,666	NSWC CSS, FL		WR	GSA SCHEDULE COTS	Apr-98	Sep-98	YES	
N88 AIR WARFARE										
HB008										
Fire Fighters Breathing Apparatus	1	1,017	NWSC CSS, FL		WR	GSA SCHEDULE COTS	Apr-98	Sep-98	YES	
FY 99										
N86 SURFACE WARFARE										
<u>HB008</u>										
Fire Fighters Breathing Apparatus	4	321.750	NWSC CSS, FL		WR	GSA SCHEDULE COTS	Nov 98	Jan 99	YES	
D. REMARKS										

UREMENT HISTORY AND PLANNING	EXHIBIT	(P-5 <i>I</i>				Weapon System		A. DATE		
DDD ODDIA TION/DUDOET A OTIVITY					0 0417514	NOMENO: ATURE				ıary 1999
PPROPRIATION/BUDGET ACTIVITY					C. P-1 IIEM	NOMENCLATURE			SUBHEAD	
Other Procurement, Navy BA-1: Ships Support Equipment					FIRE FIGHTIN	IG EQUIPMENT 0910			81HB	
BA 1. Ompo Cupport Equipment					CONTRACT	Eggii iiiziti 6916		DATE OF	SPECS	IF NO
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	WHEN
FISCAL YEAR		COST (000)	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
<u>FY 00</u>										
N85 EXPEDITIONARY WARFARE HB008										
Breathing Apparatus	5	518.4	NSWC CSS, FL		WR	GSA SCHEDULE COTS	Nov 99	Jan 00	YES	
N86 SURFACE WARFACE HB008										
Breathing Apparatus	9	278.9	NSWC CSS, FL		WR	GSA SCHEDULE COTS	Nov 99	Jan 00	YES	
N88 AIR WARFARE HB008										
Breathing Apparatus	1	1,216	NSWC CSS, FL		WR	GSA SCHEDULE COTS	Nov 99	Jan 00	YES	

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION: ITEM NO. 12 PAGE NO. 4 UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED February 1999

РЗА		INDIVID	UAL M	ODIFIC	ATION	1																	
MODELS OF SYSTEM AFFECTED:	HALON (HB001)					-	TYP	E MODIF	ICATIO	ON:							MODIFICAT	TION T	ITLE:	FIRE	FIGHTING	EQUIPME	NT
DESCRIPTION/JUSTIFICATION:																							
Halon 1301 Firefighting systems include no	ew time delays, liqui	id level in	dicator	· Halon/	1301 c	onserva	ation.																
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT MILESTO	DNES:			N/A		FINA	ANCIAL I	PLAN (TOA,\$	IN MILL	LIONS)											
	FY 1996 & Prior QTY	\$		Y 1997		′ 1998 \$		Y 1999		/ 2000 \$		2001 \$		2002		2003	FY 2004 QTY \$		2005 \$	QTY	TC \$	T QTY	OTAL
FINANCIAL PLAN (IN MILLIONS)	Q I I	Ψ		Ψ_		Ψ	Q I I		Q.11		Q11	Ψ	Q 11	Ψ	Q 11	Ψ	QII V	Q11		Q.11			Ψ
RDT&E																							
PROCUREMENT																							
INSTALLATION KITS																							
INSTALLATION KITS NONRECURRING																							
EQUIPMENT		2.6																					2.6
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER																							
OTHER																							
OTHER																							

16.9

3 16.9 1.3

1.3

1.1

1.1

INTERIM CONTRACTOR SUPPORT

INSTALL COST

TOTAL PROCUREMENT

0.6 1.4 0.7 0.6 0.2 0.7 P-1 SHOPPING LIST CLASSIFICATION: UNCLASSIFIED

0.6

0.2

0.7

23.5

26.1

ITEM NO. 12 PAGE NO. 5

1.4

0.7

0.6

CLASSIFICATION: UNCLAS	SIFIED																				Februar	1999)
P3A (Continued)						INDIVIDU	IAL M	ODIFICATI	ON (Continu	ed)													
MODELS OF SYSTEMS AFFI	ECTED:	НД	M ON ((HB001)				мс	DIFICATION	TITI F:	FIREFIG	HTING	FOUIPME	-NT									
			,					•												_			
INSTALLATION INFORMATION	ON:																						
METHOD OF IMPLEMENTAT	_	VA																					
ADMINISTRATIVE LEADTIMI			Mor	nths					CTION LEAD	гіме:		Мо	nths										
CONTRACT DATES: VAR	FY 1998:					-		FY 1999:						Y 2000:	_			_	FY 2001:				
DELIVERY DATE:	FY 1998:					=		FY 1999:	·				F	Y 2000:	-			_	FY 2001:		_		
									(\$ in Mi	llions)													
Cost:	Prior \	rears		FY 1997	F	Y 1998	F	Y 1999	FY 2000	1	FY 2001		FY 2002		FY 2003	F	FY 2004		FY 2005	To Co	mplete		Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty \$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS				16.9		1.3		1.1	0.6		1.4		0.7		0.6		0.2		0.7				23.5
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																				$\perp \perp \downarrow$			
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																				\perp			
FY 2003 EQUIPMENT																				$\perp \perp$			
FY 2004 EQUIPMENT																				$\perp \perp$			
FY 2005 EQUIPMENT																				\perp			
TO COMPLETE																							
INSTALLATION SCHEDUL	LE: S	SHIP AVAILA	ABILIT	IES																			
FY 1998 & Prior		FY 1999 2 3	4	1 2	2000	4 1		2001 3 4	FY 2	002 3 4		Y 2003 2 3		F\ 1 2	Y 2004 3	4 1	FY 200 2		TC	тот	AL		
In 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			

P-3A

12

PAGE I 6

CLASSIFICATION: UNCLASSIFIED February 1999 INDIVIDUAL MODIFICATION MODELS OF SYSTEM AFFECTED: MODIFICATION TITLE: FIREFIGHTING EQUIPMENT AFFF IMPROVED FIREFIGHTING (HB005) TYPE MODIFICATION: DESCRIPTION/JUSTIFICATION: Hardware such as Manual Hydraulic Control Valve, Verinozzle Bridge Panels and Sanitary Solid Block for storage. DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN (TOA, \$ IN MILLIONS) FY 1996 & Prior FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 TOTAL 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

> 6.5 3.5 P-1 SHOPPING LIST

6.5

INSTALL COST

TOTAL PROCUREMENT

10.4

19.5

7.0

7.0

7.4

7.4

CLASSIFICATION:

UNCLASSIFIED

47.7

56.8

3.5

3.2

3.2

0.9

0.9

1.7

1.7

4.6

4.6

2.5

CLASSIFICATION: UNCLAS	SSIFIED																					Feb	ruary 199	99	
P3A (Continued)						INDIVIDU	JAL MO	DDIFICATION	ON (C	ontinued))														
MODELS OF SYSTEMS AFF	ECTED:		AFFF IM	IPROVED	FIREFI	IGHTING ((HB00	<u>i)</u> MC	DIFIC	ATION TI	TLE:	FIREFIC	GHTING	EQUIPMEN	NT.							_			
INSTALLATION INFORMATI							_																		
METHOD OF IMPLEMENTATION			VAR				_	DDODU	STION	LEADTIN	ac.		Man	46.											
ADMINISTRATIVE LEADTIM CONTRACT DATES: VAR		1998:	IVIO	nths	_			PRODUC FY 1999:		LEADIII	1E:		Mor		2000:			E\	2001-						
DELIVERY DATE: VAR		1998:						FY 1999:		-					2000:			 F\	2001:						
																_		_			_				
											(\$	in Million	s)												
Cost:	Pi	rior 96 Years	1	FY 1997	F	FY 1998	F	Y 1999	F	Y 2000		FY 2001		Y 2002		FY 2003	F	Y 2004			FY 2004	To C	omplete		Total
	Qty	\$	Qty		Qty		Qty		Qty		Qty		Qty		Qty		Qty		Qty		\$	Qty	\$	Qty	\$
PRIOR YEARS		10.4	_	7.0	+	7.4		6.5	+'	3.5		3.2		0.9		1.7		4.6		2.5		\perp		╀	47.7
FY 1997 EQUIPMENT			\perp		!				ļ !															<u> </u>	
FY 1998 EQUIPMENT																							ļ		
FY 1999 EQUIPMENT																							ļ		
FY 2000 EQUIPMENT																									
FY 2001 EQUIPMENT																									
FY 2002 EQUIPMENT																							<u> </u>		
FY 2003 EQUIPMENT																							<u> </u>		
FY 2004 EQUIPMENT																							<u> </u>		
FY 2005 EQUIPMENT																							<u> </u>		
TO COMPLETE																							L		
INSTALLATION SCHEDU FY 1999 & Prior In Out 0	8	0	3 4 0 0 0 0	1 2 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	FY 2000 2 3 0 0 0 0	4 1	0	$\begin{array}{c c} 2001 \\ \hline 3 & 4 \\ \hline 0 & 0 \\ 0 & 0 \\ \end{array}$	0	FY 2002 2 3 0 0 0 0	0 4	0	FY 2003 2 3 0 0 0 0	4 0 0 0	0	Y 2004 - 3 - 4 0 0	0		4 0	TC 0 0			TAL 0 0		

CLASSIFICATION: UNCLASSIFIED																							February 1	1999
P3A		INDIVID	DUAL M	ODIFIC	CATION																			
MODELS OF SYSTEM AFFECTED:	BREATHI	NG APPA	RATUS	(FFBA	HB008))	TYPE	MODIF	ICATIO	ON:				_			MOE	IFICAT	ION T	ITLE:	FIRE	FIGHTING	G EQUIPMEN	NT
DESCRIPTION/JUSTIFICATION:																								
The FFBA will provide breathable air to the I/O	Fire Fighter	for a long	ger perio	d of tim	ne than t	he OB	A with p	ohysical	dema	nds on t	he use	r.												
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT M	ILESTON	ES:		N/A		FINAN	NCIAL P	LAN ((TOA, \$	IN MIL	LIONS)		<u> </u>										
	FY 1996 & QTY	Prior \$		′ 1997 \$		1998	FY QTY	1999 \$		Y 2000 \$		2001 \$		7 2002 \$		′ 2003 \$		2004		2005 \$	OTV	TC \$	T QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS)	QII	J.	QII	,	QII	Ą	QIT	Ā	QII	- P	QII	- P	QII	J.	QII	Đ	QII	ą.	WII	Þ	QII	- P	QII	3
RDT&E																							 	
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT					5	3.5	4	1.3	15	6.3	12	6.2	16	6.8	10	3.9	4	1.8	6	2.6			72	32.4
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								

3.2 15 12.0 P-1 SHOPPING LIST

5.7

1.9

4.4

7.9

OTHER OTHER

INSTALL COST

TOTAL PROCUREMENT

INTERIM CONTRACTOR SUPPORT

CLASSIFICATION: UNCLASSIFIED

72

36.5

68.9

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5.9

12.1

8.6

16 15.4

3.4

10 7.3

2.9

4.7

3.7

6 6.3

P3A (Continued)								II	NDIV	IDUA	L MO	DIFICAT	TION	(Cont	tinued	l)														Fel	bruary	/ 1999
MODELS OF SYS	STEMS AFFEC	TED:	BR	EATH	IING A	APPAI	RATU	IS (FF	ва н	B008)	M	ODIF	ICAT	ION T	ITLE:	FIR	EFIG	HTING EQUIF	MENT												
INSTALLATION II																																
ADMINISTRATIVE			-	9	Mon	ths						PRODU	СТІО	N LE	ADTIN	ME:			5 Mor	nths												
CONTRACT DAT	ES: VAR	FY	FY 1998:			Apr 9	8					FY	1999) :	N	ov 98	•		FY 2000:	Nov 99)	-	FY 2001:	:	Nov	00						
DELIVERY DATE		FY	FY 1998:			Sep 9						FY	1999) :		an 99			FY 2000:	Jan 00			FY 2001:		Jan							
															(\$ i	in Mill	lions)															
Cost:			Prior Years		F'	Y 199	7	FY	1998	В	F۱	1999		FY 2			FY 20	001	FY	2002			FY 2003		FY	2004		FY 2005	To C	omplete		Total
PRIOR YEARS		Qty	\$		Qty	\$		Qty	\$		Qty	\$	Qt	у	\$	Qty	/	\$	Qty	\$		Qty	\$	C	lty	\$	Qty	\$	Qty	\$	Qty	\$
FY 1997 EQUIPM	MENT																															
FY 1998 EQUIPM	MENT							5	4.4																						5	4.4
FY 1999 EQUIPM	MENT										4	1.9																			4	1.9
FY 2000 EQUIPM	MENT												1	3 5	.7	;	2 1	.0											\perp		15	6.7
FY 2001 EQUIPM	MENT															10	0 4.	9	2	1.2									\perp		12	4.9
FY 2002 EQUIPM	MENT																		16	7.4									\perp		16	7.4
FY 2003 EQUIPM	MENT																					9	3.4		1	0.6					10	4.0
FY 2004 EQUIPM	MENT																								4	2.3			$\overline{}$		4	2.3
FY 2005 EQUIPM	MENT																										6	3.7	\perp		6	3.7
TO COMPLETE																																
INSTALLATION		:	SHIP A		BILIT	IES																						1				
	FY 1998		FY 199			١.	FY 2			١.	FY 2		.		Y 200		11 .	_	FY 2003		ΙΙ.		2004			FY 200		TC				
	& Prior	1		3	4	1	2	3	4	1	2		1 '		2 3					4	1	2	3	-	1		3 4		TOT			
In Out	5 5	2 0		0 2	0 2	0	4 0	5 4	4 5	2 4	4 2		2 3		12 2 3 6					3 3	1 3	2 1	1 2		0 1		2 2 2 2	0	7	'2 '2		
																													P-3A			

UNCLASSIFIED

		BU	DGET ITEM	JUSTIFICA	TION SHEE	:T				DATE:			
				P-40						February 1	999		
APPROPRIATION/BUD	GET ACTIVI	TY						P-1 ITEM NO	MENCLATURE	/LINE ITEM #			
OTHER PROCURE	MENT, NA	VY						COMMAND A	ND CONTROL	. SWITCHBOAI	RDS 81GE		
BA-1: SHIPS SUPF	PORT EQU	JIPMEN [.]	Т					BLI: 09250	0				
Program Element for C	ode B Items	s :						OTHER RELA	TED PROGRA	AM ELEMENTS	5		
	Prior	ID										То	
	Years	Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY													
EQUIPMENT COST													
(In Millions)				\$8.4	\$10.1	\$12.3	\$5.7	\$8.8	\$5.2	\$5.3	\$5.4		\$61.2
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/fieldchange or partial or complete replacement of existing switchboards. Typical switchboard mods include hardware/fieldchange 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. Switchboardhardware 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.

P-1 SHOPPING LIST

ITEM NO.

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CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLA	TURE
OTHER PROCUREMENT, NAVY	COMMAND AND CON	ITROL SWITCHBOARDS 81GE
BA-1: SHIPS SUPPORT EQUIPMENT	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, NULKA, NSSMS, NTCS-A/EPROM, AIEWS 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 and material procurement of the Integrated Voice Network System for the Command and Control Ship program. The LHA Mid Life 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. For the Command and Control Ship program the IVN/ISDN system provides increased video, voice and data communications capability, and decreases the number of hand sets and terminals in confined operational spaces onboard the ship.

PUC GEINS - Outyear installation funding identified supports installation of ORDALTs/enhancements/upgradesfor command and control 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.

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CLASSIFICATION:

ITEM NO.

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UNCLASSIFIED

DD Form 2454, JUN 86

UNCLASSIFIED CLASSIFICATION:

	WEAPONS	SYSTE!		IALYSIS				Weapon Sy	/stem			DATE: Februar	y 1999	
APPRO	OPRIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM	NOMENCLA	ATURE/SU	BHEAD		•	-	
	Procurement, Navy SHIPS SUPPORT EQUIPMENT					Α		COMMAN BLI: 0925		ONTROL	SWITCHBO	OARDS 8	1GE	
			TOTAL CO	OST IN THO	DUSANDS (F DOLLAR	RS							
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000				
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
GE001	RMA	А			50			50			50			
GE002	MK 443 / MK 70 / ICNET	Α			800			0			0			
	C & C SWBDs Design, TM & MODs Installation	А			1,895 34			1,298 99			1,266 101			
GE004	DDG 993 ORDALTs/Field Changes	Α			15			0			0			
	CG 47/DDG 51 ORDALTS/Field Changes Installation	А			143 30			175 40			240 80			
	DD 963 SWBDs, ORDALTs/Field Changes Installation	А			90 93			275 0			155 92			
GE066	CGN ORDALTs/Field Changes	Α			12			0			0			
	LHA,LCC, LHD ORDALTs/Field Changes Installation	А			230 0			428 35			598 0			
	FFG SWBDs, ORDALTs/Field Changes Installation	Α			93 137			15 80			45 0			
	CV/CVN ORDALTs/Field Changes Installation	А			321 38			420 0			573 0			
GE830	Production Engineering	Α			75			75			75			
GE950 GEINS	INTEGRATED VOICE NETWORK SYSTEM Installation	А		1	3,206 1,102		2	5,502 1,592		3	6,544 2,482			
	Hardware Installation				6930 1434			8238 1846			9546 2755			
TOTAL	M 2446, JUN 86			P-1 SHOP	8,364	ı		10,084			12,301	CLASSIFIC	CATION	

UNCLASSIFIED CLASSIFICATION:

BUDGET PROCUR	EMEN	IT HISTO	ORY AND PLAN	NING EXHIBI	T (P-5A)	Weapon System		A. DATE	E February 199	9
B. APPROPRIATION	DN/BI	JDGET A	ACTIVITY		C. P-1 ITE	M NOMENCLATURE			SUBHEAD	
Other Procurement OPN BA-1: SHIPS	-	•	UIPMENT		COMMAND A	ND CONTROL SWITCHE	BOARDS		81	GE
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										
GE002 MK 443 CSCP	3	267	PHD NSWC	N/A	GSA/BOA	TRACOR/OXNARD SYSTEMS/NEEDHAM	4/98	8/98	YES	
GE950 INTERIOR VOICE NETWORK	1	3206	NAVSEA	TSR - 11/98	GSA/FFP SY	GTE GOVERNMENT STEMS/ LUCENT TECHNOLOG GREENSBORO, NC	1/99 GIES 	9/99	YES	
FY 1999										
GE950 INTERIOR VOICE NETWORK	2	2751	NAVSEA	TSR - 11/98	GSA/FFP SY	GTE GOVERNMENT STEMS/ LUCENT TECHNOLOG GREENSBORO, NC	 1/99 GIES 	1/00	YES	
FY 2000						,				
GE950 INTERIOR VOICE NETWORK	3	2181	NAVSEA	TSR - 11/98	GSA/FFP SY	GTE GOVERNMENT STEMS/ LUCENT TECHNOLOG GREENSBORO, NC	 1/00 GIES 	1/01	YES	
D. REMARKS										

DD Form 2446-1, JUL 87

P-1 SHOPPING LIST

CLASSIFICATION: **UNCLASSIFIED**

РЗА		INDIVID	UAL	MODIFIC	CATIO	N																		
MODELS OF SYSTEM AFFECTED:	CV/CVN/	LHA/LHD					TYP	E MODIF	ICATI	ON:				_			MOE	DIFICATI	ON T	ITLE:	GEO	002		
DESCRIPTION/JUSTIFICATION:																								
ORDALTs/ENHANCEMENTS/UPGRADE	S FOR C&	C SWITC	HBO	ARDS																				
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT I	MILESTO	NES:																					
	FY	1997		1998		1999		Y 2000		Y 2001		2002		Y 2003		2004		Y 2005		2006		TC	<u> </u>	OTAL
FINIANICIAL DI ANI (INI MILLI IONIC)	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	<u> \$ </u>	QTY	\$	QTY	/ \$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																								0.0
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																							0	0.0
EQUIPMENT			3	350.0					1	540.0	1	540.0	1	540.0	1	540.0	2	1080.0					9	3590.0
EQUIPMENT NONRECURRING		360.0		450.0						290.0		200.0		470.0		200.0		300.0					0	2270.0
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

740 | 1 | 1010 | 1 | 740 | 2 | 1380 CLASSIFICATION: P-1 SHOPPING LIST

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UNCLASSIFIED

5860.0

830

3 800 0

TOTAL PROCUREMENT

FECTE	D: <u>CV/</u>	CVN/L	HD/LHA				_ MC	DIFICA	ATION TITLE	:	GE002									_			
ΓΙΟΝ:																							
	AIT																						
ME:	1007	4 MC		_						_		4 MC		_		A1/A							
																		_					
	1337.		IVA				1 1 1330	·.	Aug-3i	,				1333.	_	IN/A		_					
										Millions	s)												
								_															otal
Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty 0	0
																						0	0
				3																		3	0
																						0	0
																						0	0
										1												1	0
												1										1	0
														1								1	0
																1						1	0
																		2				2	0
ULE: 98 or 1 0	FY 1999 2 3 0 0	4 0	1 2 0 0	0	0 1	0	3 4 0 0	1	FY 2002 2 3 0 0 0 0	4 1	0 1	3 0	0 1	0	3 4	1	2 3 1 0	0	<u>TC</u> 0 0	9)		
	JLE: 98 1 0	ATION: AIT ME: FY 1997: FY 1997: FY 1997: Prior Years Qty \$ ULE: SHIP AV 98 FY 1999 1 2 3 0 0 0	ATION: AIT ME: 4 MC FY 1997: FY 1997: Prior Years FY Qty \$ Qty JLE: SHIP AVAILAE 98 1 2 3 4 0 0 0 0 0 0	ATION: AIT ME:	ATION: AIT ME: 4 MONTHS FY 1997: N/A FY 1997: N/A Prior Years FY 1997 F Qty \$ Qty \$ Qty 3 3 JLE: SHIP AVAILABILITIES 98 FY 1999 1 2 3 4 1 2 3 0 0 0 0 0 0 0 0 0 0	ATION: AIT ME: 4 MONTHS FY 1997: N/A FY 1997: N/A Prior Years FY 1997 FY 1998 Qty \$ Qty \$ Qty \$ 3 3 JLE: SHIP AVAILABILITIES 98 FY 1999 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 0 0 0 0 0 0 1 1	ATION: AIT ME:	ATION: AIT ME: 4 MONTHS FY 1997: N/A FY 1997: N/A FY 1998 Prior Years FY 1997 FY 1998 FY 1999 Qty \$ Qty \$ Qty \$ Qty \$ Qty \$ Qty \$ JLE: SHIP AVAILABILITIES 98 FY 1999 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ATION: AIT ME:	ATION: AIT ME: 4 MONTHS FY 1997: N/A FY 1997: N/A FY 1998: Apr-90 FY 1998: Aug-90 (\$ in Prior Years FY 1997 FY 1998 FY 1999 FY 2000 Qty \$ JLE: SHIP AVAILABILITIES 98 FY 1999 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ATION: AIT ME: 4 MONTHS FY 1997: N/A FY 1997: N/A FY 1998: Apr-98 FY 1999: FY 1999: (\$ in Millions) Prior Years FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 Qty \$ Qt	ATION: AIT WE: 4 MONTHS FY 1997: N/A N/A PRODUCTION LEADTIME: 4 MONTHS FY 1999: N/A FY 1998: Apr-98 FY 1999: N/A (\$ in Millions) Prior Years FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 F Oty \$ Qty \$	ATION: AIT WE: 4 MONTHS FY 1997: N/A FY 1997: N/A FY 1998: Agr-98 FY 1999: N/A RE: 4 MONTHS FY 1997: N/A FY 1998: Agr-98 FY 1999: N/A (\$ in Millions) Prior Years FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 Qty \$	ATION: AIT WE: 4 MONTHS FY 1997: N/A FY 1997: N/A FY 1998: Apr-98 FY 1998: PY 1999: N/A FY 1999: N/A FY 1998: Apr-98 FY 1999: PY 1999: N/A FY 1998: Aug-98 FY 1999: PY 1999: N/A Sin Millions Sin Millions Prior Years FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2004 FY 2007 FY 2008 FY 2009 F	ATION: AIT WE: 4 MONTHS FY 1997: N/A FY 1998: Apr-98 FY 1999: N/A FY 1999: N/A FY 1997: N/A FY 1998: Apr-98 FY 1999: N/A FY 1998: Apr-98 FY 1999: N/A N/A FY 1998: Apr-98 FY 1999: N/A N/A FY 1998: Apr-98 FY 1999: N/A	ATION: AIT WE: 4 MONTHS PRODUCTION LEADTIME: 4 MONTHS FY 1997: N/A FY 1998: Apr-98 FY 1999: N/A FY 1997: N/A FY 1998: Apr-98 FY 1999: N/A Prior Years FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 To C. Oty S	NTION: AIT PRODUCTION LEADTIME: 4 MONTHS FY 1997: N/A FY 1998: Apr-88 FY 1999: N/A FY 2003 FY 2004 FY 2005 TO Complete FY 1999: N/A FY 2004 FY 2005 TO Complete FY 2005 TO	ATION: AIT WE: 4 MONTHS PY 1997: N/A PY 1998: Apr-98 FY 1999: N/A FY 1997: N/A PY 1998: Apr-98 FY 1999: N/A (\$ in Millions) (\$ in Millions)					

CLASSIFICATION:	UNCLASSIFIED					
P3A		INDIVIDUAL MODIFICATION				
MODELS OF SYSTE	M AFFECTED:	DDG 993	TYPE MODIFICATION:	ORDALTs/Field Changes	MODIFICATION TITLE:	GE003/GE004
DESCRIPTION/JUST ORDALTs/ENHANC	IFICATION: EMENTS/UPGRADES FOR C	&C SWITCHBOARDS				

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY	1997	FY 1998	FY	′ 1999	<u>F</u>	Y 2000	FY	2001	FY	2002	<u>F</u>	2003	FY	2004	<u>FY</u>	2005	FY	2006		TC	I	<u>OTAL</u>
	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	75.0																				3	75.0
INSTALLATION KITS NONRECURRING		150.0	15.0																			0	165.0
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	3	225	0 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	240.0

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:	UNCLASSIFIE	ס				
P3A		INDIVIDUAL MODIFICATION				
MODELS OF SYSTE	M AFFECTED:	CG 47/ DDG 51	TYPE MODIFICATION:	ORDALTs/Field Changes	MODIFICATION TITLE:	GE003/GE005
DESCRIPTION/JUST ORDALTs/ENHANC		FOR C&C SWITCHBOARDS				

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY QTY	1997 \$	<u>FY</u> QTY	<u>/ 1998</u>	<u>FY</u> QTY	<u>′ 1999</u> \$	FY QTY	<u>/ 2000</u> \$	<u>F\</u> QTY	<u>/ 2001</u> \$	<u>FY</u> QTY	2002 \$	<u>F\</u> QTY	<u>/ 2003</u> \$	<u>FY</u> QTY	2004 \$	<u>F\</u> QTY	<u>′ 2005</u> \$	<u>FY</u> QTY	2006 \$	QT	<u>TC</u> TY \$	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)		<u> </u>				, , , , , , , , , , , , , , , , , , ,		<u> </u>		<u> </u>		<u> </u>						,				· · · · · ·		
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS	12	255.0	1	103.0	4	100.0	8	170.0	12	220.0	12	235.0	8	155.0	10	175.0	8	215.0					75	1628.0
INSTALLATION KITS NONRECURRING		324.0		515.0		424.0		284.0		224.0		395.0		185.0		358.0		118.0					0	2827.0
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		60.0		30.0		40.0		80.0		120.0		100.0		0.0		100.0		0.0					0	530.0
TOTAL PROCUREMENT	12	639	1	648	4	564	8	534	12	564	12	730	8	340	10	633	8	333	0	0	C	0	75	4985.0

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLAS	SSIFIE	D						INDIVIDU	JAL N	ODIFIC	ATION	l (Cor	ntinue	d)														
1 or (continued)									JAL 11	iobii io	,A1101	(00)	itiiiuc	۵,														
MODELS OF SYSTEMS AFI	ECTE	D:	CG	47/DI	DG 51					N	/ODIFI	CATI	ON TIT	LE:	GE003/	GE00	5								_			
INSTALLATION INFORMAT									_																			
METHOD OF IMPLEMENTA ADMINISTRATIVE LEADTIN		AII		N/A					_	DDOD	UCTIC	NII E	A DTIM	ı = .		N	/A											
CONTRACT DATES:		1997		IN/A	N/A					FY 19		IN LE	N/A	_		IN	/A	FY	1999:		N/A							
DELIVERY DATE:		1997			N/A					FY 19			N/A						1999:	_	N/A		<u> </u>					
													(¢ in	Millior	20)													
Cost:	Pr	ior Ye	ars	F,	Y 1997		F١	Y 1998	F	Y 1999		FY 20			Y 2001		FY 20	002	F۱	/ 2003	F	Y 2004	FY	2005	To Cor	molete	-	Γotal
0001.	Qty		\$	Qty	\$		Qty	\$	Qty		Qty		\$	Qty	\$	Q		\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	,		•	,				· ·		T			.		*		-,	Ť				7	1.7				0	0
FY 1997 EQUIPMENT				12	60																						12	60
FY 1998 EQUIPMENT							1	30																			1	30
FY 1999 EQUIPMENT									4	40																	4	40
FY 2000 EQUIPMENT												8 8	30														8	80
FY 2001 EQUIPMENT														12	120												12	120
FY 2002 EQUIPMENT																1	12 10	00									12	100
FY 2003 EQUIPMENT																			8	0							8	0
FY 2004 EQUIPMENT																					10	100					10	100
FY 2005 EQUIPMENT																							8	0			8	0
TO COMPLETE																												
INSTALLATION SCHEDL FY 198 & Pric In 13 Out 13	8	FY 2 2	1999 3 0	4 0 4	4	FY 20	000 3 0 4	4 1 3 0 4	3	3	4 3 3 3	3	3		1 2	4 2	3 4	4	FY 2 2 4 2	2004 3 4 2 0 2 4	2	FY 2005 2 3 4 2 2 2	0	TC 0 0	TOT/ 75 75			
																								P-3	3A			

CLASSIFICATION: UNCLASSIFIED			
P3A	INDIVIDUAL MODIFICATION		
MODELS OF SYSTEM AFFECTED: DD 963	TYPE MODIFICA	TION: ORDALTs/Field Changes	MODIFICATION TITLE: GE003/GE006
DESCRIPTION/JUSTIFICATION: ORDALTs/ENHANCEMENTS/UPGRADES FOR C&	C SWITCHBOARDS		

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	<u>FY</u> 2	1 <u>997</u> \$	<u>FY</u> QTY	<u>′ 1998</u> \$	<u>FY</u> QTY	1999 \$	FY QTY	2000 \$	<u>FY</u> QTY	<u>′ 2001</u> \$	<u>FY</u> QTY	2002 \$	<u>FY</u> QTY	2003 \$		2004 \$	<u>FY</u> QTY	<u>2005</u>	<u>FY</u> QTY	2006 \$	QTY	TC g	S.	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	Q.I.I	Ψ	Q.1.1	<u> </u>	Q.1.	Ψ		Ψ	Q I I	Ψ	Q.1.	Ψ		Ψ	Q.I.	Ψ	Q I I	<u> </u>		<u> </u>				Q.I.I	Ψ
RDT&E																								0	0.0
PROCUREMENT																									
INSTALLATION KITS	15	75.0	6	15.0	9	155.0	7	90.0	2	60.0	4	120.0	3	60.0	6	120.0	5							57	695.0
INSTALLATION KITS NONRECURRING		300.0		285.0		195.0		65.0				25.0		275.0		75.0		175.0						0	1395.0
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		75.0		93.0		0.0		92.0		0.0		0.0		0.0		0.0		0.0						0	260.0
TOTAL PROCUREMENT	15	450	6	393	9	350	7	247	2	60	4	145	3	335	6	195	5	175	0	0	0)	57	2350.0
								P-1 S	SHOPE	PING LIST	Г										CLAS	SSIFIC	CATIO	N:	

CLASSIFICATION: UNCLASS	SIFIED																						
P3A (Continued)						INDIVID	UAL M	ODIFICA	TION (C	Continue	d)												
MODELS OF SYSTEMS AFFE	CTED:	DD	963					МС	DIFICA	TION TIT	TLE:	GE003/	/GE006	3						_			
INSTALLATION INFORMATIC	_	A 1T					_																
METHOD OF IMPLEMENTATI ADMINISTRATIVE LEADTIME	_	AII	N/A				_	DDODII	CTION	LEADTIN	1 = .		N/A										
CONTRACT DATES:	 FY 19	007:	IN/A	N/A				FY 1998		N/A	-		IN/A		1999:	N/	٨						
DELIVERY DATE:	FY 19			N/A				FY 1998	-	N/A					1999:	N/		_					
BELIVEIXI BATTE.				1471				11 1000	· -			`			<u> </u>	14/		_					
Cost:	Drior	Years		Y 1997		Y 1998	E	Y 1999	EV	(\$ in i	Millions) Y 2001		Y 2002	FY 2003	•	Y 2004		Y 2005	To C	omplete		Fotal
Cost.	Qty	\$	Qty		Qty		Qty	\$	Qty	\$	Qty		Qty		Qty \$			Qty	\$	Qty		Qty	\$
PRIOR YEARS	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	φ	Qty	Ψ	Qiy ş	Qij	Ψ	Qty	Ψ	Qty	Ψ	Qty 0	0
FY 1997 EQUIPMENT			15	75																		15	75
FY 1998 EQUIPMENT					6	93																6	93
FY 1999 EQUIPMENT							9	0														9	0
FY 2000 EQUIPMENT									7	92												7	92
FY 2001 EQUIPMENT											2	0										2	0
FY 2002 EQUIPMENT													4	0								4	0
FY 2003 EQUIPMENT															3 0							3	0
FY 2004 EQUIPMENT																	6 0					6	0
FY 2005 EQUIPMENT																		5	0			5	0
TO COMPLETE																							
INSTALLATION SCHEDUL FY 1998 & Prior In 21 Out 21	1 4	SHIP AV FY 1999 2 3 5 0 0 4	1	BILITIES	7 2000 2 3 3 1	4 0 1 0 0 0	2	2001 3 4 1 0 1 1	1 0 0	FY 2002 2 3 2 2 0 2	0	1 2 0 2 0 0	! 1	4 1 0 1 3 0		4 1 0 2 4 0	3 0	0	TC 0 0	TO ⁻ 5			
																			P-	3A			

CLASSIFICATION: UNCLASSIFIE																								
P3A		INDIVIE	DUAL	MODIF	ICATIO	ON																		
MODELS OF SYSTEM AFFECTED:	CGN					_	TYPI	E MODIF	ICATIO	ON:	ORDA	ALTs/Fie	eld Cha	anges			MODII	FICATI	ON TI	TLE:	GE0	03/GE066		
DESCRIPTION/JUSTIFICATION:																								
ORDALTs/ENHANCEMENTS/UPGRADES	FOR C&C	SWITC	CHBO	ARDS																				
DEVELOPMENT STATUS/MAJOR DEVELO	PMENT N	/ILEST	ONES:																					
	<u>FY 1</u> QTY	1 <u>997</u> \$		1998		1999		Y 2000 \$		<u>Y 2001</u> \$	<u>FY</u>	2002	<u>FY</u>	2003	<u>FY</u>	<u>2004</u> \$	FY:	200 <u>5</u>	FY OTV	2006	OTV	<u>TC</u> \$	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	QII	Ą	QII		QII	φ	QIT	Ą	QII	Φ	QII	Ą	QII	φ	QII	φ	QII	φ	QII	Ф	QII	Ψ	QII	Ψ
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING		25.0		12.0																			0	37.0
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

UNCLASSIFIED

0.0

37.0

INSTALL COST

TOTAL PROCUREMENT

25

12

CLASSIFICATION: UNC	LASSIFIED				
P3A	INDIVIDUAL MODIFICATION				
MODELS OF SYSTEM AFFE	CTED: LHA/LHD	TYPE MODIFICATION:	ORDALTs/Field Changes	MODIFICATION TITLE:	GE003/GE067
DESCRIPTION/JUSTIFICATION	ON:				
ORDALTs/ENHANCEMENT	S/UPGRADES FOR C&C SWITCHBOARDS				
DEVELOPMENT STATUS/MA	AJOR DEVELOPMENT MILESTONES:				

	FY ·	1997 \$	<u>FY</u> QTY	<u>′ 1998</u> \$	<u>FY</u> QTY	<u>1999</u> \$	<u>F`</u> QTY	<u>/ 2000</u> \$	<u>F\</u> QTY	<u>/ 2001</u> \$	<u>FY</u> QTY	2002 \$	<u>F`</u> QTY	<u>/ 2003</u> \$	<u>FY</u> QTY	<u>2004</u>	<u>F\</u> QTY	<u>/ 2005</u> \$		2006	то	<u>T(</u>	<u>2</u> \$	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	<u> </u>					Ψ		<u> </u>				<u> </u>									Ī	İ	Ψ		Ψ
RDT&E																								0	0.0
PROCUREMENT																						\perp			
INSTALLATION KITS	2	70.0	1	100.0	8	235.0	10	245.0	10	280.0	1	600.0	2	570.0	4	600.0	2	570.0				\perp		40	3270.0
INSTALLATION KITS NONRECURRING		500.0		640.0		618.0		935.0		791.0		694.0		810.0		882.0		795.0				1		0	6665.0
EQUIPMENT																								0	0.0
EQUIPMENT NONRECURRING																								0	0.0
ENGINEERING CHANGE ORDERS																						\perp		0	0.0
DATA																						\perp		0	0.0
TRAINING EQUIPMENT																								0	0.0
SUPPORT EQUIPMENT																						\perp		0	0.0
OTHER																						\perp		0	0.0
OTHER																						\perp		0	0.0
OTHER																						\perp		0	0.0
INTERIM CONTRACTOR SUPPORT																						\perp		0	0.0
INSTALL COST		10.0		0.0		35.0		0.0		220.0		255.0		230.0		210.0		345.0				\perp		0	1305.0
TOTAL PROCUREMENT	2	580	1	740	8	888	10	1180	10	1291	1	1549	2	1610	4	1692	2	1710	0	0	0)	0	40	11240.0

P-1 SHOPPING LIST

CLASSIFICATION:

P3A (Continued)						INDIVIDU	JAL M	ODIFICA	TION (Continu	ed)													
MODELS OF SYSTEMS	AFFECTE	D: <u>LH</u>	A/LH[)				_ M0	DDIFIC	ATION T	TTLE:	GE003/	GE067								=			
INSTALLATION INFORM METHOD OF IMPLEMEI ADMINISTRATIVE LEAD CONTRACT DATES: DELIVERY DATE:	NTATION: DTIME: FY	AIT 1997: 1997:	N/A	N/A N/A			<u>-</u>	PRODU FY 1998 FY 1998	3:	I LEADT N/	Ά		N/A	F`	Y 1999: Y 1999:		N/A N/A							
										(\$ in Mill	ions)												
Cost:		or Years		Y 1997		Y 1998		Y 1999		Y 2000		Y 2001		FY 2002	_	FY 2003		Y 2004		2005	_	omplete		Total •
PRIOR YEARS	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty 0	0
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	220											10	220
FY 2002 EQUIPMENT													1	255									1	255
FY 2003 EQUIPMENT															2	230							2	230
FY 2004 EQUIPMENT																	4	210					4	210
FY 2005 EQUIPMENT																			2	345			2	345
TO COMPLETE																								
	′ 1998	FY 1999 2 3 8 0	9 4 0	BILITIES	0	4 1 0 10 0	0 0	2001 3 4 0 0	0	FY 200 2 3 1 0 0 0	4 0	0	FY 2003 2 3 1 1 0 1	4 0 2 1	2 2	2004 3 4 0 0 2 2	0	FY 2005 2 3 1 1 0 0	0	TC 0 0	TO1 4 4			
																				P-:	3.Δ			

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 DEVELOPMEN	I MILESTONES:				
<u> </u>	<u>Y 1997</u> <u>FY 1998</u> <u>FY 1999</u>	FY 2000 FY 2001	FY 2002 FY 2003	FY 2004 FY 2005 FY 2006	TC TOTAL
QTY	/ \$ QTY \$ QTY \$	QTY \$ QTY \$	QTY \$ QTY \$	OTY \$ OTY \$ OTY \$	QTY \$ QTY \$

		1997		1998		1999		2000		<u>/ 2001</u>		2002	FY 2			2004		2005		2006		TC		OTAL
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS	12	90.0	14	84.0	5	0.0	6	45.0	5	0.0													42	219.0
INSTALLATION KITS NONRECURRING		377.0		9.0		15.0				10.0		15.0		15.0		15.0		15.0					0	471.0
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		137.0		80.0		0.0		80.0													0	297.0
TOTAL PROCUREMENT	12	467	14	230	5	95	6	45	5	90	0	15	0	15	0	15	0	15	0	0	0	0	42	987.0

P-1 SHOPPING LIST

UNCLASSIFIED

CLASSIFICATION:

CLASSIFICATION: UNCLA	SSIFIE	D																					
P3A (Continued)						INDIVID	UAL M	ODIFICAT	TION (Continue	ed)												
MODELS OF SYSTEMS AF	FECTE	D: FFG	<u>; </u>					_ MO	ODIFIC	CATION T	ITLE:	GE068								_			
INSTALLATION INFORMA																							
METHOD OF IMPLEMENT		AIT																					
ADMINISTRATIVE LEADTI		1007	N/A		_					N LEADTI			N/A			N 1/A							
CONTRACT DATES: DELIVERY DATE:		1997:		N/A N/A		-		FY 1998		N//					1999:	N/A		-					
DELIVERY DATE:	FY	1997:		N/A		-		FY 1998	5:	IN//	A			FY	1999:	IN/P	•	-					
Cost:	D-	iar Vaara		Y 1997		TY 1998		TV 1000		(\$ in N				V 2002	FY 2003		V 2004	T =	V 2005	To C	aman lata	Tota	
Cost:	Qty	ior Years	Qty		Qty		Qty	Y 1999 \$	Qty	Y 2000 \$	Qty	Y 2001 \$	Qty	Y 2002 \$	Qty \$	Qty	Y 2004 \$	Qty	Y 2005 \$	Qty	omplete \$	Qty Tota	\$ \$
PRIOR YEARS	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qiy	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qiy \$	Qty	Ψ	Qty	Ψ	Qty	Ψ		<u>Ψ</u> 0
FY 1997 EQUIPMENT			12	0																		12 (0
FY 1998 EQUIPMENT					14	137								 -							ļ	14 137	7
FY 1999 EQUIPMENT							5	80	<u> </u>										<u> </u>			5 80	0
FY 2000 EQUIPMENT								<u> </u>	6	0									<u> </u>			6 0	0
FY 2001 EQUIPMENT			-						_		5	80							<u> </u>			5 80	0
FY 2002 EQUIPMENT			-						_										<u> </u>			0 0	0
FY 2003 EQUIPMENT																						0 0	0
FY 2004 EQUIPMENT																							
FY 2005 EQUIPMENT																						0 0	0
TO COMPLETE																			<u></u>				
INSTALLATION SCHED FY 19 & Pri In 26 Out 26	998 for 1 3	FY 1999 2 3 2 0	4 0	1 2	Y 2000 2 3 3 1	4 0			0		<u>4</u> 0	1 2 0 0 0 0	0		0 0 0	0		0	0 0	4	TAL 12 12		
																			P-3	3A			

CLASSIFICATION:	UNCLASSIFIED					
P3A		INDIVIDUAL MODIFICATION				
MODELS OF SYSTE	M AFFECTED: <u>CV/CVN</u>		TYPE MODIFICATION:	ORDALTs/Field Changes	MODIFICATION TITLE:	GE003/GE069
DESCRIPTION/JUST						
ORDALTs/ENHANC	EMENTS/UPGRADES FOR C&(C SWITCHBOARDS				
DEVELOPMENT STA	ATUS/MAJOR DEVELOPMENT N	MILESTONES:				

	<u>FY 1</u> QTY		<u>FY</u> QTY	<u>′ 1998</u> \$	<u>FY</u> QTY	<u>′ 1999</u> \$	FY QTY	<u>2000</u> \$	F) QTY	<u>/ 2001</u> \$	<u>FY</u> QTY	2002 \$	F) QTY	<u>′ 2003</u> \$		<u>2004</u>	F) QTY	<u>/ 2005</u> \$	<u>FY</u> QTY	2006 \$	QTY	<u>TC</u> \$	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	~	Ψ	~''	Ψ	~ ' '	Ψ		¥	~ ' '	Ψ		Ψ	~ ' '	Ψ	~ ' '	Ψ				<u> </u>		Ψ	<u> </u>	Ψ
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS	12	300.0	2	152.0	3	270.0	13	200.0	11	540.0	7	675.0	5	640.0	7	675.0	5	640.0					65	4092.0
INSTALLATION KITS NONRECURRING		729.0		869.0		599.0		843.0		800.0		720.0		646.0		821.0		647.0					0	6674.0
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		43.0		38.0		0.0		0.0		0.0		220.0		310.0		285.0		255.0					0	1151.0
TOTAL PROCUREMENT	12	1072	2	1059	3	869	13	1043	11	1340	7	1615	5	1596	7	1781	5	1542	0	0	0	0	65	11917.0
								P-1 S	HOPE	PING LIST											CLA	SSIFICATIO	ON:	

IED																						
			I	INDIVID	UAL MC	DIFICA	TION (Continu	ed)													
TED: <u>CV</u>	//CVN					МС	DDIFIC	ATION T	TTLE:	GE003/0	E069								_			
					_																	
·. /···	N/A	L				PRODU	ICTION	LEADTI	IME:		N/A											
Y 1997:		N/A				FY 1998	3:	N/A	A			FY	1999		N/A		_					
Y 1997:		N/A				FY 1998	3:	N//	A			FY	1999:	: <u> </u>	N/A		_					
<u> </u>		24400		, , , , , ,								7/ 2222		7/ 0000								
			_																		04.	Total
ity \$	Qty	Ф	Qty	\$	Qty	Ф	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	Ф	Qty	Ъ	Qty 0	0
	12	43																			12	43
			2	38																	2	38
					3	0															3	0
							13	0													13	0
									11	0											11	0
											7	220									7	220
													5	310							5	310
															7	285					7	285
																	5	255			5	255
FY 1999 1 2 3 2 1 0	9 4 0	1 2 13 0	3	0 5	5 6	3 4 0 0	4	3 0	0	1 2	2 3	0 2	3	3 4 0	3	2 3 2 0	0	TC 0 0	65 65	5		
	SHIP A FY 1997 1	TED:	TED:	TED:	SHIP AVAILABILITIES	SHIP AVAILABILITIES	N: AIT	INDIVIDUAL MODIFICATION (TED: CV/CVN	NE	NDIVIDUAL MODIFICATION (Continued) TED:	N: AIT	NE	NE	NE	NE CV/CVN MODIFICATION (Continued) MODIFICATION TITLE: GE003/GE069 GE003/G	No	Note	NDIVIDUAL MODIFICATION (Continued) TED: CV/CVN	NDIVIDUAL MODIFICATION (Continued) NODIFICATION TITLE: GE003/GE069 SECOND GEORGE GE003/GE069 GEORGE GEORGE	INDIVIDUAL MODIFICATION (Continued) TED: CV/CVN	NE	INDIVIDUAL MODIFICATION (Continued) TED: CVICVN

CLASSIFICATION:	UNCLASSIFIED			
P3A		INDIVIDUAL MODIFICATION		
MODELS OF SYSTE	M AFFECTED:	CV/CVN/LHA/LHD/DDG 51/DD 993/ DDG963/CG/(TYPE MODIFICATION:	MODIFICATION TITLE:	GE001/GE830/GEINS
DESCRIPTION/JUST	ΓΙΓΙCATION:			
Reliability, Maintaina	ability, & Availability (RM	A): Evaluate product improvement proposals designed to improve switching	capability and availability, upgrade unreliable components and repla	ace obsolete parts and items no longer
in production.				
DEVELOPMENT STA	ATUS/MAJOR DEVELOR	PMENT MILESTONES:		

FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 TC QTY \$ QTY

	QII	φ	QII	Ψ	QII	Ψ	QII	Ψ	QII	φ	QII	Ψ	QII	φ	QII	Ψ	QII	φ	QII	Ψ	QII	φ	QII	Ψ
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																							0	0.0
PROCUREMENT																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING		151.0		97.0		224.0		226.0		233.0		241.0		265.0		224.0		234.0					0	1895.0
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	151	0	97	0	224	0	226	0	233	0	241	0	265	0	224	0	234	0	0	0	0	0	1895.0
								P-1	SHOPF	PING LIST											CLA	SSIFICAT	ΓΙΟΝ:	

UNCLASSIFIED CLASSIFICATION: INDIVIDUAL MODIFICATION P3A MODELS OF SYSTEM AFFECTED: LHA 1-5 AN/STC-1 REPLACEMENT TYPE MODIFICATION: MODIFICATION TITLE: GE950 AGF 3. 11: LCC 19. 20 DESCRIPTION/JUSTIFICATION: LHA INTERIOR VOICE NETWORK - LHA MIDLIFE UPGRADE DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 **TOTAL** QTY QTY \$ QTY QTY FINANCIAL PLAN (IN MILLIONS) RDT&E 0 0.0 **PROCUREMENT** INSTALLATION KITS 0.0 INSTALLATION KITS NONRECURRING 0.0 **EQUIPMENT** 2791.0 1 3206.0 2 5502.0 3 6544.0 0 2 2768.0 20811.0 1 0.0 9

 TRAINING EQUIPMENT
 0
 0.0

 SUPPORT EQUIPMENT
 0
 0.0

 OTHER
 0
 0.0

 OTHER
 0
 0.0

 OTHER
 0
 0.0

 OTHER
 0
 0.0

EQUIPMENT NONRECURRING

DATA

ENGINEERING CHANGE ORDERS

INTERIM CONTRACTOR SUPPORT

INSTALL COST 1102.0 1592.0 2482.0 1278.0 969.0 7423.0 TOTAL PROCUREMENT 2791 4308 7094 9026 0 1278 3737 0 0 0 0 28234.0 P-1 SHOPPING LIST CLASSIFICATION:

UNCLASSIFIED

0.0

0.0

0.0

0.0

0

0

CLASSIFICATION: UNCLA	SSIFIE	D																					
P3A (Continued)						INDIVID	UAL M	ODIFICATIO	ON (Cont	inued)													
MODELS OF SYSTEMS AFFECTED: LHA 1-5 AN/STC AGF 3, 11; LCC 19			1-5 AN/STC-1 REPLACEMENT			NT	MODIFICATION TITLE:				GE950												
INSTALLATION INFORMAT	ION:																						
METHOD OF IMPLEMENTATION: Tiger Team				4 month (LCC/AGF Class)																			
			12 MONTHS					PRODUC	CTION LE	EADTIME:		12 month (LHA 1 Class)											
CONTRACT DATES: FY 1997: 1/98				FY 1998: <u>Sep-98</u>				FY 1999: 1/99															
DELIVERY DATE: FY 1997: 9/98				FY 1998: Sep-99 FY 1999: 1/00						_													
										(\$ i	n Millions	s)											
Cost:	Pri	or Years	F	Y 1997		FY 1998		FY 1999		FY 2000		FY 2001	1	FY 2002		FY 2003	F'	Y 2004	FY 200	5 To	Complete		Total
	Qty	\$	Qty	\$	Qty		Qty		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty S	G Qty	/ \$	Qty	\$
PRIOR YEARS																						0	0
FY 1997 EQUIPMENT					1	1102																1	1102
FY 1998 EQUIPMENT							,	1 1592														1	1592
FY 1999 EQUIPMENT									1	1217	1	526								\perp		2	1743
FY 2000 EQUIPMENT									2	1265	1	546								_		3	1811
FY 2001 EQUIPMENT																						0	0
FY 2002 EQUIPMENT												206 *	2	969						\perp		2	969
FY 2003 EQUIPMENT																				\perp		0	0
FY 2004 EQUIPMENT																				\perp		0	0
FY 2005 EQUIPMENT																				-		0	0
TO COMPLETE																							
* FY0	1 Advan	nce Planni	ng for	FY02 ins	tallatio	ons	·		·		·						·			·			
INSTALLATION SCHEDU FY 199		SHIP AV		BILITIES	Y 200	0 1		FY 2001		FY 2002			Y 2003		EV	/ 2004		FY 200	5 TC				
& Pric		2 3	4	1 2	3	4	1 2	3	4 1 0 1	2 :	3 4 0	1 2	2 3	4 0	1 2	3	4 1 0 0	2 3	4	T	OTAL 9		
Out 0	0			0 1			0 0		0 2		1 0	0 0			0 0		0 0	0 0			9		
																				D-3V			

UNCLASSIFIED

		BUI	DGET ITEM	I JUSTIFIC <i>A</i>	DATE:								
				P-40	February 1999								
APPROPRIATION/BUD OTHER PROCURE	-				P-1 ITEM NOMENCLATURE/LINE ITEM #								
BA 1: Ships Supp	ort Equip	ment			POLLUTION CONTROL EQUIPMENT BLI: 093500 SBHD: 81HF								
Program Element for Co	ode B Items:				OTHER RELATED PROGRAM ELEMENTS								
	Prior	ID										То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		Complete	Total
QUANTITY													
EQUIPMENT COST													
(In Millions)			\$116.3	\$129.5	\$113.5	\$54.2	\$66.3	\$68.2	\$46.4	\$35.7			\$630.1
SPARES COST													
(In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

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.

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 required 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 qpm pumps. The IO for this is 10. The total cost is \$21.1 M.

HF025 - METAL GLASS SHREDDER (MSG), LARGE PULPER (LP) AND SMALL PULPERS (SP) - These equipments 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 benign 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 the Navy submitted to Congress the Navy's Special-Area Compliance Plan in November, 1996. 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 awareness. The RFO for this procurement was released in February 1997 with contract award planned in November 1997. The Pulpers and Shredders will be installed on existing ships by K ShipAlt backfit starting in August 1998. They will be forwarded fitted on new ship construction where applicable. The Inventory Objective for MGS is 158 units, for LP is 136 and SP is 37. Total program cost for procurement and installation, including installation design, is \$250.9M.

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

P-1 SHOPPING LIST PAGE NO. 1

ITEM NO. 14

CLASSIFICATION:

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40 CONTINUATION	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	
BA 1: SHIPS SUPPORT EQUIPMENT	POLLUTION CONTROL EQUIPMENT BLI: 093500

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 and 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 03. 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 \$421.8M equipment and install. 221 CFC-12 AC Backfit units have been installed and 327 CFC-12 Reefer Backfit units have been installed.

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.

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	
BA 1: SHIPS SUPPORT EQUIPMENT	POLLUTION CONTROL EQUIPMENT BLI: 093500
PROOF AM DECORPTION JUSTIFICATION	

PROGRAM DESCRIPTION/JUSTIFICATION:

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-released 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.

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 system, steam generator systems, and material transfer system. Required I/O is 69.

HF058 Arctic Oil Recovery Systems: This system 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 planting 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 lightening 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, emuisifice, or mixes with other contaminants will become thick and viscous to the point that regular centrifugal pumping systems will not remove 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.

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CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40 CONTINUATION	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	
BA 1: SHIPS SUPPORT EQUIPMENT	POLLUTION CONTROL EQUIPMENT BLI:093500

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 1.

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 to 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.

HF027 FOOD GRINDER/PULPER: SHIPALT 4102K installs a dedicated fool grinder/pulper and sink in the SSN 688 Class galley/scullery. The food grinder/pulper will eliminate the use of plastic wet bags for grindable food wastes, improve the quality of life by alleviating handling and stowage of grindable food waste, and provide operational enhancements by reducing Trash Disposal Unit (TDU) operations. The Secretary of the Navy submitted to Congress the Navy's MARPOL Annex V Special Area, Solid Waste Management Plan in Dec 97. In this plan, the Navy committed to the use of food grinder/pulpers exists on SSBN 726 Class submarines. SHIPALT 4102K will install food grinders/pulpers on forty-four existing SSN 688 Class submarines starting in FY 00 and ending in FY 04. The total cost is \$4.4M.

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CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLA	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY		
BA 1: SHIPS SUPPORT EQUIPMENT		POLLUTION CONTROL EQUIPMENT BLI: 093500
HF028 POLLUTION PREVENTION AFLOAT: The shipboard funds provide for the procurement and Fleetwide installation of savings to the Fleet through reduction in the quantity of hazardous material used aboard ship, offloaded, and subseque used/excess hazardous material offloads will also assist shore activities in meeting pollution prevention and community right-trinstallation of suites of equipment tailored to individual ship classes. Installation of these suites of equipment will begin in FY HF830 - PRODUCTION ENGINEERING - The review and approval of any production contact technical document, Manuals, PMS, Level III production drawings. Provisional Technical Documentation (PTD), Program Support Data final design reviews. This work can be accomplished by NSWC, PHILA and the in-service engineering agent, oth	ently disposed of by shoro-know requirements under 00 and end in FY 05. requirements or the separate develop (SPD), and Allowance er Naval Activities or co	uipment which will produce immediate life cycle cost re activities as hazardous waste. The reduction of er Executive Order 12856. The funds will enable the uired I/O is 171. Total program cost is \$28.8M. Imment of this documentation to include Technical Parts Lists (AL's); and Engineering in support of contractors as appropriate.
P-1 SHOPPING LIST	CLASSIFIC	CATION:

UNCLASSIFIED

PAGE NO.

UNCLASSIFIED CLASSIFICATION:

Other Pr	PRIATION/BUDGET ACTIVITY Procurement, Navy SHIPS SUPPORT EQUIPMENT ELEMENT OF COST		TOTAL CO			ID Code	P-1 ITEM	NOMENCLA	TURE/SUBI	HEAD		February	1999	
Other Pr BA 1: S COST	rocurement, Navy SHIPS SUPPORT EQUIPMENT		TOTAL CO			ID Code	P-1 ITEM	NOMENCLA	TURE/SUBI	HEAD				
COST S	SHIPS SUPPORT EQUIPMENT		TOTAL CO											
COST			TOTAL CO											
	ELEMENT OF COST		TOTAL CO						POLLUTIC	N CONTR	OL EQUIP	MENT BL	l: 093500	
	ELEMENT OF COST	1		ST IN THO	USANDS O	F DOLLAR	S							
		ID I		FY 1998			FY 1999			FY 2000				
		Code												
				UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
			QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HF830 PI	PRODUCTION ENGINEERING	Α			\$2,274			\$2,273						
HF025 PI	PULPERS & SHREDDERS	Α												
	METAL GLASS SHREDDERS	A	101	58,253	\$5,884	57	62,140	\$3,542						
	ARGE PULPERS		86	*	\$9,145	50		\$5,321						
	SMALL PULPERS		21	*	\$1,836	16		\$1,267						
SI	SUBTOTAL SOLID-WASTE		208		19,139	123		12,403						
	NON-SOLID WASTE													
HF019 20	200 GPM SEWAGE PUMP	Α	2	78,500	\$157									
				-,	•									
HF024 C	CFC-12 (R-12) AC BACKFIT	Α	9	26,666	\$240	0	0	\$0	0		\$0			
	, ,			Í										
HF024 C	CFC-12 (R-12) REEFER BACKFIT	Α	103	25,135	\$2,589	2	54,500	\$109	0		\$0			
HF024 C	CFC-114 (R-114) AC BACKFIT	Α	20	260,000	\$5,200	9	276.222	\$2,486	8	263.125	\$2,105			
HF027 F0	FOOD GRINDER/PULPERS	Α							11	20.000	\$220			
HFU2/ F	OOD GRINDER/PULPERS	A							11	20.000	\$220			
HF028 P	POLLUTION PREVENTION AFLOAT	Α							18	108.722	\$1,957			
HF830 PI	PRODUCTION ENGINEERING	А			\$1,663			\$255			\$1,083			
					. ,						. ,			
	NIDTOTAL NON COLUD MACTE													
	SUBTOTAL NON-SOLID WASTE SUBTOTAL SEA 03L													
TOTAL	JOB TO THE OLIN GOL	1			28,988			\$15,253			\$5,365			

UNCLASSIFIED CLASSIFICATION:

	WEAPON		M COST AN	ALYSIS			,	Weapon Sys	stem			DATE:	-	4000
APPRO	DPRIATION/BUDGET ACTIVITY	P-	·5			ID Code	P-1 ITEM N	IOMENCLA	TURE/SUB	HEAD			February	1999
Other	Procurement, Navy SHIPS SUPPORT EQUIPMENT					Α		POLLUTIO			MENT BI	LI: 093500		
			TOTAL CO	ST IN THO	JSANDS OI									
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000				
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAI COST
	B. SHOREBASED - (N452)													
IF040	Support Systems	А	4	87	348	2	89	178	2	90	180			
IF042	Boom Tend Boats (Inflatable)	А				2	96	192						
HF051	Oil Boom Systems	А	5	241.2	1,206	3	244	732	5	245	1225			
IF054	Beach Transfer Systems	А	1	63	63	2	68	136						
IF055	Salvage Skimmer Systems	А				2	100	200	2	106	212			
HF056	Equipment Clean-up Systems	Α	1	95	95									
IF057	Logistics Support Systems	А	3	172	516	3	176	528	2	178	356			
IF058	Arctic Oil Recovery Systems	Α	1	361	361				1	375	375			
IF059	Boom Mooring Systems	Α	16	10.3	165	16	11	176						
IF060	Hot Tap Systems	Α	1	234	234									
IF061	Viscous Oil Transfer Systems	Α	2	105	210				3	106	318	3		
HF062	Submersible 6" Hyd Pump Sys	Α	2	74	148	1	75	75	2	76	152	2		
HF064	Modular Barge Systems	Α				1	619	619						
HF065	Boarding Kits	A												
OTAL					3,346			2,836			2,818			

UNCLASSIFIED

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	WEAPONS	S SYSTEN P-		ALYSIS				Weapon Sy	stem			DATE:	February 1	1999
Other	OPRIATION/BUDGET ACTIVITY Procurement, Navy SHIPS SUPPORT EQUIPMENT	-	-			ID Code	P-1 ITEM	NOMENCLA			IPMENT E	BLI: 09350) SBHD: 811	
			TOTAL CO	ST IN THO	USANDS O	F DOLLAR	RS							·
COST CODE	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000				
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SUBTOTAL SEA 00C				\$3,346			\$2,836			\$2,818			
	SUBTOTAL SEA 03L				\$28,988			\$15,253			\$5,365			
	GRAND TOTAL EQUIPMENT				\$32,334			\$18,089			\$8,183			
	<u>INSTALL</u>													
	N85 EXPENDITIONARY WARFARE				\$33,133			\$31,651			\$23,194			
	N42 AUXILIARY WARFARE				\$4,105			\$3,466			\$3,105			
	N86 SURFACE WARFARE				\$31,644			\$62,276			\$62,962			
	N87 SUBMARINE WARFARE				\$1,769			\$2,528			\$1,350			
	N88 AIR WARFARE				\$13,347			\$11,528			\$13,411			
	N45 ENVIRONMENTAL COMPLIANCE				<u>\$0</u>			<u>\$0</u>			\$1,301			
	GRAND TOTAL INSTALL				\$83,998			\$111,449			\$105,323			
TOTAL	M 2446 ILIN 86			P-1 SHOPE	116,332			129,538			113,506	CLASSIEIC	<u> </u>	

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

*QTY CHANGE ITEM NO. 14 PAGE NO. 8

BUDGET PROCUR	EME	NT HISTO	ORY AND PLAN	NING EXHIB	SIT (P-5A)	Weapon System		A. DATE		
	PS SUPPORT EQUIPMENT ment/ (FAR									ry 1999
B. APPROPRIATI	ON/B	UDGET A	ACTIVITY		C. P-1 ITE	M NOMENCLATURE			SUBHEAD	
Other Procuremen	t, Nav	y			POLLUTION (CONTROL EQUIPMENT (0935)		81	HF
BA 1: SHIPS SUPI	PORT	EQUIPN	IENT							
Cost Element/ FISCAL YEAR	QTY	COST		RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	AVAILABLE	IF NO WHEN AVAILABLE
FY 98 (HF024) CFC 12 AC/BF (1) CFC 12 REEFER (1) CFC 114 BACKFIT	BF (1) 9 \$26,666 NSWC PHILA, PA FER (1) 103 \$25,135 NSWC PHILA, PA CKFIT 20 \$260,000 NAVSEA	20-Jun-97	RCP WR C/FP	INTEGRATED SYS ARL., VA NSWC PHILA YORK INT	FEB 98 FEB 98 FEB 98	NOV 98 NOV 98 NOV 98	YES YES YES			
(HF019) SEWAGE PUMP (200 GPM)	2	\$78,500	SPCC, MECH, PA		RCP/OPTION	SCOTT PUMP	APR 98	OCT 99	YES	
(HF025) LARGE PULPER		+ - ,-	_		C/FP C/FP	UNIV TECH, TN FREQ ENG LAB	NOV 97 NOV 97	JUL 98 JUL 98	YES YES	
SMALL PULPER					C/FP C/FP	UNIV TECH, TN FREQ ENG LAB	NOV 97 NOV 97	JUL 98 JUL 98	YES YES	
METAL GLASS SHREDDER	10 \$110,882 NAVSEA		C/FP	FREQ ENG LAB	NOV 97	JUL 98	YES			
D REMARKS										

D. REMARKS

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

P-1 SHOPPING LIST

UNCLASSIFIED

CLASSIFICATION:

B. APPROPRIATION/E	DUDGET AC	TIVITV			C D 1 17	LEM NOMENCL	ATLIDE		SUBHEAD	ary 1999
		HIVIII			C. P-111	I EINI NOINENCL	AIUKE			
Other Procurement, Na	•								81	1HF
BA 1: SHIPS SUPPORT	EQUIPMEN	1 I				ontrol Equipment				
Cost Element/ FISCAL YEAR	QTY	UNIT COST	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
		(000)								
FISCAL YEAR (98)										
HF040 Support Systems	4	87	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	11/98	YES	
HF051 Oil Boom Systems	5	241.2	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	01/99	YES	
HF054 Beach Trans Sys	1 1	63	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	07/98	YES	
HF056 Equip Cln-up Sys	1 1	95	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	01/99	YES	
HF057 Logistics Spt Sys	3	172	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	01/99	YES	
HF058 Artic Oil Revy Sys	1	361	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	01/99	YES	
HF059 Boom Mooring Sys	16	10.3	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	09/98	YES	
HF060 Hot Tap Systems	1	234	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	01/99	YES	
HF061 Viscous Oil Trans Sys	2	105	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	12/98	YES	
HF062 Sub 6" Hyd Pump Sys	2	74	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk, VA	02/98	12/98	YES	
D. REMARKS	<u> </u>		1 1		L			ļ	<u> </u>	

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 14 PAGE NO. 10

BUDGET PROCUR	EME	NT HISTO	ORY AND PLAN	INING EXHIB	SIT (P-5A)	Weapon System		A. DATE		
					. ,				Februa	ry 1999
B. APPROPRIATI	ON/B	UDGET A	ACTIVITY		C. P-1 ITEI	M NOMENCLATUR	E		SUBHEAD	
Other Procuremen	t, Nav	/y			POLLUTION C	ONTROL EQUIPMENT	(0935)		81	HF
BA 1: SHIPS SUPI	PORT	EQUIPM	IENT							
					CONTRACT			DATE OF	SPECS	IF NO
	QTY			RFP ISSUE DATE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	WHEN
FISCAL YEAR	SCAL YEAR COST (000) OF PCO (000) FY 99 (HF024) \$276,222 NAVSEA (HF025) 31 \$109,858 19 \$100,811 NAVSEA MALL PULPER 8 \$81,608 876,742 NAVSEA NAVSEA				& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
	SHIPS SUPPORT EQUIPMENT st Element/ SCAL YEAR QTY UNIT COST (000) LOCATION OF PCO FY 99 (HF024) \$276,222 NAVSEA (HF025) RGE PULPER 31 19 \$100,811 \$109,858 NAVSEA NAVSEA NAVSEA IALL PULPER 8 8 8 \$81,608 8 NAVSEA NAVSEA									
CFC 114 AC BACKFIT	9	\$276,222	NAVSEA		FFP/OPT	YORK, INTL	DEC 98	SEP 99	YES	
(HF025)										
LARGE PULPER	31	\$109,858			C/FP/OPT	UNIV TECH, TN	APR 99	OCT 99	YES	
	19	\$100,811	NAVSEA		C/FP/OPT	FEEQ ENG LAB	APR 99	OCT 99	YES	
SMALL PULPER	8	\$81,608	NAVSEA		C/FP/OPT	UNIV TECH, TN	APR 99	OCT 99	YES	
	8	\$76,742	NAVSEA		C/FP/OPT	FEEQ ENG LAB	APR 99	OCT 99	YES	
METAL GLASS SHREDDER	57	\$62,140	NAVSEA		C/FP/OPT	FREQ ENG LAB	APR 99	OCT 99	YES	

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 14 PAGE NO. 11

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

BUDGET PROCUREMENT HIS	TORY A	ND PLANNI	NG EXHIBIT (P	-5A)		Weapon Syster	n	A. DATE	Fals	4000
B. APPROPRIATION/BUDGE	T ACTIVI	TY			C. P-1 ITEN	│ // NOMENCLATU	IRE		SUBHEAD	ary 1999
Other Procurement, Navy BA 1: SHIPS SUPPORT EQUIF						ontrol Equipmen				31HF
Cost Element/ FISCAL YEAR FISCAL YEAR (99) HF040 Support Systems HF042 Boom Tend Boats (Inflat) HF051 Oil Boom Systems HF054 Beach Trans Sys HF055 Salv Skimmer Sys HF057 Logistics Spt Sys HF059 Boom Mooring Sys HF062 Sub 6" Hyd Pump Sys HF064 Modular Barge Sys	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 AVAILABLI
FISCAL YEAR (99)										
• ,	2	89	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk,VA	Feb-99	09/99	YES	
	2	96	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk,VA	Feb-99	08/99	YES	
	3	244	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk,VA	Feb-99	09/99	YES	
	2	68	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk,VA	Feb-99	07/99	YES	
HF055 Salv Skimmer Sys	2	100	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk,VA	Feb-99	09/99	YES	
	3	176	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk,VA	Feb-99	08/99	YES	
	16	11	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk,VA	Feb-99	03/99	YES	
	1	75	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk,VA	Mar-99	08/99	YES	
	1	619	NAVSEA	11/15/93 (OPTION)	C/CPAF	GPC-Norfolk,VA	Feb-99	07/99	YES	
		1	I	I	1			1		

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 14 PAGE NO. 12

BUDGET PROCUR	EMEN	IT HISTO	RY AND PLAN	NING EXHIBI	T (P-5A)	Weapon System		A. DATE		
					<u> </u>					ry 1999
B. APPROPRIATION	ON/BI	JDGET A	CTIVITY		C. P-1 ITE	M NOMENCLATURE	Ė		SUBHEAD	
Other Procuremen	t, Nav	y		CONTROL EQUIPMENT	(0935)		81	HF		
BA 1: SHIPS SUP	PORT	EQUIPM	ENT							
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 00 (HF024) CFC 114 AC BACKFIT (HF027)	8	\$263,125	NAVSEA		FFP	UNKNOWN	DEC 00	SEP 01	YES	
FOOD GRINDER/PULPER (HF028)	11	\$20,000	NAVSEA		FFP	UNKNOWN	DEC 99	MAR 00	YES	
POLLUTION PREVENTION AFLOAT	18	\$108,722	NAVSEA		FFP	UNKNOWN	NOV 99	MAR 00	YES	

D. REMARKS

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

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 14 PAGE NO. 13 **UNCLASSIFIED**

BUDGET PROCUREMENT HIS	STORY A	ND PLANN	IING EXHIBIT (F	P-5A)		Weapon Syster	n	A. DATE		
			-	•					Febru	ary 1999
B. APPROPRIATION/BUDGE	T ACTIV	ITY			C. P-1 ITEM	M NOMENCLATU	JRE		SUBHEAD	
Other Procurement, Navy										B1HF
BA 1: SHIPS SUPPORT EQUI	PMENT				Pollution Co	ontrol Equipmen	t			
					CONTRACT			DATE OF	SPECS	IF NO
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	FIRST DELIVERY	AVAILABLE NOW	WHEN AVAILABLE
FISCAL YEAR (00)										
HF040 Support Systems	2	90	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	11/99	09/00	YES	
HF051 Oil Boom Systems	5	245	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	11/99	08/00	YES	
HF055 Salv Skimmer Sys	2	106	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	11/99	09/00	YES	
HF057 Logistics Spt Sys	2	178	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	11/99	08/00	YES	
HF058 Actic Oil Recvy Sys	1	375	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	11/99	03/00	YES	
HF061 Viscous Oil Transfer Sys	3	106	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	11/99	08/00	YES	
HF062 Sub 6" Hyd Pump Sys	2	76	NAVSEA	11/15/93 (OPTION)	C/CPAF	Unknown	11/99	12/00	YES	

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 14 PAGE NO. 14

FY 1998/99 BUDGET PRODU	1998/99 BUDGET PRODUCTION SCHEDULE, P-21																	DA ⁻					brua							
APPROPRIATION/BUDGET A OTHER PROCUREMEN													Wea	apon	Sys	stem)	P-1	ITE 81l	M N HF/	ЮМ 09	ENC 35	CLAT	ΓUR	E					
							Pro	duct	ion I	Rate)				Pro	cure	mei	nt Le	adti	mes										
Item			nufactu and L		n	M	SR	1-8	8-5	M	AX		T P			T A			Initia fg Pl			eord fg P			Tota	al		Un Mea	it of	
PLASTIC WASTE	UNIV	/ERSA	L TEC	CH															9 m			7 m						ea		
PROCESSORS																														
	WES	TING	HOUS	E															9 m	os		7 m	nos					ea		
																														_
		FISCAL YE						L YEA	R 19	97									FISC	CAL Y	EAR	1998					Г			
ITEM / MANUFACTURER	F	V V T F A									IDAR	YEAF	R 199	7									EAR 1	998			ĺ			
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A WESTINGHOUSE						2 2 2 2 2 2 2 2 2 2 2						2	0	0	3	3	3	1	U											
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C UNIV TECH INC C WESTINGHOUSE D UNIV TECH INC		36 12 24 52 10 42					2 2	2 2	3	2	2	0	0	0	3	3	3	3	3	1	0									
D WESTINGHOUSE			2	0	2	0				2																	Щ			L
										FISC	CAL Y	EAR	1999									FISC	CAL Y	EAR	2000					
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	0	1998 N	D	J	F	М	Α	М	J	YEAF J	Α	s	0	N	D	J	F	CA M	Α	М	EAR 2	J	А	s	B A
		C	ī		_	C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	0 V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	L
Remarks:			<u> </u>		<u> </u>																<u> </u>									

FY 1998/99 BUDGET PRODUC			EDULI	E, P-2	1													DA	TE		F	ebr	uary	/ 199	99					
APPROPRIATION/BUDGET AC OTHER PROCUREMENT			ВА	1									Wea	apor						OLL	LUTI					EQU	JIPM	IENT	(09	935)
							Pro	duct	ion l	Rate									adti											
			nufacti										ΤP			-T A			Initia			eorc							nit of	
Item	1		and L		n	М	SR	1-8	8-5	M	٩X	to	Oc	t 1		Oct	1	М	fg P	LT	M	fg P	LT		Tota				asur	
HF025 METAL GLASS SHREDDER		FREQ	ENG L	AB									0			12			8						20			МО	NTF	<u> </u>
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ITEM / MANUFACTURER	F Y	S V	Q T	D E	B A		1996	_		I _				NDAR		l	1		١	l _		l _	1	LEND	T .	1	1			В
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BASE CONTRACT METAL GLASS SHREDDER	98		101	0	101														Α								2	4	6	89
WE TAL GLASS STINEDDEN	30		101		101																							4		
ITEM / MANUFACTURER	F	S	Q	D	В		1998			FISC	CAL Y	EAR		NDAR	VΕΔΕ	2 100	ıa.					FISC		EAR		FΔR 2	2000			
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		С	Y	L	L	C T	0 V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	0 V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	A L
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		57	0	57							Α						5	5	5	5	5	5	5	5	5	5	5	2	0
Remarks:	1					<u> </u>																							<u> </u>	Щ

FY 1998/99 BUDGET PRODU			EDULE	E, P-2	1													DA	TE		F	ebr	uary	y 19	99					
APPROPRIATION/BUDGET A					_								W	eap/	on S	ystem		P-1	ITE											
OTHER PROCUREMEN	T, NAV	Υ		BA	1																_LU	TIOI	A C	TMC	ROL	_ EG	UIF	MEI	VT (0	935)
							Pro	duct	ion	Rate)					ocurem														
			nufactı										_T P		Α	LT Afte	r		Initia			eord							Unit c	
Item			and L	ocatio	n	M:	SR	1-8	8-5	M	AX	to	ОС	t 1		Oct 1		M	lfg P	LT	М	fg P	LT		Tota				1easu	
HFO25 LARGE PULPER	FEL,	NJ											0			12			7			7			12			MC	HTM	
HFO25 LARGE PULPER	UTI,	TN											0			12			7			7			12			MC	HTM	
HFO25 SMALL PULPER	FEL,	TN											0			12			7			7			12)		MC	NTH	
HFO25 SMALL PULPER	UTI,	TN											0			12			7			7			12			MC	NTH	
									F	ISCA	L YEA	R 19	97									FIS	CAL	YEAR	1998	3				
ITEM / MANUFACTURER	F	S	Q	D	В		1996					_	CA	LEND	AR YE	AR 1997		_					C	ALENI	DAR \	/EAR	1998			
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		С	Υ		L L	C T	0	E	A	E	A	Р	A	U	U	U G	E P	C T	0 V	E	A N	E	A	Р	A	U	U		E	L
BASE CONTRACT	_						V	С	N	В	R	R	Y	N	L	G	Ρ.		V	С	IN	В	K	R	Y	N	L	G	P	
LARGE PULPER/FEL	98		40	0	40														Α								1	4	4	31
LARGE PULPER/UTI	98		46	0	46														A							2	3		4	33
SMALL PULPER/FEL	98		10	0	10														A							1	0	1	1	7
SMALL PULPER/UTI	98		11	0	11														Α							1	1	1	1	7
										F	ISCAI	ΥFΑ	R 19	99								FIS	CAL	YEAR	2000)	_	-		
ITEM / MANUFACTURER	F	s	Q	D	В		1998			•	100/11	,			AR YE	AR 1999								ALENI			2000			
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		С	Υ	L	L	C	O	E	A	E	A	P	A	U	U	Ü	E	C	O	E	A	E	A	P	A	U	U		E	A L
						Т	V	С	Ν	В	R	R	Y	N	L	G	Р	Т	V	С	Ν	В	R	R	Y	N	L	G	Р	_
BASE CONTRACT (CONT)																														
LARGE PULPER/FEL	98					3	4	4	4	3	4	4	4	1																0
LARGE PULPER/UTI	98					4	4	4	4	4	4	4	4	1										1	1					0
SMALL PULPER/FEL	98 98					1	1	1	1	1	1	1																		0
SMALL PULPER/UTI OPTION 1	98					1	1	1	1	1	1	1																	-	0
LARGE PULPER/FEL	99		19	0	19					Α							2	2	2	2	3	4	3	1					-	0
LARGE PULPER/UTI	99		31	0	31					A							4	4	4	4	4	4	4	3					-	0
SMALL PULPER/FEL	99		8	0	8					Α							1	1	1	1	1	1	1	1						0
SMALL PULPER/UTI	99		8	0	8					Α							1	1	1	1	1	1	1	1						0
Remarks:																														
																NO 1 10														

DD Form 2445, JUL 87

311 / 244

Previous editions are obsolete

P-1 SHOPPING LIST

ITEM NO 14 PAGE

CLASSIFICATION: UNCLASSIFIED																						February 199	99
РЗА		INDIVID	UAL	MODIFIC	CATIO	N																	
MODELS OF SYSTEM AFFECTED:	SEWAGE	PUMP/G	REYV	/ATER (2	200 GP	M)	TYPE	MODIF	ICATIC	N:						MOD	IFICATI	ON TI	TLE:	POL	LUTION CO	ONTROL EQ	UIPMENT
DESCRIPTION/JUSTIFICATION:																							
Collect Greywater Waste from showers, la	undry and o	discharge	it to p	oierside s	sewage	faciliti	es																
DEVELOPMENT STATUS/MAJOR DEVELO	OPMENT N	IILESTO	NES:				FINA	NCIAL F	PLAN: (TOA \$	MILLIO	NS)											
	FY 1996 QTY		<u>FY</u> QTY	<u>/ 1997</u> ′ \$	<u>FY</u> QTY	1998 \$	<u>F</u> QTY	Y 1999 \$	<u>FY</u> QTY	<u>2000</u>	<u>FY</u> QTY	<u>2001</u> \$	FY 2002 QTY \$	<u>F\</u> QTY	<u>/ 2003</u>	<u>FY</u> QTY	2004 \$	<u>FY</u> QTY	2005 \$	QTY	TC \$	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)																							
RDT&E																							
<u>PROCUREMENT</u>																							
INSTALLATION KITS																							
INSTALLATION KITS NONRECURRING																							
EQUIPMENT	4	0.6	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	2.5	2	2.9	AP	0.5	2	2.6								2	3.1	10	15.1
TOTAL PROCUREMENT		1.1		3.3		2.7		2.9 P-1	SHODE	0.5	г	2.6								CLA	SSIFICATION	ON:	16.2

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February 1999 CLASSIFICATION: UNCLASSIFIED

										a. (
P3A (Continued)	INDIVIDUAL	INDIVIDUAL MIODIFICATION										
MODELS OF SYSTEMS AFFECTED:	ı	SEWAGE PUMP/GREYWATER (200 GPM)	MOD	MODIFICATION TITLE:	POLLUT	POLLUTION CONTROL EQUIPMENT	QUIPMENT			1		
INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION:	SHIPYARD											
ADMINISTRATIVE LEADTIME:	9 Months		PRODUCTIC	ON LEADTIME:		18 Months	Î					
CONTRACT DATES: FY 1 DELIVERY DATE: FY 1	FY 1998: Apr-98 FY 1998: Oct-99	86	FY 1999 FY 1999	FY 1999 FY 1999		<u>. u</u>	FY 2000 FY 2000			FY 2001: FY 2001:		
				√ u; \$)	(\$ in Millions)							
Cost: Prior	Prior 96 Years FY 1997	7 FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete		Total
	\$ Oty	Oty \$	Qty \$	Qty \$	Qty \$	Oty \$	Qty \$	Qty \$	Qty \$	Qty \$	Qţ	မှာ
PRIOR YEARS AP	0.5 2	3.0 2 2.5									4	0.9
FY 1997 EQUIPMENT			2 2.7								2	2.7
FY 1998 EQUIPMENT		#	AP 0.2	AP 0.5	2 2.6						2	3.3
FY 1999 EQUIPMENT												
FY 2000 EQUIPMENT												
FY 2001 EQUIPMENT												
FY 2002 EQUIPMENT												
FY 2003 EQUIPMENT												
FY 2004 EQUIPMENT												
FY 2005 EQUIPMENT												
TO COMPLETE												
HISTAL BATON SCHEDIEF	SHIP AVAII ARII ITIES											
FY 1998 & Prior 4	FY 1999 2 3 4 1 0 0 2 0	3 4 1	Y 2001	FY 200		3 4	FY 20	FY 200	4 0	TOTAL 10		
Out 2 0	0 2 0	2 0 0 0	0 0 0	2 0 0	0 0	0 0 0	0 0 0	0 0 0	0 0 2	10		
									ă	P-3A		
				ITEM NO. 14	PAGE	19		ี้	CLASSIFICATION: UNCLASSIFIED	UNCLASSIFIE	æ	

CLASSIFICATION: UNCLASSIFIED February 1999 INDIVIDUAL MODIFICATION MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT MODELS OF SYSTEM AFFECTED: OIL CONTENT MONITOR TYPE MODIFICATION: DESCRIPTION/JUSTIFICATION: Monitor Oil Content of Oil/Water Separator Effiuent DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FINANCIAL PLAN: (TOA \$ MILLIONS) FY 1996 & Prior FY 1997 FY 1998 QTY QTY \$ QTY \$ QTY \$ FINANCIAL PLAN (IN MILLIONS) RDT&E **PROCUREMENT** INSTALLATION KITS INSTALLATION KITS NONRECURRING **EQUIPMENT** 153 0.8 153 8.0 **EQUIPMENT NONRECURRING** ENGINEERING CHANGE ORDERS DATA TRAINING EQUIPMENT SUPPORT EQUIPMENT OTHER OTHER OTHER INTERIM CONTRACTOR SUPPORT INSTALL COST 76 4.9 33 2.4 12 1.4 0 0.0 17 0.7 2 0.1 13 153 10.5 1.0

> 0.0 ITEM NO. 14 P-1 SHOPPING LIST PAGE 20

0.7

2 0.1

1.4

TOTAL PROCUREMENT

5.7

CLASSIFICATION:

10.30

CLASSIFICATION: UNCLASSIFIED	ED															Fel	February 1999	666
P3A (Continued)				NDINIDNI	INDIVIDUAL MODIFICATION (Continued)	ATION (C	ontinued)											
MODELS OF SYSTEMS AFFECTED:		IL CONT	OIL CONTENT MONITOR	TOR		MODI.	MODIFICATION TITLE:	ij	POLLUT	POLLUTION CONTROL EQUIPMENT	EQUIPMENT							
RMATION: AENTATIOI ADTIME:		AIT / SHIPYARD Months	YARD			ODUCTIC	ON LEADTIME		•	16 Months								
	FY 1998: FY 1998:				ŒŒ	. 1999: . 1999:	FY 1999:				FY 2000: FY 2000:					FY 2001: _		
+900	Drior Of Veers		EV 1007	EV 1008	5	FV 1999	(9	(\$ in Millions)	5)	2002		2003	V 2004	EV 2005		To Complete	F	To to L
	Otv S	ě	66	986 - AO	ð		Otv r 2000	ΔţC	\$	Otv - 1	Š		Otv 1 S	Q14 Z00		S Complete		S.
PRIOR YEARS	4.9	33	2.4	•	1.4 0		0.7			0						-	153	10.5
FY 1997 EQUIPMENT																		
FY 1998 EQUIPMENT																		
FY 1999 EQUIPMENT																		
FY 2000 EQUIPMENT																		
FY 2001 EQUIPMENT																		
FY 2002 EQUIPMENT																		
FY 2003 EQUIPMENT																		
FY 2004 EQUIPMENT																		
FY 2005 EQUIPMENT																		
TO COMPLETE																		
NSTALLATION SCHEDLILE	SHID AVAII ARII ITIES	ABILITIE	g. II															
FY 1998	FY 1999	~	-	FY 2000	FY 2001		1 5 EY 2	FY 2002	,	FY 2003	FY 2004	904	FY 2005			IATOT		
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1.0. 15 91.							NET I	ITEM NO. 14	PAGE	21			10	P-3A CLASSIFICATION: UNCLASSIFIED	P-3A ON: UNC L	ASSIFIED		
:: 2									1				i					

CLASSIFICATION: UNCLASSIFIED **FEBRUARY 1999** INDIVIDUAL MODIFICATION MODELS OF SYSTEM AFFECTED: SMALL SOLID WASTE PULPER 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 1996 & Prior FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 TC **TOTAL** QTY \$ QTY QTY FINANCIAL PLAN (IN MILLIONS) RDT&E PROCUREMENT INSTALLATION KITS INSTALLATION KITS NONRECURRING 1.8 16 **EQUIPMENT** 21 1.3 37 3.1 EQUIPMENT NONRECURRING ENGINEERING CHANGE ORDERS DATA TRAINING EQUIPMENT SUPPORT EQUIPMENT OTHER OTHER OTHER INTERIM CONTRACTOR SUPPORT INSTALL COST 2.2 14 9.9 21 11.7 0.7 37 24.5

ITEM NO. 14 PAGE NO. 22

1.2 11.7 P-1 SHOPPING LIST

TOTAL PROCUREMENT

UNCLASSIFIED

CLASSIFICATION:

CLASSIFICATION: UNCLASSIFIED **FEBRUARY 1999** INDIVIDUAL MODIFICATION MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT LARGE SOLID WASTE PULPER DESCRIPTION/JUSTIFICATION: Process food, paper and other plastic waste for disposal overboard. DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FINANCIAL PLAN: (TOA \$ MILLIONS) FY 1996 & Prior FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 TC **TOTAL** QTY \$ QTY QTY FINANCIAL PLAN (IN MILLIONS) RDT&E **PROCUREMENT** INSTALLATION KITS INSTALLATION KITS NONRECURRING 9.1 50 **EQUIPMENT** 86 5.3 136 14.4 EQUIPMENT NONRECURRING ENGINEERING CHANGE ORDERS DATA TRAINING EQUIPMENT SUPPORT EQUIPMENT OTHER OTHER OTHER INTERIM CONTRACTOR SUPPORT INSTALL COST 0.2 1.1 15.7 57 56.4 69 57.9 5 4.0 135.3 TOTAL PROCUREMENT 0.2 4.0

> ITEM NO. 14 PAGE NO. 23

57.9

P-1 SHOPPING LIST

24.8

UNCLASSIFIED

CLASSIFICATION:

149.7

CLASSIFICATION: UNCLASSIFIED **FEBRUARY 1999** INDIVIDUAL MODIFICATION MODELS OF SYSTEM AFFECTED: METAL GLASS SHREDDER 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 1997 FY 1998 FY 2001 FY 2002 FY 2003 FY 2004 **TOTAL** FY 1996 & Prior FY 1999 FY 2000 FY 2005 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 57 3.5 158 9.4 **EQUIPMENT NONRECURRING** ENGINEERING CHANGE ORDERS DATA TRAINING EQUIPMENT * SUPPORT EQUIPMENT OTHER OTHER OTHER INTERIM CONTRACTOR SUPPORT INSTALL COST 0.2 AP 0.2 8.6 65 29.1 82 26.7 2.0 158 66.8

P-1 SHOPPING LIST

32.6

TOTAL PROCUREMENT

0.2

0.2

14.5

CLASSIFICATION: UNCLASSIFIED

76.2

2.0

26.7

PROGRAM QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

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

February 1999 CLASSIFICATION: UNCLASSIFIED INDIVIDUAL MODIFICATION MODELS OF SYSTEM AFFECTED: FOOD GRINDER/PULPER TYPE MODIFICATION: MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT DESCRIPTION/JUSTIFICATION: SHIPALT 4102K installs a dedicated food grinder/pulper and sink in the SSN 688 Class galley/scullery. DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FINANCIAL PLAN: (TOA \$ MILLIONS)
 FY 1997
 FY 1998
 FY 1999
 FY 2000
 FY 2001
 FY 2002
 FY 2003
 FY 2004
 FY 2005
 TC

 QTY
 \$
 <td FY 1996 & Prior **TOTAL** QTY FINANCIAL PLAN (IN MILLIONS) RDT&E PROCUREMENT INSTALLATION KITS INSTALLATION KITS NONRECURRING **EQUIPMENT** 0.2 | 11 | 0.2 | 11 | 0.2 | 11 | 0.2 11 44 8.0 **EQUIPMENT NONRECURRING** ENGINEERING CHANGE ORDERS DATA TRAINING EQUIPMENT SUPPORT EQUIPMENT OTHER OTHER OTHER INTERIM CONTRACTOR SUPPORT INSTALL COST 0.9 0.9 0.9 0.9 44 3.6 TOTAL PROCUREMENT 1.1 4.4

P-1 SHOPPING LIST CLASSIFICATION:
ITEM NO. 14 PAGE NO. 28 UNCLASSIFIED

February 1999 0.9 0.9 Total 0.9 0.9 Qty 7 7 7 7 P-3A CLASSIFICATION: **UNCLASSIFIED** FY 2005 To Complete TOTAL 44 44 Dec-00 Mar-01 FY 2001: FY 2001: 0 0 4 0 0 Qty FY 2005 2 3 0 0 FY 2004 Dec-99 Mar-00 Qty -00 4 0 0 FY 2003 Qty \$ 0.9 POLLUTION CONTROL EQUIPMENT FY 2000: FY 2000: Qty FY 2002 0.9 EY 2003 2 3 11 0 3 Months 11 Qty 29 (\$ in Millions) FY 2001 -00 0.9 PAGE 4 0 0 Qty 11 ITEM NO. 14 MODIFICATION TITLE:
 FY 2001
 FY 2001

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 PRODUCTION LEADTIME: FY 1999: FY 2000 INDIVIDUAL MODIFICATION (Continued) 0.9 Qty 1 FY 1999 Qty \$ FY 1998 FY 2000 1 2 3 0 11 0 0 11 0 ģ FOOD GRINDER/PULPER AIT / SHIPYARD 9 Months FY 1997 Prior 96 Years

Qty \$ Qty INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME:
CONTRACT DATES:
FY 1998:
FY 1998: MODELS OF SYSTEMS AFFECTED: CLASSIFICATION: UNCLASSIFIED P3A (Continued) FY 1997 EQUIPMENT FY 1998 EQUIPMENT FY 1999 EQUIPMENT FY 2002 EQUIPMENT FY 2003 EQUIPMENT FY 2005 EQUIPMENT FY 2000 EQUIPMENT FY 2004 EQUIPMENT FY 2001EQUIPMENT Cost: TO COMPLETE PRIOR YEARS I.O. IS 6 UNITS

CLASSIFICATION: UNCLASSIFIED February 1999

1 JA		IIIDIVID	OAL WI	ODII I	CA 110																			
MODELS OF SYSTEM AFFECTED:	REMOTE	SPACE (OILY WA	STE TE	RANSF	ER	TYPE	MODIFI	CATIC	ON:						MOD	IFICATI	ON TI	TLE:	POLL	UTION CC	NTROL EC	QUIPMENT	_
DESCRIPTION/JUSTIFICATION:																								
This program extends the oily waste trans	sfer system	to includ	e remote	e spac	e such	ı as JPt	5 pump	rooms.																
L DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT I	MILESTO	DNES:				FINA	NCIAL P	LAN: ((TOA \$ I	MILLIC	NS)												
	<u>FY 1996</u> QTY	& Prior \$	FY 1 QTY	1 <u>997</u> \$	<u>FY</u> QTY	<u>1998</u> \$	<u>F\</u> QTY	<u>/ 1999</u> \$	<u>FY</u> QTY	<u>′ 2000</u> \$	<u>FY</u> QTY	<u>2001</u> \$	<u>FY 200</u>	<u>)2 </u>	<u>Y 2003</u> Y \$	<u>FY</u> QTY	<u>/ 2004</u> \$	<u>FY</u> QTY	2005 \$	QTY	TC \$	QTY <u>T</u>	OTAL \$	
FINANCIAL PLAN (IN MILLIONS)				,		·				•							,				•			-
RDT&E																								_
<u>PROCUREMENT</u>																								_
INSTALLATION KITS																								_
INSTALLATION KITS NONRECURRING																								_
EQUIPMENT																						0	0.0	_
EQUIPMENT NONRECURRING																								_
ENGINEERING CHANGE ORDERS																								_
DATA																								_
TRAINING EQUIPMENT																								_
SUPPORT EQUIPMENT																								_
OTHER																								
OTHER																								_
OTHER																								_
INTERIM CONTRACTOR SUPPORT																								_
INSTALL COST								0.00		0.0		0.1	0	.5	1.1		0.4		0.0				2.10	_
TOTAL PROCUREMENT		0.0				0.0		0.00		0.0		0.1	0	.5	1.1		0.4		0.0				2.10	_

P-1 SHOPPING LIST

ITEM NO. 14 PAGE N(30

CLASSIFICATION:

^{*} No Central Procurement Associated with the Program.
Only Incidental Materials are required to support the installation.

CLASSIFICATION: UNCLAS	SIFIED)																		Fe	bruary	/ 1999
P3A (Continued)						INDIVIDU	JAL MO	DIFICATIO	N (Contin	ued)												
MODELS OF SYSTEMS AFF	ECTE	D: <u>RE</u>	MOTE	SPACE O	ILY WA	STE TRAN	SFER	=	MODIFICA	ATION TITLE:		POLLUTI	ON CO	NTROL EC	QUIPMENT					_		
INSTALLATION INFORMATI METHOD OF IMPLEMENTA																						
ADMINISTRATIVE LEADTIM	E: _		Month	ns			_	PRODUC	TION LEA	DTIME:		1	2 Mon									
CONTRACT DATES:	FY 1					_		FY 1999:							Y 2000:			_				
DELIVERY DATE:	FY 1	998:				_		FY 1999:						F.	Y 2000:			_				
											Millions											
Cost:		96 Years		Y 1997	0.	FY 1998		FY 1999	0.	FY 2000		FY 2001		Y 2002	FY 2003		Y 2004		Y 2005	To Complete		otal
PRIOR YEARS	Qty	\$	Qty	\$	Qty	\$	Qty 0	0	Qty 0	0	Qty	0.1	Qty	\$ 0.5	Qty \$ 8 1.1	Qty 2	\$ 0.4	Qty	0	Qty \$ 11 2.8	Qty 21	\$ 4.9
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT																						
TO COMPLETE																						
INSTALLATION SCHEDU	LE:	SHIP AV	/AILABI	LITIES										<u>l</u>		1 1						
FY 1998		FY 1999			Y 2000			Y 2001	4	FY 2002			Y 2003	4	FY 2004		FY 2005		TC	TOTAL		
In 0 Out 0	0	2 3 0 0 0 0	0	0	$ \begin{array}{c c} 2 & 3 \\ \hline 0 & 0 \\ 0 & 0 \end{array} $	0	1 2 0 0 0 0	3 0 0	4 1 0 0 0 0	$ \begin{array}{c cccc} & 2 & 3 \\ \hline & 0 & 0 \\ & 0 & 0 \end{array} $	0 0	1 2 0 8 0 0	0	0 0		0	2 3 0 0 0 0	0	11	21 21		
0	1 [0	0 0	U	U	0 0	U	0 0	U	0 0	0 0	U	1 0 0	· U	0 [<i>3</i>		0 0	, 0				
										ITEM NO. 14	PA	c	31				CI	ASSIF	P-: FICATION:	UNCLASSIFIED		

CLASSIFICATION: UNCLASSIFIED	SSIFIED												Febr	February 1999	66
P3A (Continued)			INDIVIDUA	NDIVIDUAL MODIFICATION (Continued)	N (Continued)										
MODELS OF SYSTEMS AFFECTED:		C100 OIL/WATER SEPARATO	SEPARATOR	MO	MODIFICATION TITLE:	ij	POLLUTION	POLLUTION CONTROL EQUIPMENT	UIPMENT						
INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: CONTRACT DATE: CONTRACT ATE:	1998:	AIT / SHIPYARD 6 Months		- PRODUC FY 1999:	PRODUCTION LEADTIME: FY 1999:		15	15 Months FY 2000:	FY 2001:					-	
	0000					in Millio				1	1993 1993 1994		NORM NORM		
Cost:		Qty FY 1	- 1	≻	ш	Qty		-	FY 2003 Qty \$	FY 2004 Qty \$	4 FY 2005		omplete \$		_ s
PRIOR YEARS FY 1997 EQUIPMENT	2 0.05	4.8	9 10.2	4 5.4	2 1.8	7	8:	6.3						27 30.4	4
FY 1998 EQUIPMENT															
FY 1999 EQUIPMENT															
FY 2000 EQUIPMENT															
FY 2001 EQUIPMENT															
FY 2002 EQUIPMENT															
FY 2003 EQUIPMENT															
FY 2004 EQUIPMENT															
FY 2005 EQUIPMENT															
TO COMPLETE															
A TIMETALL A TIME OF HER HER HER		AHE MANA GIHO													
FY 1998 8 Prior 14 14 14 14 14 14 14 1			FY 2000 2 3 4 1 0 0 0 0 2 0 2 0	EY 2001 2 3 4 2 0 0 0 2 0	FY 2002 1 3 0 4 0 0 0 0	3 3 4 0 0 0 4	1 2 0 0 0 0	EY 2003 2 3 4 0 0 0 0	FY 2004 1 2 3 0 0 0 0 0	4 0 0 	EY 2005 TC 2 3 4 0 0 0 0 0 0		TOTAL 27 27		
												P-3A			
					ITEM NO. 14		PAGE	35			CLASSIFICATION: UNCLASSIFIED	TION: UNCL	ASSIFIED		

CLASSIFICATION: UNCLASSIFIED February 1999 INDIVIDUAL MODIFICATION MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT MODELS OF SYSTEM AFFECTED: POLLUTION PREVENTION AFLOAT TYPE MODIFICATION: DESCRIPTION/JUSTIFICATION: The shipbaord funds provide for the procurement and Fleetwide installation of pollution prevention equipment which will produce immediate life cycle cost savings to the Fleet through reduction in the quantity of hazardous material used aboard ship, offloaded, and subsequently disposed of by shore activities as hazardous waste. DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FINANCIAL PLAN: (TOA \$ MILLIONS) FY 1996 & Prior FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 **TOTAL** QTY \$ QTY QTY \$ \$ FINANCIAL PLAN (IN MILLIONS) RDT&E **PROCUREMENT** INSTALLATION KITS INSTALLATION KITS NONRECURRING **EQUIPMENT** 2.0 27 2.9 37 3.7 40 4.2 32 3.0 17 1.8 171 17.6 **EQUIPMENT NONRECURRING ENGINEERING CHANGE ORDERS** DATA TRAINING EQUIPMENT SUPPORT EQUIPMENT OTHER OTHER OTHER INTERIM CONTRACTOR SUPPORT 40 2.7 32 INSTALL COST 18 1.3 27 1.9 37 2.4 2.0 17 1.1 171 11.4

P-1 SHOPPING LIST CLASSIFICATION:

6.1

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UNCLASSIFIED

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TOTAL PROCUREMENT

0.0 1.3 1.9 2.7 2.0 2.4 Total Off O 18 27 37 40 32 MAR 01 To Complete Qty \$ P-3A CLASSIFICATION: **UNCLASSIFIED** TOTAL 171 171 FY 2001: FY 2001: FY 2005 y \$ <u>_</u> 00 Qty 17 4 0 0 FY 2005 2 3 3 9 3 9 NOV 99 MAR 00 FY 2004 2.0 32 Qty 5 7 4 - -FY 2003 FY 2004 2 3 11 12 11 12 2.7 POLLUTION CONTROL EQUIPMENT FY 2000: FY 2000: ð 40 ~ ∞ ∞ FY 2002 4 m m 2.4 4 Months 37 Qty FY 2003 2 3 14 3 1.9 FY 2001 2 2 2 4 ო ო (\$ in Millions) Qty 27 EY 2002 2 3 12 16 12 16 MODIFICATION TITLE: PRODUCTION LEADTIME: FY 1999: FY 1999: FY 2000 INDIVIDUAL MODIFICATION (Continued) 1.3 18 Qty FY 1999 ty \$ FY 2001 2 3 10 9 10 9 Qty - 9 9 FY 1998 4 0 0 POLLUTION PREVENTION AFLOAT Qty FY 2000 2 3 10 2 10 2 FY 1997 SHIP AVAILABILITIES

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2 3 4 1

0 0 0 6

0 0 6 AIT SHIPYARD
9 Months Qty Prior 96 Years Qty \$ FY 1998: FY 1998: MODELS OF SYSTEMS AFFECTED: INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME:
CONTRACT DATES:
FY 15
DELIVERY DATE: -00 FY 1999 EQUIPMENT FY 2000 EQUIPMENT FY 2001 EQUIPMENT FY 2002 EQUIPMENT FY 2003 EQUIPMENT FY 2004 EQUIPMENT FY 2005 EQUIPMENT FY 1997 EQUIPMENT FY 1998 EQUIPMENT Cost: TO COMPLETE PRIOR YEARS P3A (Continued) 1.0.13

34

PAGE

ITEM NO. 14

February 1999

CLASSIFICATION: UNCLASSIFIED

February 1999 CLASSIFICATION: UNCLASSIFIED P3A INDIVIDUAL MODIFICATION MODIFICATION TITLE: POLLUTION CONTROL EQUIPMENT MODELS OF SYSTEM AFFECTED: CFC-12 REEFER UNIT CONVERSION TYPE MODIFICATION: DESCRIPTION/JUSTIFICATION: DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A FINANCIAL PLAN: (TOA \$ MILLIONS) FY 1996 & Prior FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 **TOTAL** QTY \$ FINANCIAL PLAN (IN MILLIONS) RDT&E PROCUREMENT INSTALLATION KITS INSTALLATION KITS NONRECURRING **EQUIPMENT** 277 0.5 103 2.6 0.1 0.0 2.8 134 5.5 25.7 EQUIPMENT NONRECURRING **ENGINEERING CHANGE ORDERS** DATA TRAINING EQUIPMENT SUPPORT EQUIPMENT OTHER OTHER OTHER INTERIM CONTRACTOR SUPPORT INSTALL COST 192 78 57 11 0.9 AP 0.00 58 3.8 37 151 9.7 97 37.9 3.6 4.6 3.6 3.1 8.6 681

P-1 SHOPPING LIST CLASSIFICATION:

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TOTAL PROCUREMENT

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CLASSIFICATION: UNCLASSIFIED February 1999

CLASSIFICATION: UNCLASSIFIE	ישב																					i chiuai	y isss	
P3A		INDIVID	UAL	MODIFI	CATIO	N																		
MODELS OF SYSTEM AFFECTED:	CFC-12 AC	BACKFIT	-				TYP	E MODIF	ICATIO	ON:							MOD	IFICATI	ON TI	TLE:	POLI	LUTION CON	TROL EQU	IPMENT
DESCRIPTION/JUSTIFICATION:																								1
Modifies CFC-12 AC Units on most surfac	e ship classe	ed to O Zo	one - F	riendly	HFC 1	34A.																		
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT MI	LESTON	ES:		N/A		FINA	NCIAL P	LAN:	(TOA \$	MILLIO	NS)		-										
	FY 1996 8			<u>/ 1997</u>		1998		Y 1999		<u>/ 2000</u>		2001		2002	FY 2			2004		2005		<u>TC</u>		OTAL
FINANCIAL PLAN (IN MILLIONS)	QTY	\$	QTY	<u> \$ </u>	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
- HARLON LET ENT (HT MILE 1919)																								
RDT&E																								
<u>PROCUREMENT</u>																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	234	9.3	16	0.6	9	0.2	0	0.0	0	0.0	16	0.9	19	0.9							38	1.8	332	13.7
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST	159	5.9	31	1.8	31	1.5	0	0.0	0	0.0	36	2.5	7	0.5	30	1.8					38	3.6	332	17.6
TOTAL PROCUREMENT		15.2		2.4		1.7		0.0		0.0		3.4		1.4		1.8						5.4	0	31.3
								P-1	SHOP	PING LIST											CLAS	SSIFICATION	:	

ITEM NO. 14 PAGE NO. 36 UNCLASSIFIED

ITEM NO. 14 PAGE 38

P-3A

CLASSIFICATION: UNCLASSIFIED

February 1999 CLASSIFICATION: UNCLASSIFIED 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 1996 & Prior FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 **TOTAL** FY 2005 QTY \$ QTY FINANCIAL PLAN (IN MILLIONS) RDT&E **PROCUREMENT** INSTALLATION KITS INSTALLATION KITS NONRECURRING **EQUIPMENT** 5.2 2.5 2.1 60 | 15.5 | 68 | 19.7 | 62 | 17.9 | 65 | 17.4 145.9 **EQUIPMENT NONRECURRING ENGINEERING CHANGE ORDERS** DATA TRAINING EQUIPMENT SUPPORT EQUIPMENT OTHER OTHER OTHER INTERIM CONTRACTOR SUPPORT INSTALL COST 3.0 16 5.2 9 3.8 8 6.8 | 56 | 17.4 | 72 | 23.6 | 62 | 19.0 | 65 | 20.1 | 213 | 86.2 505 185.1

P-1 SHOPPING LIST

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TOTAL PROCUREMENT

UNCLASSIFIED

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CLASSIFICATION:

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February 1999

P3A (Continued)	NOINIONI	INDIVIDUAL MODIFICATION (Continued)	(p							L GD	reblualy 1999
MODELS OF SYSTEMS AFFECTED:	FECTED: CFC-114 AC UNIT CONVERSION	MODIFICATION TITLE:		POLLUTION CONTROL EQUIPMENT	OL EQUIPM	ENT					
INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION:	ION: Shipyard	ļ									
ADMINISTRATIVE LEADTIME: CONTRACT DATES: DELIVERY DATE:	9 FY 1998: EV 1998:	PRODUCTION LEADTIME: FY 1999: EX 1000:	Dec-98	9 Months	FY 2000:	öö	DEC 00	I	FY 2001:		DEC 01
					- -	 		1	-		
Cost:	Prior 96 Years FY 1997 FY 1998	FY 1999 FY 2000	(\$ in Millions) 000 FY 2001	FY 2002	302	FY 2003	FY 2004	FY 2005	To Complete	ø	Total
PRIOR YEARS	Qty \$ Qty \$	Qty \$ Qty	\$ Qty \$	Oty	\$ Qty	\$	Qty \$	Qty \$	Qty \$	Qty	\$
FY 1997 EQUIPMENT											
FY 1998 EQUIPMENT	4	16 4.5								20	7.3
FY 1999 EQUIPMENT	AP 0.2	AP 0.6 9 1.6	9							6	
FY 2000 EQUIPMENT		AP 0.1 AP 0.9	9 8 3.4							8	4.4
FY 2001 EQUIPMENT		AP 1.3	AP 2.3	56 12	12.5	4 0.8				9	16.9
FY 2002 EQUIPMENT			AP 1.1	AP	2.6 68	8 18.3				68	22.0
FY 2003 EQUIPMENT				AP 2	2.3 AP	3.3	62 15.5			62	21.1
FY 2004 EQUIPMENT					AP	1.2	AP 2.6	65 18.5		65	22.3
FY 2005 EQUIPMENT							AP 0.9	AP 1.6	31 16.0	31	18.5
TO COMPLETE									182 69	69.4	
INSTALLATION SCHEDULE:	SHIP AVAILABILITIES										
FY 1998 & Prior	1 2 3 4 1 2 3 4	1	Y 2002 3 4 1	FY 2003 2 3 4	~	3	FY 200	5 3 4	TOTAL		
In A 4	4 4 <td>8 0 0 0 16 33 8 0 0 0 16 33</td> <td>3 4 4 14 14</td> <td>17 6 3 17 6 3</td> <td>35 3 26 35 3 26</td> <td>8 25</td> <td>5 43</td> <td>12 5 213 12 5 213</td> <td>505 505</td> <td></td> <td></td>	8 0 0 0 16 33 8 0 0 0 16 33	3 4 4 14 14	17 6 3 17 6 3	35 3 26 35 3 26	8 25	5 43	12 5 213 12 5 213	505 505		
		ITEN	ITEM NO. 14 PAGE	40			0	CLASSIFICATION: UNCLASSIFIED	N: UNCLASSIF	ED	

Exhibit P-20, Requ	uirements Study	Approp Co	de/BA		Subhead		Date: Feb	ruary 1999	
D 4 L: It N		1810 BA:1	1	11: / 61	81HF		D 11 1		
P-1 Line Item Non			Admin Lea	dtime (after	Oct 1): xx	months	Prod Leadt	ime	
Project Unit/Item	ITROL EQUIPMENT	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
•									
HF040 Suppo		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002		FY 2004	FY 2005
Buy Summary QT	Y	4	2		3	2	4	Ū	
Unit Cost		87				94			
Total Cost		348	178	180	276	188	385	297	306
Asset Dynamics									
Beginning Asset P		39	43	45	47	50	52	56	59
	prior year funding	4							
Deliveries from FY			2						
Deliveries from FY				2					
Deliveries from FY									
Deliveries from su	bsequent years' funding				3				
Other Gains						2	4	3	3
Combat Losses/U	sage								
Training Losses/U	Isage								
Test Losses/Usag	e								
Other Losses/Usa	ge								
Disposals/Retirem	nents/Attritions/etc.								
End of Year Asse	et Position	43	45	47	50	52	56	59	62
Inventory Objectiv	re/Current Authorized Allowance	76	76	76	76	76	76	76	76
•	e Actual Training Expenditures	Other than	Training	Disposals					
76		Usage		(Vehicles/C	Other)				
	PY thru	PY thru		PY thru					
	: :	:		:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
TOTAL	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requi	rements Study	Approp Co	de/BA		Subhead		Date: Feb	ruary 1999	
		1810 BA:1			81HF				
P-1 Line Item Nome			Admin Lea	dtime (after	Oct 1): xx	months	Prod Lead	time	
POLLUTION CONT	ROL EQUIPMENT	T		1	T	T		T	T
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF042 Boom	Tend Boats	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	,		2	0	1	0	3	0	0
Unit Cost			96	0	98	0	100	0	0
Total Cost		0	192	0	98	0	300	0	0
Asset Dynamics									
Beginning Asset Po	sition	8	8	10	10	11	11	14	14
Deliveries from all p	orior year funding								
Deliveries from FY	1999 funding		2						
Deliveries from FY	2000 funding								
Deliveries from FY	2001 funding								
Deliveries from sub	sequent years' funding				1				
Other Gains							3		
Combat Losses/Us	age								
Training Losses/Us	age								
Test Losses/Usage									
Other Losses/Usag	е								
Disposals/Retireme	ents/Attritions/etc.								
End of Year Asset	Position	8	10	10	11	11	14	14	
Inventory Objective	/Current Authorized Allowance	22	22	22	22	22	22	22	22
Inventory Objective	Actual Training Expenditures	Other than	Training	Disposals					
22		Usage		(Vehicles/C	Other)				
	PY thru	PY thru		PY thru					
	:	<u> </u> :		:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requi	rements Study	Approp Co	de/BA		Subhead		Date: Feb	ruary 1999	
		1810 BA:1			81HF				
P-1 Line Item Nome			Admin Lea	dtime (after	Oct 1): xx	months	Prod Lead	time	
POLLUTION CONT	ROL EQUIPMENT								
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF051 Oil Boo	om Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		5	3	5	5	4	4	4	5
Unit Cost		241.2	244	245	248	252	253	264	272
Total Cost		1206	732	1225	1240	1008	1012	1056	1360
Asset Dynamics									
Beginning Asset Po		20	20	22	25	28	31	34	37
Deliveries from all p	prior year funding	2							
Deliveries from FY	1999 funding		3						
Deliveries from FY				5					
Deliveries from FY	2001 funding								
Deliveries from sub	sequent years' funding				5	4	4	4	5
Other Gains									
Combat Losses/Usa									
Training Losses/Us									
Test Losses/Usage									
Other Losses/Usag									
Disposals/Retireme		2	1				1	1	2
End of Year Asset		24							44
Inventory Objective	/Current Authorized Allowance	52	52	52	52	52	52	52	52
Inventory Objective	Actual Training Funanditure	Oth or the	Troining	Dianasala					
52	Actual Training Expenditures	Other than Usage	i raining	Disposals (Vehicles/C	l 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:	1 1 0.	1 1-0.		I I ⁻J.					
REMARKS:		1	l	1	1	1	1	1	<u> </u>
ILMAINNO.									

Exhibit P-20, Requi	rements Study	Approp Co	de/BA		Subhead		Date: Feb	ruary 1999	
		1810 BA:1			81HF				
P-1 Line Item Nome	enclature		Admin Lea	dtime (after	Oct 1): xx	months	Prod Lead	time	
POLLUTION CONT	ROL EQUIPMENT								
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF054 Beach	Transfer Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	-	1	2	0	0	2	0	0	1
Unit Cost		63			0	71	0	0	80
Total Cost		63	136	0	0	142	0	0	80
Asset Dynamics									
Beginning Asset Po		2	3	5	5	5	7	7	7
Deliveries from all p		1							
Deliveries from FY			2						
Deliveries from FY 2	<u> </u>								
Deliveries from FY 2	<u> </u>								
	sequent years' funding					2			1
Other Gains									
Combat Losses/Usa									
Training Losses/Usa									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retireme									
End of Year Asset		3					7		
Inventory Objective	/Current Authorized Allowance	8	8	8	8	8	8	8	8
Inventory Objective	Actual Training Expenditures	Other than	Training	Disposals					
8		Usage		(Vehicles/0	Other)				
	PY thru	PY thru		PY thru					
	<u></u> :	:		:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requi	rements Study	Approp Co	de/BA		Subhead		Date: Feb	ruary 1999	
		1810 BA:1			81HF				
P-1 Line Item Nome			Admin Lea	dtime (after	Oct 1): xx	months	Prod Leadt		
POLLUTION CONT	ROL EQUIPMENT						3-6 MONT		
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF055 Salv Sk	immer Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY			2	2	0	0	1	2	1
Unit Cost			100	106	0	0	108	111.5	115
Total Cost		0	200	212	0	0	108	223	115
Asset Dynamics									
Beginning Asset Po	sition	3	3	5	7	7	7	8	10
Deliveries from all p									
Deliveries from FY	1999 funding		2						
Deliveries from FY 2	2000 funding			2					
Deliveries from FY 2	2001 funding								
Deliveries from sub	sequent years' funding				*		1	2	1
Other Gains									
Combat Losses/Usa	age								
Training Losses/Usa	age								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retireme	nts/Attritions/etc.								
End of Year Asset	Position	3		7	7	7	8		11
Inventory Objective	Current Authorized Allowance	21	21	21	21	21	21	21	21
Inventory Objective	Actual Training Expenditures	Other than	Training	Disposals					
21	<u> </u>	Usage		(Vehicles/C	Other)				
	PY thru	PY thru		PY thru					
	: PY-1:	: PY-1:		: PY-1:					
	PY-2:	PY-2:		PY-1:					
	PY-3:	PY-2: PY-3:		PY-2: PY-3:					
TOTAL:	r i -3.	F1-3:		F1-3.					
		1					<u> </u>		
REMARKS:									

Exhibit P-20, Requi	rements Study	Approp Co	de/BA		Subhead		Date: Feb	ruary 1999	
		1810 BA:1	T		81HF				
P-1 Line Item Nome			Admin Lea	dtime (after	Oct 1): xx	months	Prod Lead	time	
POLLUTION CONT	ROL EQUIPMENT								
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
	Clean-up Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		1	0	0		0	1	0	0
Unit Cost		95				0	.00		
Total Cost		95	0	0	97	0	100	0	0
Asset Dynamics									
Beginning Asset Po		4	5	5	5	5	6	6	7
Deliveries from all p		1							
Deliveries from FY									
Deliveries from FY									
Deliveries from FY									
	sequent years' funding					1		1	
Other Gains									
Combat Losses/Usa									
Training Losses/Us									
Test Losses/Usage									
Other Losses/Usag									
Disposals/Retireme									
End of Year Asset		5							
Inventory Objective	/Current Authorized Allowance	8	8	8	8	8	8	8	8
Inventory Objective	Actual Training Expanditures	Other than	Training	Disposals					
8	Actual Training Expenditures	Usage	rraining	(Vehicles/C) 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:			!			Į.	!	ļ	

Exhibit P-20, Requirements Study	Approp Co	de/BA		Subhead		Date: Feb	ruary 1999	
DALL IS NO IN	1810 BA:1		141 / 64	81HF		5		
P-1 Line Item Nomenclature		Admin Lea	dtime (after	Oct 1): XX	months	Prod Lead	ime	
POLLUTION CONTROL EQUIPMENT	PY	CY	DV4	IDV0	DV0 · 4	DVO . O	DV0.0	DVO . 4
Project Unit/Item			BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF057 Logistics Support Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	3	_		_				
Unit Cost	172							
Total Cost	516	528	356	546	370	560	388	398
Asset Dynamics								
Beginning Asset Position	8		14	16	19	21	24	26
Deliveries from all prior year funding	3							
Deliveries from FY 1999 funding		3						
Deliveries from FY 2000 funding			2					
Deliveries from FY 2001 funding								
Deliveries from subsequent years' funding				3	2	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	11	14	16	19	21	24	26	
Inventory Objective/Current Authorized Allowance	69	69	69	69	69	69	69	69
Inventory Objective Actual Training Expenditures 69	Other than Usage	Training	Disposals (Vehicles/0	 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, Requi	rements Study	Approp Co	de/BA		Subhead		Date: Feb	ruary 1999	
		1810 BA:1			81HF				
P-1 Line Item Nome			Admin Lea	dtime (after	Oct 1): xx	months	Prod Lead	time	
POLLUTION CONT	TROL EQUIPMENT	T		T	1	T		1	I
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF058 Arctic	Oil Recovery Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	,	1	0	1	0	0	0	0	0
Unit Cost		361	0	375	0	0			
Total Cost		361	0	375	0	0	0	0	0
Asset Dynamics									
Beginning Asset Po		0	1	1	2	2	2	2	2
Deliveries from all p	orior year funding	1							
Deliveries from FY	1999 funding			1					
Deliveries from FY	2000 funding								
Deliveries from FY	2001 funding								
Deliveries from sub	sequent years' funding								
Other Gains									
Combat Losses/Us	age								
Training Losses/Us	age								
Test Losses/Usage									
Other Losses/Usag	е								
Disposals/Retireme	ents/Attritions/etc.								
End of Year Asset	Position	1	1	2	2	2	2	2	2
Inventory Objective	/Current Authorized Allowance	6	6	6	6	6	6	6	6
		2						4	4
Inventory Objective	Actual Training Expenditures	Other than	Training	Disposals					
6		Usage		(Vehicles/C	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 Co	de/BA		Subhead		Date: Feb	ruary 1999	
P-1 Line Item Nomenclature	1810 BA:1	A duoin Loo	dtime (after	81HF		Prod Lead	ilina a	
POLLUTION CONTROL EQUIPMENT		Admin Lea	dlime (alter	Oct 1): XX	months	Prod Lead	ime	
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF059 Boom Mooring Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	16							
Unit Cost	10.3		0				0	
Total Cost	165	176					0	ŭ
Asset Dynamics	103	170	0		30	0	0	U
Beginning Asset Position	22	38	54	54	56	59	59	59
Deliveries from all prior year funding	16		04	01	00	00	00	00
Deliveries from FY 1999 funding	10	16						
Deliveries from FY 2000 funding								
Deliveries from FY 2001 funding								
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	38							
Inventory Objective/Current Authorized Allowance	64	64	64	64	64	64	64	64
Leading Objects of Auto-LT-relative Formation	Othersthee	T	Discount					
Inventory Objective Actual Training Expenditures 64	Other than	ı raınıng I	Disposals (Vehicles/0	 				
PY thru	Usage PY thru		PY thru	Jiner)				
Fi ullu	יייייייייייייייייייייייייייייייייייייי		י ווווע .					
PY-1:	PY-1:		PY-1:					
PY-2:	PY-2:		PY-2:					
PY-3:	PY-3:		PY-3:					
TOTAL:								
REMARKS:		<u>l</u>	<u>l</u>	L	1	<u>l</u>	<u>l</u>	1
NEIVIANNO.	D 4							

Exhibit P-20, Requi	rements Study	Approp Co 1810 BA:1	de/BA		Subhead 81HF		Date: Feb	ruary 1999	
P-1 Line Item Nome		1810 BA:1	Admin Lea	dtime (after		months	Prod Lead		
POLLUTION CONT	ROL EQUIPMENT						3-6 MONT		
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF060 Hot Tap	o Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		1	0	0	0	0	0	0	0
Unit Cost		234							
Total Cost		234	0	0	0	0	0	0	0
Asset Dynamics									
Beginning Asset Po		4	5	5	5	5	5	5	5
Deliveries from all p		1							
Deliveries from FY	<u> </u>								
Deliveries from FY 2	Ŭ								
Deliveries from FY 2									
	sequent years' funding								
Other Gains									
Combat Losses/Usa	0								
Training Losses/Us									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retireme									
End of Year Asset		5							
Inventory Objective	/Current Authorized Allowance	10	10	10	10	10	10	10	10
In contain Ohio atica	A street Tree in in a France distance	Oth on the on	T	Diamanda					
10	Actual Training Expenditures	Other than Usage	i raining	Disposals (Vehicles/0	l Other)				
	PY thru	PY thru		PY thru	,				
	:	<u> </u>		:					
	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 Co	de/BA		Subhead		Date: Feb	ruary 1999	
		1810 BA:1			81HF				
P-1 Line Item Nomenclature			Admin Lea	dtime (after	Oct 1): xx	months	Prod Leadt		
POLLUTION CONTROL EQUIPM	MENT						3-6 MONT		
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF061 Viscous Oil Trans	sfer Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		2	0	3		1	0	0	0
Unit Cost		105	0	106	107	112	0	0	0
Total Cost		210	0	318	107	112	0	0	0
Asset Dynamics									
Beginning Asset Position		9		11	14	15	16	16	16
Deliveries from all prior year fund	ing		2						
Deliveries from FY 1999 funding									
Deliveries from FY 2000 funding				3					
Deliveries from FY 2001 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/e	etc.								
End of Year Asset Position		9	11	14	15	16	16	16	16
Inventory Objective/Current Author	orized Allowance	28	28	28	28	28	28	28	28
Inventory Objective Actual Trainir	ng Expenditures	Other than	Training	Disposals					
28		Usage		(Vehicles/C	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:		D.4							

Exhibit P-20, Requi	rements Study	Approp Co	de/BA		Subhead 81HF		Date: Feb	ruary 1999	
		1810 BA:1			-				
P-1 Line Item Nome			Admin Lea	dtime (after	Oct 1): xx	months	Prod Leadt		
POLLUTION CONT	ROL EQUIPMENT	1		1	I =	1	3-6 MONT		1
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF062 Sub 6"	Hyd Pump Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		2	1	2	1	0	2	0	0
Unit Cost		74				0	78	0	0
Total Cost		148	75	152	77	0	156	0	0
Asset Dynamics									
Beginning Asset Po	sition	21	24	25	27	28	28	30	30
Deliveries from all p	prior year funding	2							
Deliveries from FY	1999 funding		1						
Deliveries from FY	2000 funding			2					
Deliveries from FY	2001 funding								
Deliveries from sub-	sequent years' funding				1		2		
Other Gains									
Combat Losses/Usa	age								
Training Losses/Us	age								
Test Losses/Usage									
Other Losses/Usage	e								
Disposals/Retireme	nts/Attritions/etc.								
End of Year Asset	Position	23	25		28				
Inventory Objective	/Current Authorized Allowance	33	33	33	33	33	33	33	33
la contant Objective	A street Tree is in a Francisch and	Oth an the are	Tuelele	Diamanda					
33	Actual Training Expenditures	Other than Usage	i raining	Disposals (Vehicles/C	l Other)				
	PY thru	PY thru		PY thru					
	:	:		:					
	PY-1:	PY-1: PY-2:		PY-1:					
	PY-2:			PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:	· ·								

Exhibit P-20, Requi	rements Study	Approp Co 1810 BA:1	de/BA		Subhead 81HF		Date: February 1999		
P-1 Line Item Nome	anclature	1010 BA.1	Admin Loa	dtima (aftar	_	months	Prod Lead	timo	
POLLUTION CONT			Aumin Lea	dmin Leadtime (after Oct 1): xx months Prod Leadtime 3-6 MONTHS					
Project Unit/Item	KOL EQUIFINENT	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF063 VOSS	Skim Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		0	0						
Unit Cost		0	0				0		
Total Cost		0	0	_	_		0	_	
Asset Dynamics							_		000
Beginning Asset Po	sition	6	6	6	6	6	8	8	7
Deliveries from all p									
Deliveries from FY	1999 funding								
Deliveries from FY									
Deliveries from FY	2001 funding								
Deliveries from sub	sequent years' funding					2			2
Other Gains									
Combat Losses/Usa	age								
Training Losses/Us	age								
Test Losses/Usage									
Other Losses/Usag									
Disposals/Retireme									
End of Year Asset	Position	6	6	6	6	8	8	8	
Inventory Objective	/Current Authorized Allowance	9	9	9	9	9	9	9	9
Inventory Objective 9	Actual Training Expenditures	Other than Usage	Training 	Disposals (Vehicles/0	 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:	15 · 5 · 5 · 5								
REMARKS:			I		1	l	1	1	

Exhibit P-20, Requirements Study	Approp Co	de/BA		Subhead		Date: February 1999		
DATE: Many Name and Augus	1810 BA:1	A .	-10° / - 6 °	81HF		Daniel I and	··	
P-1 Line Item Nomenclature		Admin Lea	Admin Leadtime (after Oct 1): xx months					
POLLUTION CONTROL EQUIPMENT	IDV.	0)/	DV4	ID)/O	D)/0 - 4			D)/0 - 4
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HF064 Modular Barge Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	0	1	0			0		0
Unit Cost	0	619		_		_		
Total Cost	0	619	0	0	0	0	704	0
Asset Dynamics								
Beginning Asset Position	0	0	1	1	1	1	1	2
Deliveries from all prior year funding								
Deliveries from FY 1999 funding		1						
Deliveries from FY 2000 funding								
Deliveries from FY 2001 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	1	1	1	2	2
Inventory Objective/Current Authorized Allowance	4	4	4	4	4	4	4	4
Inventory Objective Actual Training Expenditures 4	Other than Usage	i raining	Disposals (Vehicles/C	l 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:	1	ı	1	į.	1	ı	1	1

Exhibit P-20, Requirements Study		Approp Co	de/BA		Subhead 81HF		Date: Feb	ruary 1999	
D.4.Line Here Norman datum		1810 BA:1	A -l: l	-lt: /-ft	_		Dun al I a a al	·:	
P-1 Line Item Nomenclature			Admin Lea	dtime (after	Oct 1): xx	montns	Prod Lead		
POLLUTION CONTROL EQUIPMENT Project Unit/Item		PY	CY	BY1	BY2	BY2+1	3-6 MONT BY2+2	<u>пъ</u> ВҮ2+3	BY2+4
HF065 BOARDING KITS		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		0	0		2		0	ŭ	Ū
Unit Cost		0	0	_	47	0	_		
Total Cost		0	0	0	94	0	0	0	0
Asset Dynamics						_	_	_	_
Beginning Asset Position		3	3	3	3	5	5	5	5
Deliveries from all prior year funding									
Deliveries from FY 1999 funding									
Deliveries from FY 2000 funding					2				
Deliveries from FY 2001 funding	l'a a								
Deliveries from subsequent years' fund	ling								
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				_	E
	Allewense	3 10	3 10						
Inventory Objective/Current Authorized	Allowance	10	10	10	10	10	10	10	10
Inventory Objective Actual Training Exp	nenditures	Other than	Training	Disposals					
4	Jonalia Go	Usage		(Vehicles/C	ı 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:	TOTAL:								
REMARKS:				•	•	•		•	

	В	UDGET	ITEM JUS	TIFICATION	SHEET			DATE:				
			P-4	40					February 1999	•		
APPROPRIATION/BUD					P-1 ITEM NOI		-	-				
OTHER PROCURE	MENI, NA	VY			Submarine S	ilencing Equi	oment - 0940					
BA-1: Ships Suppo	rt Equipm	nent										
Program Element for C	ode B Items	S :					OTHER RELA	ATED PROGR	AM ELEMENT	3		
	N/A											
	Prior	ID									То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST												
(In Millions)			\$4.5	\$3.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.9	
SPARES COST (In Millions)												

PROGRAM DESCRIPTION/JUSTIFICATION:

Starting with the FY 2000 budget, this program was consolidated into the Submarine Support Equipment program - 094100.

P-1 SHOPPING LIST

ITEM NO. 15 PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED

		BU	DGET ITEM	JUSTIFICA		DATE:							
				P-40				February 1999					
APPROPRIATION/BUD	GET ACTIV	ITY				P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	!				
OTHER PROCURE	MENT, NA	VY											
BA-1: Ships Suppo	ort Equipn	nent						Submarine	Support Ed	quipment B	LI: 094100	Sbhd: H1CC	:/81HG
Program Element for C	ode B Item	s:						OTHER RELA	ATED PROGR	AM ELEMENT	s		
	N/A							N/A					
	Prior	ID										То	
	Years	Code		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY													0
EQUIPMENT COST													
(In Millions)		Α		\$0.0	\$0.0	\$51.0	\$28.2	\$26.6	\$20.5	\$4.0	\$4.0	\$0.0	134.3
SPARES COST													
(In Millions)											0		

PROGRAM DESCRIPTION/JUSTIFICATION:

Subhead H1CC

INSURANCE SPARES - Based on experiencegained 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 equipment's 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 lead-time 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 equipment's 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 upkeep's 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.

SEAWOLF DEFICIENCY CORRECTION - The funding identified corrects both mechanical and acoustic deficiencies noted during SEAWOLF Seatrials. These deficiencies, if left uncorrected, would degrade the performance and acoustic signature of the ship.

P-1 SHOPPING LIST

ITEM NO. 16

PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED

		BU	DGET ITEM	JUSTIFICA		DATE:							
				P-40		February 1999							
APPROPRIATION/BUD	GET ACTIV	ΊΤΥ						P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	ŧ		
OTHER PROCURE	MENT, NA	VY											
BA-1: Ships Suppo	ort Equipn	nent						Submarii	ne Support	Equipment	BLI: 09410	0 SBHD: H1	CC/81HG
Program Element for C	ode B Item	s:						OTHER RELA	TED PROGR	AM ELEMENT	s		
	N/A							N/A					
	Prior	ID										То	
	Years	Code		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY													0
EQUIPMENT COST													
(In Millions)		Α											0
SPARES COST													
(In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

Subhead 81HG

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.]

P-1 SHOPPING LIST

ITEM NO. 16 PAGE NO. 2

CLASSIFICATION:

	WEAPONS				Weapon Sy	ystem			DATE:	February	1000				
	PRIATION/BUDGET ACTIVITY Procurement, Navy	P-	<u> </u>			ID Code						rebruary	1999		
	Ships Support Equipment					Α		Submarii	ne Suppo	rt Equip	ment BLI	: 094100	Sbhd: H1	CC/81HG	
		TOTAL CO	ST IN THO	THOUSANDS OF DOLLARS											
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000			FY 2001		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
	Submarines (N87)														
	SSN 21 Class Support Equipment SEAWOLF Tool/Equipment under \$100k SEAWOLF Defiency Corrections	А									9,251 460 38,000				
	Submarines (N87)														
HG050	Facilities/Lab Upgrades/Refurb										3,270				
	-														
	-														
TOTAL					0			0			50,981				

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

BUDGET PROCUE	REMEN	NT HISTO	RY AND PLAN	NING EXHIB	BIT (P-5A)	Weapon System		A. DATE		
B. APPROPRIATION Other Procuremen		_	CTIVITY		C. P-1 ITE	C. P-1 ITEM NOMENCLATURE SUBHEA				
BA-1: Ships Supp	•	•			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	SPECS AVAILABLE	IF NO WHEN AVAILABLE
FISCAL YEAR (00) CC001 Periscope Mast 18H Mod 1 SPU OGP Electrolysis Pwr Sup OGP DW Feed Pump Inner Stern Planes Inner Stern Plan & Ext Gear Bow Plane Rails Bow Plane Splined Shaft Bow Plane Tiller ACB 6400 Circuit Breakers	1 1 1 2 1 1 1 1 2	1,221.0 2,303.0 480.0 413.0 972.0 972.0 346.0 885.0 856.0 195.0	NAVSEA Portsmouth NSY Portsmouth NSY Portsmouth NSY SUPSHIP, Groton SUPSHIP, Groton SUPSHIP, Groton SUPSHIP, Groton Portsmouth NSY		SS/FFP SS/FFP SS/FFP SS/FFP SS/FFP SS/FFP SS/FFP SS/FFP SS/FFP	Kollmorgen, N Hampton MA Westinghouse, PA United Technolgy, CT Treadwell, CT EB Corp, Groton CT SPD Technologies, PA	1/00 1/00 1/00 1/00 1/00 1/00 1/00 1/00	5/02 12/01 6/01 6/01 6/02 6/02 6/02 6/02 6/02 6/01	YES YES YES YES YES YES YES YES YES	
D. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 16 PAGE NO. 4

UNCLASSIFIED

		BUI	OGET ITEM	JUSTIFICA		DATE:						
				P-40						Fe	bruary 1999	
APPROPRIATION/BUD OTHER PROCURE	_				P-1 ITEM NO	MENCLATUR	E/LINE ITEM #					
BA-1: Ships Supp	ort Equip	ment							SUBMARINE	BATTERIES BL	I: 094500 SBHD: 81HM	
									ATED PROGR	AM ELEMENTS		
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
EQUIPMENT COST (In Millions)			\$8.2	\$8.6	\$13.1	\$12.5	\$9.6	\$13.4	\$13.7	\$14.0		93.2
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 replacementschedule for these batteries is predicted using continually updated usage data from each ship. Previous experienceand laboratory tests indicate that MOD E batteries will need replacement after 66 months of service.

PRODUCTION ENGINEERING HM830

Complementing the battery procurements with technical contractual data, 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 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 98

SSN 686 at Portsmouth JAN 98.

P-1 SHOPPING LIST

ITEM NO. 17 PAGE NO. 1

CLASSIFICATION:

DD Form 2454, JUN 86

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	BUDGET I	TEM JUSTIFICA	TION SHEET			DATE:
		P-40 CONTIN	UATION			February 1999
APPROPRIATIO	N/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PRO	CUREMENT, NAVY					SUBMARINE BATTERIES BLI: 094500 SBHD: 81HM
BA 1: SHIPS	SUPPORT EQUIPMENT					
E) (00 (I) (000)			EV 00			
FY 98 (HM002)	INICTALLING ACENIT	DATE	FY 99	INCTALLING ACENT	DATE	
SHIP	INSTALLING AGENT	DATE	SHIP	INSTALLING AGENT	DATE	
SSN 706	PORTSMOUTH	JUL 98	SSN 772	PEARL HARBOR	AUG 99	
SSN 753	PORTSMOUTH	AUG 98	SSN 690	PORTSMOUTH	OCT 99	
SSN 705	PORTSMOUTH	SEP 98	SSN 758	PEARL HARBOR	NOV 99	
SSN 754	PEARL HARBOR	N0V 98	SSN 773	PEARL HARBOR	JAN 99	
SSN 769	PORTSMOUTH	JAN 99	SSN 756	PORTSMOUTH	FEB 00	
SSN 716	PUGET SOUND	FEB 99	SSN 757	PORTSMOUTH	FEB 00	
SSN 771	PEARL HARBOR	MAR 99	SSN 715	PEARL HARBOR	FEB 00	
SSN 714	PORTSMOUTH	AUG 99				
FY 00			FY 01			
SSN 759	PEARL HARBOR	JUN 00	SSN 721	PEARL HARBOR	APR 01	
SSN 708	PORTSMOUTH	AUG 00	SSN 765	PORTSMOUTH	AUG 01	
SSN 709	PORTSMOUTH	AUG 00	SSN 725	PEARL HARBOR	NOV 01	
SSN 718	PUGET SOUND	SEP 00	SSN 691	PORTSMOUTH	NOV 01	
SSN 717	PUGET SOUND	OCT 00	SSN 700	PORTSMOUTH	NOV 01	
SSN 688	PEARL HARBOR	OCT 00	SSN 761	PORTSMOUTH	FEB 02	
SSN 720	PORTSMOUTH	NOV 00	SSN 722	PEARL HARBOR	MAR 02	
SSN 710	PORTSMOUTH	NOV 00	SSN 766	PEARL HARBOR	MAY 02	
SSN 764	PORTSMOUTH	FEB 01	SSN 723	PORTSMOUTH	MAY 02	
SSN 719	PORTSMOUTH	FEB 01	SSN 752	PEARL HARBOR	JUN 02	
SSN 760	PORTSMOUTH	FEB 01				

P-1 SHOPPING LIST

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40 CONTINUATION	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	SUBMARINE BATTERIES BLI: 094500 SBHD: 81HM
BA 1: SHIPS SUPPORT EQUIPMENT	

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 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

DSV 3 &4 (HM004)

Submarine 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-combatatant submersibles, which provide the Navy with underwater search and revocery 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 months life cycle.

P-1 SHOPPING LIST

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BUDGET ITEM JUSTIFICATION SHEET
P-40 CONTINUATION

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY
BA 1: SHIPS SUPPORT EQUIPMENT

DATE:
February 1999
P-1 ITEM NOMENCLATURE/LINE ITEM #
SUBMARINE BATTERIES BLI: 094500 SBHD: 81HM

Procurement Installation on the following Hulls

FY 98
DSV-3 DSU MAR 99,00 1 SET
DSV-4 DSU AUG 99,00 1 SET

FY 99
DSV-3 DSU MAR 00,01 1 SET
DSV-4 DSU AUG 00,01 1 SET

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

INSTALLING AGENT DATE

FY 99 Portsmouth JAN 01 FY 00 Portsmouth JUNE 02

P-1 SHOPPING LIST CLASSIFICATION:
DD Form 2454, JUN 86 ITEM NO. 17 PAGE NO. 4

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40 CONTINUATION	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	SUBMARINE BATTERIES BLI: 094500 SBHD: 81HM
BA 1: SHIPS SUPPORT EQUIPMENT	

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 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 and emergency batteries, and is requisitioned from the governments reclaiming facility.

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 (HM008)

FY 98	SHIP	INSTALLING AGEN	T DATE
SSBN	741	Kings Bay	MAY 99
SSBN	730	TRF	AUG 99
FY 99			
SSBN	729	TRF	OCT 99
SSBN	742	Kings Bay	May 99
SSBN			

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

	Bl	JDGET ITEM JUSTIFICATION	SHEET		DATE:
		P-40 CONTINUATION			February 1999
APPROPRIAT	ION/BUDGET ACT	IVITY		P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PR	OCUREMENT, I	YVAN		SUBMARINE	BATTERIES BLI: 094500 SBHD: 81HM
BA 1: SHIF	S SUPPORT E	QUIPMENT			
FY 00					
SSBN 737	Kings Bay	Nov 00			
SSBN 743	Kings Bay	Nov 00			
SSBN 736	Kings Bay	Nov 00			
SSBN 726	Bangor, TRF	Feb 01			
SSBN 731	Bangor, TRF	Apr 01			
574.04					
FY 01	Kin na Davi	A 04			
SSBN 738	Kings Bay	Aug 01			
SSBN 732 SSBN 727	Bangor, TRF	Mar 01			
33BN 121	Bangor, TRF	Apr 01			
SEAWOLF (HI	M009)				
Submarine bat	teries are consumal				e MISSION CRITICAL equipment. These are
replacement b	atteries for SEAWO	LF Class snips. Failure analyses of sn	nipboard, and laboratory test ce	elis nas resulted in and	estimated net service life of 72 months.
Procurement a	nd Installation on th	e following Hulls (HM009)			
		o tenetunig riane (rimeco)			
FY01					
SSN 21	Portsmouth	Jul 01			
L			P-1 SHOPPING LIS	T CLASSIFI	CATION:
			P-1 SHUPPING LIS	I CLASSIFI	CATION.

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WEAPONS SYSTEM COST ANALYSIS
P-5

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

Weapon System
DATE:
February 1999

P-1 ITEM NOMENCLATURE/SUBHEAD
SUBMARINE BATTERIES BLI: 094500 SBHD: 81HM

BA 1:	11: SHIPS SUPPORT EQUIPMENT							SUBMAR	RINE BAT	IERIES	BLI: 09450	M SRHD:	81HM	
			TOTAL CO	ST IN THO	USANDS C	F DOLLAR	S							
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000		FY 2001		
OODL		Oode	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST
	N87 SUBMARINE WARFARE				555.		- 5551			- 5551				
HM001	GUPPY 1 MOD C (126 CELL)	А	1	408.0	408									
HM002	GUPPY 1 MOD E (126 CELL)	А	8	582.5	4,660	7	596	4,172	11	609.7	6,707			
	DSRV 1-2 (GFE) SILVER	А	3 SETS	229.3	688 256	3 SETS	325	975 289	3 SETS	240.3	721 300			
	DSV 3-4 (GFE) SILVER	А							2 SETS	62.5	125			
HM005 HM005A	NR-1 (GFE) SILVER	А				1	364	364 92	1	372	372 94			
	EMERGENCY BATTERIES (GFE) SILVER	А	8	7.875	63 6				8	8.6	69 9			
HM008	TRIDENT 1 TYPE (126 CELL)	А	2	680.5	1,361	2	723.0	1,446	5	740.0	3,700			
HM009	SEAWOLF (126 CELL)													
HM830	PRODUCTION ENGINEERING				807			1,277			1,004			
TOTAL					8,249			8,615			13,101			
				1	U,270	1	1	0,010	1	1	10,101	01.1001=10	1	1

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

APPROPRIAT	TION/B	UDGET /	ACTIVITY		C. P-1 ITEM	NOMENCLATUR	E		SUBHEAD	ry 1999	
her Procureme	nt, Nav	/y				SUBMARINE BATTER	IES BLI: 09	94500			
1: SHIPS SUI	PPORT	EQUIPM	MENT						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 AVAILABLI	
FY 1998 HM001 HM002 HM003	1 8 3	408.0 582.5 229.3	NAVSEA NAVSEA NAVSEA	SEP 96 SEP 96 DEC 96	OPTION OPTION OPTION	GNB LOMBARD, ILL GNB LOMBARD, ILL YARDNEY TECH, PAWCATUCK, CT	DEC 97 NOV 97 NOV 97	OCT 98 APR 98 NOV 98	YES YES YES YES		
HM006	8	7.875	NAVSEA	DEC 96	OPTION	YARDNEY TECH, PAWCATUCK, CT	NOV 97	NOV 98	YES		
HM008	2	680.5	NAVSEA		C/NP	GNB LOMBARD, ILL	APR 98	OCT 98	YES		
FY 1999 HM002 HM003	7 3	596.0 325.0	NAVSEA NAVSEA		SS/NP COMP	GNB LOMBARD, ILL UNKNOWN	FEB 99 JAN 99	JUL 99 JAN 00	YES YES		
									YES		
HM005	1	364	NAVSEA		COMP	UNKNOWN	JAN 99	JAN 00	YES		
HM008	2	723.0	NAVSEA		OPTION	GNB LOMBARD, ILL	NOV 98	APR 99	YES		
REMARKS											

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				NG EXHIBIT		Weapon System		A. DATI	Februa	ry 1999
APPROPRIAT			TIVITY			M NOMENCLATUR			SUBHEAD	
ther Procureme	•	•			;	SUBMARINE BATTER	811	HM		
A 1: SHIPS SUF	PPORT	EQUIPMEN	T	1	001177407		T	D. 1 = 0 =	07500	IE 110
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 AVAILABL
FY 2000 HM002 HM003 HM004 HM005 HM006 HM008	11 3 2 1 8 5	609.7 240.3 62.5 372.0 8.6 740.0	NAVSEA NAVSEA NAVSEA NAVSEA NAVSEA		OPTION OPTION OPTION OPTION OPTION C/NP	GNB LOMBARD, ILL. UNKNOWN UNKNOWN UNKNOWN UNKNOWN UNKNOWN	DEC 99 DEC 99 DEC 99 DEC 99 DEC 99 APR 00	APR 00 DEC 00 DEC 00 DEC 00 DEC 00 OCT 00	YES YES YES YES YES YES	

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Exhibit P-20, Requirements Study	Approp Code			Subhead		Date: Febi	ruary 1999	
	1810			81HM				
P-1 Line Item Nomenclature		Admin Lead	time (after Oc	t 1): xx mor		Prod Leadt		
SUBMARINE BATTERIES/ 0945					6		10	
Project Unit/Item		CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HM001: GUPPY 1 MOD C	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	1	0	0					
Unit Cost	408	0						
Total Cost	408	0	0					
Asset Dynamics								
Beginning Asset Position	0	0	0					
Deliveries from all prior year funding	1	1						
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from FY 2001 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	1						
End of Year Asset Position	0	0	0					
Inventory Objective/Current Authorized Allowance								
I/O= N/A								
Inventory Objective Actual Training Expenditures	Other than T Usage	raining	Disposals (Vehicles/Oth	her)				
PY thru	PY thru		PY thru	,				
<u></u> :	:		:					
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	/.	•	•	•	·	•	•	<u> </u>

P-1 Shopping List Item No 17 Page No 10

Exhibit P-20, Requi	rements Study	Approp Code			Subhead		Date: Febru	ary 1999	
		1810			81HM		<u> </u>		
P-1 Line Item Nome			Admin Lead	time (after Oc	,		Prod Leadtii		
SUBMARINE BAT	TERIES/ 0945	T		T		6		5	T =
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HM002: GUPP		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		8	7	11					
Unit Cost		582.5	596.0	609.7					
Total Cost		4660	4172	6706.7					
Asset Dynamics									
Beginning Asset Po	sition	0	0	0					
Deliveries from all p	rior year funding	8							
Deliveries from FY	1999 funding		7						
Deliveries from FY	2000 funding			11					
Deliveries from FY	2001 funding								
Deliveries from sub-	sequent years' funding								
Other Gains									
Combat Losses/Usa	age								
Training Losses/Us									
Test Losses/Usage									
Other Losses/Usag									
Disposals/Retireme	nts/Attritions/etc. *	8	7	11					
End of Year Asset		0	0	0		0 (C	0 0	(
Inventory Objective	Current Authorized Allowance								
I/O= N/A									
Inventory Objective	Actual Training Expenditures	Other than T Usage	raining 	Disposals (Vehicles/Oth	l ner)				
	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	/.			•	•	•	•	•

P-1 Shopping List Item No 17 Page No 11

Exhibit P-20, Requi	rements Study	Approp Code			Subhead		Date: Febr	uary 1999	
D 4 Line Herr News	an alations	1810		: /-ft O-	81HM	. tl	Due di Lacadi	!	
P-1 Line Item Nome			Admin Lead	time (after Oc	t 1): xx mor		Prod Leadt		
SUBMARINE BAT	I ERIES/ 0945	DV	0)/	DV4	ID)/O	6		12	D)(0 - 4
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HM003: DSRV		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	003 FY 2004 FY 2	
Buy Summary QTY	,	3	3	_					
Unit Cost		229.3	325						
Total Cost (**)		687.9	975	720.9					
Asset Dynamics									
Beginning Asset Po		0	0	0					
Deliveries from all p									
Deliveries from FY		2							
Deliveries from FY			3						
Deliveries from FY	2001 funding			3					
Deliveries from sub	sequent years' funding								
Other Gains									
Combat Losses/Usa	age								
Training Losses/Us	age								
Test Losses/Usage									
Other Losses/Usag	е								
Disposals/Retireme	ents/Attritions/etc. *	2	3	3					
End of Year Asset	Position	0	0	0					
Inventory Objective	/Current Authorized Allowance								
I/O= N/A									
Inventory Objective	Actual Training Expenditures	Other than T	raining	Disposals					
	DV there	Usage		(Vehicles/Oth	ner)				
	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:			<u> </u>		<u> </u>				
REMARKS:	* Usage based on life of battery	<i>'</i> .	** INCLUDE	S COST OF (GFE SILVER	₹			

P-1 Shopping List Item No 17 Page No 12

Exhibit P-20, Requirements Study	Approp Cod			Subhead 81HM		Date: Feb	ruary 1999	
P-1 Line Item Nomenclature	101	-	Itime (after Oc		nths	Prod Lead	time	
SUBMARINE BATTERIES/ 0945		, tarriir 20ac	illino (artor 00		6	1		
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HM004: DSV 3-4	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		C) 2					
Unit Cost		C	62.5					
Total Cost (**)	(0 0	125					
Asset Dynamics								
Beginning Asset Position	(0 0	0					
Deliveries from all prior year funding								
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from FY 2001 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	0					
Inventory Objective/Current Authorized Allowance								
I/O= N/A								
Inventory Objective Actual Training Expenditures	Other than	Γraining	Disposals					
	Usage		(Vehicles/Oth	ner)				
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			ES COST OF					

P-1 Shopping List Item No 17 PAGE No 13

Exhibit P-20, Requirements Study	Approp Cod			Subhead		Date: Feb	ruary 1999	
	1810			81HM				
P-1 Line Item Nomenclature		Admin Lead	time (after Oc	t 1): xx moi		Prod Lead		
SUBMARINE BATTERIES/ 0945				1	6		12	
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HM005: NR-1	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	C	1	1					
Unit Cost	C	364	372					
Total Cost (**)	C	456	466					
Asset Dynamics								
Beginning Asset Position	C	0	0					
Deliveries from all prior year funding								
Deliveries from FY 1999 funding			1					
Deliveries from FY 2000 funding								
Deliveries from FY 2001 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc. *		C	1					
End of Year Asset Position	C		0					
Inventory Objective/Current Authorized Allowance								
I/O= N/A								
Inventory Objective Actual Training Expenditures	Other than T	raining	Disposals					
	Usage		(Vehicles/Otl	ner)				
PY thru	PY thru		PY thru					
:	<u> :</u>		<u> </u>					
PY-1:	PY-1:		PY-1:					
PY-2:	PY-2:		PY-2:					
PY-3:	PY-3:		PY-3:					
TOTAL:								

P-1 Shopping List Item No 17 PAGE No 14

Exhibit P-20, Requi	rements Study	Approp Code			Subhead 81HM		Date: Feb	ruary 1999	
D.4.Line Here Name		1810		 t:			Dua di La a di		
P-1 Line Item Nome			Admin Lead	Itime (after Oc	t 1): xx moi		Prod Lead		
SUBMARINE BAT	1ERIE5/ 0945	IDV	OV	IDV4	IDVO	6		12	IDV0 : 4
Project Unit/Item		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
	RGENCY BATTERIES	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	<u>, </u>	8							
Unit Cost		7.9							
Total Cost	(**)	63	C	69					
Asset Dynamics									
Beginning Asset Po		0							
Deliveries from all p	orior year funding		8	8					
Deliveries from FY									
Deliveries from FY									
Deliveries from FY	2001 funding								
	sequent years' funding								
Other Gains									
Combat Losses/Us	age								
Training Losses/Us									
Test Losses/Usage									
Other Losses/Usag									
Disposals/Retireme	ents/Attritions/etc. *		8	8					
End of Year Asset		0	C	0					
Inventory Objective	e/Current Authorized Allowance								
I/O= N/A									
Inventory Objective	Actual Training Expenditures	Other than T Usage	raining 	Disposals (Vehicles/Oth	ner)				
	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 batter	y.	* INCLUDE	S COST OF C	FE SILVER	₹	•	•	•

P-1 Shopping List Item No 17 Page No 15

Exhibit P-20, Requirements Study	Approp Code 1810			Subhead 81HM		Date: Febr	uary 1999	
P-1 Line Item Nomenclature	1610		time (after Oc	_	othe	Prod Leadt	imo	
SUBMARINE BATTERIES/ 0945		Aumin Leau	ume (anter Oc	t i). XX iiioi	6		12	
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
1		_						
HM008: TRIDENT	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	2	2	5					
Unit Cost	680.5							
Total Cost (**)	1361	1446	3700					
Asset Dynamics								
Beginning Asset Position	0	_	0					
Deliveries from all prior year funding	2							
Deliveries from FY 1999 funding			2					
Deliveries from FY 2000 funding								
Deliveries from FY 2001 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc. *	2		2					
End of Year Asset Position	0	0	0					
Inventory Objective/Current Authorized Allowance								
I/O= N/A								
Inventory Objective Actual Training Expenditures	Other than T	raining	Disposals					
	Usage		(Vehicles/Oth	ner)				
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	<i>i</i> .	* INCLUDE	S COST OF C	FE SILVER	<u> </u>	•	•	•

P-1 Shopping List Item No 17 Page No 16

	В	UDGET	ITEM JUS	TIFICATION	SHEET				DATE:			
			P-4	40						February 199	9	
APPROPRIATION/BUI	DGET ACTIV	ITY					P-1 ITEM NO	MENCLATURE	LINE ITEM#			
OTHER PROCURE	EMENT, NA	VΥ					SSN 21 Class	s Support Equ	ipment (0949)			
BA-1: Ships Supp	ort Equipm	nent										
Program Element for	Code B Items	s:					OTHER RELA	ATED PROGR	AM ELEMENT	S		
	N/A											
	Prior	ID									То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST												
(In Millions)			\$6.3	\$15.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$21.7
SPARES COST												
(In Millions)												

PROGRAM DESCRIPTION/JUSTIFICATION:

Starting with the FY 2000 budget, this program was consolidated into the Submarine Support Equipment program - 094100.

P-1 SHOPPING LIST

ITEM NO. 18

PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED

		BUI	DGET ITEM	JUSTIFICA	TION SHEE	:T				DATE:			
				P-40							February 199	9	
APPROPRIATION/BUD OTHER PROCURE	_							P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	ŧ		
BA-1: SHIP SUPPO	ORT EQU	IPMEN1	Γ					S	trategic Pla	atform Supp	ort Equipn	nent/#09500	0
Program Element for C	ode B Item	s:				OTHER RELA	ATED PROGR	M ELEMENTS	3				
	Prior	ID										То	
	Years	Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY													
EQUIPMENT COST													
(In Millions)		Α		\$20.3	\$10.2	\$6.1	\$6.3	\$11.4	\$11.9	\$12.2	\$12.5		\$90.9
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 are 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 of 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.

P-1 SHOPPING LIST

ITEM NO. 19 PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED

DD Form 2454, JUN 86

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY		
BA-1: SHIP SUPPORT EQUIPMENT	Strategic Platfo	orm Support Equipment/#095000
TRIDENT ENGINEERED AVAILABILITY (EA) - TRIDENT EA material support funding is requir the critical path schedule during the SSBN 726 Class Submarine Engineered Availabilities (EAs) com of the submarine. This equipment is separate and exclusive of TRIPER program equipment. Funding fixtures required to reduce EA scheduled durations. This program also provides funding for installation HM&E MODERNIZATION KITS - Accomplishes alterations and actions at the lowest practicable an capability, capacity and cost). Alterations, and upgrades to SSBN 726 Class Submarines are schedule equipment procurement and installation, technical planning, training, and associated resources. This I required alterations to SSBN 726 Class Submarines at the TRIREFFAC, Bangor, and the TRIREFFAC	red to provide replacent imencing in FY93 and it is also required to for on of Depot level alterand authorized level (taked for accomplishment ine provides for materic, Kings Bay.	nent and contingency material to support continuing through the operational life mulate or procure complex tools and ations packages. Ting into consideration urgency, priority, at the TRIREFFACs. This requires ial procurement necessary to install the
P-1 SHOPPING LIS [*]	T CLASSIFIC	CATION:

ITEM NO. 19

PAGE NO. 2
UNCLASSIFIED

	WEAPONS			ALYSIS				Weapon Sy	/stem			DATE:		
ADDD	OPRIATION/BUDGET ACTIVITY	P-	5			ID Code	D 4 ITEM	NOMENCLA	ATUDE/QUD	HEAD		<u> </u>	Febru	ary 1999
	rocurement, Navy					ID Code	P-111EW	NOWENCLA	ATURE/SUB	пеар				
	SHIP SUPPORT EQUIPMENT					Α		Strategic	Platform S	Support E	auipment	/81HH		
			TOTAL CO	ST IN THO	USANDS C		S				11			
0007	EL EMENT OF COST			EV 4000			EV 4000			EV 2000		ı	EV 0004	
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000			FY 2001	
0022		0000		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
			QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
	<u>N871</u>													
HH007	Equipment TRIPER Assets	Α			\$555			\$361			\$470			
HH009	Equipment HM&E & SWS/SS Alteration	Α			\$891			\$4,839			\$0			
HH012	Equipment HM&E TRIDENT EA	Α			\$4,500			\$5,000			\$5,600			
HH017	Equipment HM&E Modernization Kits	Α			\$14,360			\$0			\$0			
	Subtotal				\$20,306			\$10,200			\$6,070			
	-													
TOTAL					\$20.306			\$10.200			\$6.070			

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2446-1, JUL 87

BUDGET PROCUREM	ENT H	ISTORY A	AND PLANNIN	G EXHIBIT (F	P-5A)	Weapon System		A. DATE		
(Page 1)					•	-			Februa	ry 1999
B. APPROPRIATION/	BUDG	ET ACTIV	/ITY		C. P-1 ITE	M NOMENCLATURE			SUBHEAD	
Other Procurement, Na	avy				Strategic Plat	form Support Equipmer	nt			
BA-1: SHIP SUPPORT	EQUI	PMENT			HH007 TRIPE	R Assets			81	НН
		UNIT			CONTRACT			DATE OF	SPECS	IF NO
Cost Element/	QTY	COST	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	WHEN
FISCAL YEAR		(000)	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
Fical Year (98)										
Pump & Motor for Ships Ser	3	\$73.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/98	12/98	Yes	
Priming Pump & Motor Unit	1	\$62.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/98	12/98	Yes	
Hyd Actuator for Trim & Drain	2	\$14.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/98	12/98	Yes	
Supply Valve for Missile Tube	7	\$22.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/98	12/98	Yes	
Gear/Motor/Valve for Cyclic	1	\$10.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/98	12/98	Yes	
Gear/Motor/Valve for Cyclic	1	\$10.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/98	12/98	Yes	
C02 Scrubbers	1	\$72.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/98	12/98	Yes	
Fiscal Year (99)										
Periscope Hoist Cylinder	2	\$30.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/99	12/99	Yes	
Hydraulic Cyclinder, Nav Sat	1	\$186.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/99	12/99	Yes	
Trim & Drain Acuator, Rotary	2	\$14.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/99	12/99	Yes	
Valve, Linear, Direct	2	\$18.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/99	12/99	Yes	
Cyclic Brine Speed Gear Assy	1	\$10.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/99	12/99	Yes	
Cyclic Brine Speed Gear Assy	1	\$10.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/99	12/99	Yes	
Cyclic Brine Valve/Gear Motor	1	\$10.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/99	12/99	Yes	
MCC Fan	1	\$21.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/99	12/99	Yes	
Fiscal Year (00)										
Pump Unit, Centrifug	2	\$62.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/00	12/00	Yes	
Burner Assembly	1	\$130.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/00	12/00	Yes	
Valve, Linear, Direct	1	\$18.00	NAVSEA	N/A	Allotment		2/00	12/00	Yes	
Valve, Solenoid	9	\$22.00	NAVSEA	N/A	Allotment	NAVICP, Mechanicsburg,PA	2/00	12/00	Yes	
D. REMARKS										

P-1 SHOPPING LIST

CLASSIFICATION:

RUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

BUDGET PROCUREMENT	HI2 I O	RIAND	PLANNING I	-XHIBII (P-3	DA)	weapon System		A. DAII		
(Page 1)									Februa	ry 1999
B. APPROPRIATION/BUD	GET A	CTIVITY			C. P-1 ITE	M NOMENCLATURI	Ξ		SUBHEAD	
Other Procurement, Navy					Strategic Plat	form Support Equipme	nt			
BA-1: SHIP SUPPORT EQU	JIPME	NT				and SWS/SS Alteration			81	нн
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	CONTRACT METHOD	CONTRACTOR	AWARD	DATE OF FIRST	SPECS AVAILABLE	IF NO WHEN
FISCAL YEAR		COST (000)	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
Fical Year (98)										
Alternate Bearing System	*	\$50.00	NAVSEA	N/A	WR	TRF, Kings Bay, GA	4/98	6/98	Yes	
Self Contained Breathing Apparatus (SD)	*	\$640.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	9/98	9/99	Yes	
1/2" 02 Hull Stop Valve Actuator (SD)	*	\$51.30	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	9/98	9/99	Yes	
Misc MOD Mat. @ TRF/TTF, KB/B	***	\$150.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/98	5/98	Yes	
Fiscal Year (99)										
ARC Fault Detector Sys. Improvement	*	\$990.00	NAVSEA	N/A	WR	NSWC CD, Bethesda MD	1/99	9/99	Yes	
Submarine Conference HM&E Alterations	**	\$837.70	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	2/99	9/99	Yes	
Misc MOD Mat. @ TRF/TTF, KB/B	***	\$364.30	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	4/99	Yes	
Low Sensitivity Rotor (LSR) Install	2	\$565.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	2/99	6/99	Yes	
OK-542 Towed Array Handling Sys.	*	\$881.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	8/99	Yes	
Indication Control & Alarm Systems	*	\$486.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	2/99	6/99	Yes	
BQR-15 SPALT 9080 ISEA/Depot	1	\$150.00	NAVSEA	N/A	WR	NATSC, Little Creek, VA	2/99	8/99	Yes	
Fiscal Year (00)										
None										

Δ DΔTF

UNCLASSIFIED

Weapon System

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

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D. REMARKS

^{*} A variety of hardware procured at different quantities.

^{**} As Required

^{***} Bulk Material

BUDGET PROCUREMEN	NT HIS	TORY AN	D PLANNING	EXHIBIT (P	-5A)	Weapon System		A. DATE	=	
(Page 1)									Februa	ry 1999
B. APPROPRIATION/B	UDGE1	Γ ACTIVIT	Υ		C. P-1 ITE	M NOMENCLATUR	E		SUBHEAD	
Other Procurement, Nav	/y				Strategic Plat	form Support Equipme	nt			
BA-1: SHIP SUPPORT E	QUIPI	MENT			_	TRIDENT Engineered		/	81	нн
		UNIT			CONTRACT	_		DATE OF	SPECS	IF NO
Cost Element/ FISCAL YEAR	QTY	COST (000)	LOCATION OF PCO	RFP ISSUE DATE	METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	FIRST DELIVERY	AVAILABLE NOW	WHEN AVAILABLE
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	\$4,224.00	NAVSEA	N/A	WR	PSNS/Bremerton, WA	2/99	8/99	Yes	
EA Advanced Planning (SSBN 732)	1	\$500.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	2/99	8/99	Yes	
EA OK-276T Overhaul (SSBN 731)	1	\$276.00	NAVSEA	N/A	WR	NUWC Neport, RI	2/99	8/99	Yes	
Fiscal Year (00)										
EA Prod Engr & Mgmt/Material	1	\$5,100.00	NAVSEA	N/A	WR	PSNS/Bremerton, WA	12/99	6/00	Yes	
EA Advanced Planning (SSBN 733)	1	\$500.00	NAVSEA	N/A	CPFF	EB Corp./Groton, CT	2/00	6/00	Yes	
D. REMARKS										

D. REIVIARNA

DD Form 2446-1, JUL 87

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 19

PAGE NO. 6

BUDGET PROCUREMI	ENT HI	STORY A	ND PLANNING	EXHIBIT (P-	5A)	Weapon System		A. DATE		4000
(Page 1) B. APPROPRIATION/	BUDGE	T ACTIVI	ITY		C. P-1 ITEI	⊔ M NOMENCLATURI			SUBHEAD	ry 1999
Other Procurement, Na	avy				Strategic Plat	form Support Equipme	nt			
BA-1: SHIP SUPPORT	EQUIF	PMENT			HH017 HM&E	Modernization Kits			811	НН
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) AN/UYQ-70 Display Fiscal Year (99) None Fiscal Year (00) None	*	\$14,360.00	NAVSEA	N/A	CPIF/FPR	Lockheed Martin, LMTDS/ Eagan, MN	1/98	7/98	Yes	

D. REMARKS

DD Form 2446-1, JUL 87

P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 19 PAGE NO. 7

^{*} A variety of H/W procured at different quantities.

CLASSIFICATION: UNCLASSIFII																								
P3A		INDIVID	UAL	MODIFI	CATIO	N																		
MODELS OF SYSTEM AFFECTED:	Ship Serv	vice Turb	ine Ge	enerator	(SSTG)		TYPE	MODIF	ICATIO	ON:	Obso	lete Eq	uipme	nt Repl	lacem	ent	MOD	IFICATI	ON T	ITLE:	Low	Sensitivity	Rotor (LS	R)
DESCRIPTION/JUSTIFICATION:																								
The Low Sensitivity Rotor (LSR) replace	es obsole	ete SST(3 com	ponent	s to inc	rease	system	reliabil	ity and	increa	se plat	form a	oustic	advan	tage t	hrough	incre	ased sy	stem	quietin	g.			
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT	MILEST	ONES	S:						N/A														
	FY 1996 QTY	& Prior	<u>F\</u> QTY	<u>/ 1997</u> ' \$	<u>FY</u> QTY	1998 \$	<u>FY</u> QTY	1999 \$	<u>FY</u> QTY	<u>′ 2000</u> \$	<u>FY</u> QTY	2001 \$	<u>FY</u> QTY	<u>2002</u>		<u>/ 2003</u>		<u>′ 2004</u> \$		2005 \$	QTY	<u>TC</u> \$	<u>T</u> QTY	ΓΟΤΑL \$
FINANCIAL PLAN (IN MILLIONS)												_		Ť		Ť		_		Ť		,		
RDT&E																								
PROCUREMENT																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																					_			
EQUIPMENT	1	3.81	1	3.90																			2	7.71
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER LLTM Note 2			1	0.82																			1	0.82
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST							2	1.13															2	1.13
TOTAL PROCUREMENT	1	3.81	2	4.72			0	1.13					0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	9.7

Note 1: FY97 and FY05 and out procurements include LLTM; results in increased unit cost & production lead time (19.5 mos.).

P-1 SHOPPING LIST

CLASSIFICATION:

Note 2: LLTM incorporated into LSR shipset prior to installation. FY02 and FY03 LLTM broken down into subcomponents. No related installation cost for LLTM/LSR combine.

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PAGE NO.

8

P3A (Continued)						INDIVIDU	AL M	ODIFICAT	ION (Continue	d)													
				rice Turb	ine Ge	nerator																		
MODELS OF SYSTEMS AFFE	ECTED	: <u>(</u> SS	STG)					MC	DIFIC	ATION TI	TLE:	Low Se	nsitivi	ty Rotor	(LSR)						_			
INSTALLATION INFORMATIO																								
METHOD OF IMPLEMENTAT		Tiger Te			Refit F	acility	_	DD 0 DL 1	OTION			19.5 Mon												
ADMINISTRATIVE LEADTIME CONTRACT DATES:		<u>3</u> 1998:	8 Mor	nths	_			FY 1999		I LEADTIN 12/		13.5 Mon	ths w		ocure 2000:		nce							
DELIVERY DATE:		1996. 1998:						FY 1999		6/9					2000.				_					
																			_					
Cost:	Pri	or Years	l F	Y 1997	T F	Y 1998	l F	Y 1999	F	(\$ in N Y 2000		<u>)</u> Y 2001	l F	Y 2002	l F	Y 2003	F\	Y 2004	TF	Y 2005	To C	omplete		Total
0031.	Qty	\$	Qty	\$	Qty		Qty		Qty		Qty	\$	Qty		Qty	\$	Qty	\$	Qty		Qty	\$	Qty	\$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT							1	0.56															1	0.56
FY 1997 EQUIPMENT							1	0.57															1	0.57
FY 1998 EQUIPMENT																							0	0.00
FY 1999 EQUIPMENT																							0	0.00
FY 2000 EQUIPMENT																							0	0.00
																							0	
FY 2001 EQUIPMENT							-																0	0.00
FY 2002 EQUIPMENT																							0	0
FY 2003 EQUIPMENT																							0	0.00
FY 2004 EQUIPMENT																							0	0.00
FY 2005 EQUIPMENT																							0	0.00
TO COMPLETE																							0	0.00
INISTALL ATION SCHEDUIL		SHID VV																		•			•	

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CLASSIFICATION:			UNCL	ASSIFI	ED							
		BUDG	SET ITEM JUSTIFICA	TION SHEE	Т				DATE:			
			P-40							February 1999	9	
APPROPRIATION/BUD OTHER PROCURE	MENT, NA	AVY					P-1 ITEM NOI	MENCLATUR	E/LINE ITEM #			
BA-1 SHIP SUPPO	RT EQUIP	PMENT					DSSP E	EQUIPMEN	T BLI: 0955	00 SBHD:	81HJ	
Program Element for C	ode B Items	s:				OTHER RELA	ATED PROGR	AM ELEMENT	S			
	Prior	ID									То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY												
EQUIPMENT COST									_			
(In Millions)			\$7.0	\$10.4	\$8.0	\$5.4	\$6.5	\$4.5	\$4.6	\$8.1		\$54.5
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 proje. 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/modernization's 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.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 20 PAGE NO. 1

CLASSIFICATION:	UNCLASSIFIED		
Bl	UDGET ITEM JUSTIFICATION SHEET		DATE:
	P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIV	/ITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NA	AVY		
BA-1 SHIP SUPPORT EQUIP	MENT	DSSP EQUIPME	NT BLI: 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.

ADS (Hardsuit 2000) (HJ090)

The ADS is a component of the Submarine Rescue Diving and Recompression System (SRDRS). This modified COTS one-man, one atmosphere diving system will also 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 des 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. 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:

REFERENCES:

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 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.

Acquisition Plans 584-87 Revision 6 approved 14 February 1997.

P-1 SHOPPING LIST

ITEM NO. 20 PAGE NO. 2

CLASSIFICATION:

UNCLASSIFIED

DD Form 2454, JUN 86

	WEAPONS			ALYSIS				Weapon Sy	/stem			DATE:	- 1 40	
OTHER	PRIATION/BUDGET ACTIVITY PROCUREMENT, NAVY	P-5	<u> </u>			ID Code	P-1 ITEM	NOMENCLA			25500 05		ebruary 19	99
BA-1 5	HIP SUPPORT EQUIPMENT	1 1					TOTAL CO	DSSP EC				3HD: 81H	,	
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999	931 IN THOC	JSANDS OF	FY 2000			FY 2001	
			QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT	TOTAL COST
	<u>N873</u>		QII	COST	C031	QII	COST	C031	QII	C031	C031	QII	C031	C031
HJ010	RESCUE/DSRV	Α			\$1,531			\$2,509			\$962			
HJ020	NR-1	Α			2,016			1,039			816			
HJ060	UNMANNED VEHICLE SYSTEMS	Α			1,272			1,100			500			
HJ080	SUBMARINE RESCUE CHAMBER	Α			474			0			0			
HJ090	ADS	Α			362			185			165			
HJ100	SUBMARINE ESCAPE AND IMMERSION EQUIPMENT	A			168			4,000			4,299			
	MATERIAL TOTAL				\$5,823			\$8,833			\$6,742			
HJINS	EQUIPMENT INSTALLATION (NON-FMP)	A			1,141			1,594			1,247			
TOTAL				P-1 SHOPF	\$6,964			\$10,427			\$7,989	CLASSIFIC		

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

BUDGET PROCUREMENT	HIST	ORY AND	PLANNING E	XHIBIT (P-5A	١)	Weapon System		A. DATI		
B. APPROPRIATION/BUD OTHER PROCUREMENT, NA BA-1 SHIP SUPPORT EQU	VY		,		DSSP EQUIP	NOMENCLATURE MENT/095500 CUE/DSRV SUPPORT	EQUIPM	IENT	SUBHEAD 81HJ	ry 1999
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY1998 Rotatable Pool Items Wet Mateable Connector Scope of Cert Values Marotta Valves EBA Face Mask Mem Storage/Mating Cable LL Items Rav-18 Risk Mitigation Refridgeration Unit NT-20 Deep Ocean Transpon FY1999 Power Cable Replacement RAV-18 Rotatable Pool Items FY2000 Unidentified Safety Items	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$220 \$130 \$221 \$30 \$55 \$338 \$100 \$26 \$342 \$69 \$1,300 \$750	NAVSEA		SS/OPTION SS/OPTION SS/OPTION SS/OPTION SS/OPTION SS/OPTION SS/OPTION SS/OPTION SS/OPTION	LMESC - S. Diego, CA CSDL - Boston, MA CSDL - Boston, MA LMESC - S. Diego, CA LMESC - S. Diego, CA NAVICP LMESC - S. Diego, CA	6/98 12/97 10/99 3/98 1/98 3/98 3/98 6/98 5/98 2/98 11/98 4/99 6/99	10/98 12/98 11/99 8/98 8/98 3/99 4/99 6/98 6/99 3/98 12/99 4/99 6/00	YES	6/99
VB/TB Pump FY2001 Unidentified Safety Items	1	\$249 \$249	NAVSEA NAVSEA		SS/OPTION SS/OPTION	LMESC - S. Diego, CA LMESC - S. Diego, CA	11/99	11/00	NO NO	6/99 6/00
D. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 20 PAGE NO. 4

BUDGET PROCUREMEN	T HIST	ORY AN	D PLANNING I	EXHIBIT (P-5	A)	Weapon System		A. DATI		m. 1000
B. APPROPRIATION/BU OTHER PROCUREMENT, N BA-1 SHIP SUPPORT EQ	AVY		Y			NOMENCLATURE MENT/095500			SUBHEAD 81HJ	ry 1999
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										
CVL/CVS Delete	1	\$41	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	4/98	10/98	YES	
Thruster Control System	1	\$171	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	1/98	6/98	YES	
Multifunction Color Display	1	\$106	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	5/98	10/98	YES	
Fiberoptic Interface	1	\$50	NAVSEA		SS/BOA	EB Corp-Groton CT	3/98	12/98	YES	
Operator Display	1	\$86	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	4/98	10/98	YES	
Mission Data Processor	1	\$469	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	5/98	11/98	YES	
Jetter	1	\$1,093	NAVSEA		WR	Portsmouth, NSY	1/99	5/99	YES	
FY1999										
AN/UYK-44 Phase III	1	\$466	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	12/98	12/00	YES	
Video Switcher	1	\$150	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	12/98	12/00	YES	
Computer Interface Equip	1	\$155	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	5/99	5/00	NO	3/99
Cable Replacement	1	\$150	NAVSEA		SS/BOA	EB Corp-Groton CT	3/99	9/99	NO	3/99
Guest Work Station	1	\$24	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	1/99	1/00	YES	
Manipulator Life Extension	1	\$94	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	3/99	9/99	NO	3/99
FY2000										
GPS Antenna	1	\$84	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	12/99	9/00	YES	
Manipulator Turret Rails	1	\$90	NAVSEA		SS/BOA	EB Corp-Groton CT	11/99	12/00	YES	
PC Update	1	\$122	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	1/00	7/00	YES	
OAS PCOF Cable Replace	1	\$140	NAVSEA		RC	Applied Research Lab-UT	12/99	7/00	YES	
UHF Radio Replacement	1	\$60	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	11/99	10/00	NO	10/99
Cable Replacement	1	\$100	NAVSEA		SS/BOA	EB Corp-Groton CT	11/99	12/00	NO	3/99
Sub Rescue Equipment	1	\$220	NAVSEA		SS/BOA	EB Corp-Groton CT	11/99	10/00	YES	
FY2001										
MK23 Gyro Replacement	2	\$139	NAVSEA		SS/OPTION	LMTDS-Great Neck, NY	2/01	2/02	NO	12/00
D. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

BUDGET PROCUREMENT H	HISTO	RY AND	PLANNING EX	(HIBIT (P-5A))	Weapon System		A. DATE		4000
B. APPROPRIATION/BUDG	TT A	CTIVITY			C DAITEMA	 NOMENCLATURE			Februa SUBHEAD	ry 1999
		CIIVIII								
OTHER PROCUREMENT, NAV					DSSP EQUIPM				81HJ	
BA-1 SHIP SUPPORT EQUII	<u>PMEN</u>	T				NNED VEHICLE SYSTE	MS EQ	UIPMENT		
					CONTRACT			DATE OF	SPECS	IF NO
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	FIRST DELIVERY	AVAILABLE NOW	WHEN AVAILABLE
FY1998										
TUWVS Responders	3	\$14	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	3/98	4/98	YES	
TUWVS II Manipulator Upgrade		\$181	NAVSEA			O'Tech - Upper Malboro	5/98	5/99	YES	
Flyaway Handling F/C	1	\$200	NAVSEA			O'Tech - Upper Malboro	11/98	11/99	YES	
TUWVS Sonar Upgrade	1	\$161	NAVSEA			O'Tech - Upper Malboro	11/98	11/99	YES	
Mooring Sys. Caps	1	\$149	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	8/98	8/99	YES	
TUWVS HPU Upgrade	1	\$136	NAVSEA			O'Tech - Upper Malboro	11/98	11/99	YES	
Manipulator Replacement	1	\$241	NAVSEA			O'Tech - Upper Malboro	11/98	11/99	YES	
Van Consolidation	1	\$123	NAVSEA			O'Tech - Upper Malboro	8/98	8/99	YES	
TUWVS Cable Dist Box F/C	1	\$4	NAVSEA			O'Tech - Upper Malboro	5/98	6/99	YES	
Stand Alone ROV Trainer	1	\$35	NAVSEA		RCP	ONR	8/98	8/99	YES	
FY1999										
PODS	20	\$10	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	3/99	9/99	YES	
PODS Training Fixture	1	\$25	NAVSEA			O'Tech - Upper Malboro	10/98	3/99	YES	
PODS SSN Field Change Kits	10	\$20	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	1/99	5/99	YES	
Rescue Tools	3	\$225	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	2/99	11/99	YES	
FY2000	0.5	Фоо.	NAVOE A		COMP/ODTION	O'Tash Hamar Malhara	44/00	2/00	VEC	
PODS SSN Field Change Kits	25	\$20	NAVSEA		COMP/OPTION	O'Tech - Upper Malboro	11/99	3/00	YES	
FY2001 PODS SSN Field Change Kits	10	\$20	NAVSEA		COMP/ODTION	O'Tech - Upper Malboro	12/00	7/01	YES	
PODS SSN Field Change Kits	10	\$20 \$10	NAVSEA			O'Tech - Upper Malboro	1/98	7/01	YES	
FODS SSIN FIELD CHANGE KILS	10	Φ10	NAVSEA		COMPOPTION	Tech - Opper Malboro	1/96	7/01	123	
D. REMARKS		[l	<u> </u>		<u>I</u>	<u> </u>	<u> </u>

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 20 PAGE NO. 6

BODGET FROCUREWIEW	HIST	DRY AND	PLANNING E	XHIBIT (P-5A	()	Weapon System		A. DATI		
3. APPROPRIATION/BU	DGET A	ACTIVITY	,		C P-1 ITEM N	 NOMENCLATURE			Februa SUBHEAD	ry 1999
		ACTIVITI								
OTHER PROCUREMENT, N.					DSSP EQUIPM				81HJ	
BA-1 SHIP SUPPORT EQI	JIPME	N I				MARINE RESCUE CHAI	MBEK			
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 Anchor Trip Pedestals SPRFA Inflat Boat SPRFA False Seat Cable Reel Atmospheric Sampler Umbilical Ree	1 1 1 1 1	\$73 \$83 \$49 \$220 \$16 \$33	NAVSEA NAVSEA NAVSEA NAVSEA NAVSEA		WR WR WR WR	O'Tech - Upper Malboro PORTSMOUTH NSY PORTSMOUTH NSY PORTSMOUTH NSY PORTSMOUTH NSY PORTSMOUTH NSY	6/98 12/97 1/98 8/98 8/98 8/98	7/98 6/98 6/98 8/99 8/99	YES YES YES YES YES	

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 20 PAGE NO. 7

BUDGET PROCUREMENT I	HISTO	RY AND	PLANNING EX	(HIBIT (P-5A)	Weapon System		A. DATE		m. 1000
B. APPROPRIATION/BUDG OTHER PROCUREMENT, NAV BA-1 SHIP SUPPORT EQUI	/Y					I NOMENCLATURE MENT/095500			SUBHEAD 81HJ	ry 1999
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 LARS Spares	1	\$362	NAVSEA		RC	COASTASYSSTA Panama City, FL	8/98	12/98	YES	
FY1999 Suit Communications Upgrade	1	\$62	NAVSEA		RC	COASTASYSSTA Panama City, FL	9/99	12/99	YES	
Rescue Support Tools FY2000	1	\$123	NAVSEA		RC	COASTASYSSTA Panama City, FL	1/99	3/99	NO	4/99
Suit Communications Upgrade	2	\$50	NAVSEA		RC	COASTASYSSTA Panama City, FL	2/00	10/00	YES	
Camera Upgrade	2	\$33	NAVSEA		RC	COASTASYSSTA Panama City, FL	2/00	10/00	YES	

DD Form 2446-1, JUL 87

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 20

PAGE NO. 8

T HISTO	RY AND	PLANNING EX	KHIBIT (P-5A	.)	Weapon System		A. DATE		
IAVY				DSSP EQUIP	PMENT/095500			SUBHEAD 81HJ	<u>ry 1999</u>
QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION			SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
10	\$2	NAVSEA		воа	Naval Regional Contracting Center, London, UK	8/98	12/98	YES	
2	\$30	NAVSEA		ВОА	Naval Regional Contracting Center, London, UK	8/98	12/98	YES	
1	\$88	NAVSEA		ВОА	Naval Regional Contracting Center, London, UK	8/98	12/98	YES	
9	\$444	NAVSEA		ВОА	Naval Regional Contracting Center, London, UK	2/99	7/99	YES	
8	\$537	NAVSEA		ВОА	Naval Regional Contracting Center, London, UK	2/00	7/00	YES	
 -	DGET A IAVY UIPMEN 10 2 1	DGET ACTIVITY AVY UIPMENT	DGET ACTIVITY IAVY	DGET ACTIVITY IAVY UIPMENT	NAVY UIPMENT	DGET ACTIVITY AVY UIPMENT QTY UNIT COST (000) 10 \$2 NAVSEA NAVSEA BOA Naval Regional Contracting Center, London, UK BOA Naval Regional Contracting Center, London, UK NAVSEA BOA Naval Regional Contracting Center, London, UK	DGET ACTIVITY IAVY UIPMENT QTY UNIT COST (000) 10 \$2 NAVSEA 2 \$30 NAVSEA BOA Naval Regional Contracting Center, London, UK 1 \$88 NAVSEA BOA Naval Regional Contracting Center, London, UK DGET ACTIVITY AVY	C. P-1 ITEM NOMENCLATURE DSSP EQUIPMENT/095500 B1HJ	

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 20 PAGE NO. 9

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 ·	1998	FY	1999	FY	2000	FY 2	2001	FY 2	2002	FY 2	2003	FY 2004	FY2	005	TC			TOTAL
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY \$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																			
RDT&E																			
PROCUREMENT																			
INSTALLATION KITS	10	1.531	3	2.509	2	0.962	1	0.249	1	0.366						VAR	VAR	17	5.617
INSTALLATION KITS NONRECURRING																			
EQUIPMENT																			
EQUIPMENT NONRECURRING																			
ENGINEERING CHANGE ORDERS																			
DATA																			
TRAINING EQUIPMENT																			
SUPPORT EQUIPMENT																			
OTHER																			
OTHER																			
OTHER																			
INTERIM CONTRACTOR SUPPORT																			
INSTALL COST																			
TOTAL PROCUREMENT	10	1.531	3	2.509	2	0.962	1	0.249	1	0.366								17	5.617

P3A (Continued)						INDIVID	JAL I	MODIFICA	TION	(Contin	ued													
MODELS OF SYSTEMS AFF	ECTE): <u>M`</u>	YSTIC	DSRV-1/A	VALO	N DSRV-	2	МО	DIFIC	ATION T	TITLE:	DEEP S	SUBM	MERGE	NCE S	YSTEM	S PRC	GRAM	(DSSI	P)	_			
INSTALLATION INFORMATION METHOD OF IMPLEMENTAT ADMINISTRATIVE LEADTIMI CONTRACT DATES: DELIVERY DATE:	ION:		Mor VAF VAF	?	_	<u> </u>	-	PRODU FY 1999 FY 1999	:	N LEADT VAR VAR		VAR	Mor	F	<u>Y</u> 2000: Y 2000:		AR AR		<u>-</u>					
	FY1	998	FY '	1999		2000		2001		2002		2003	FY:	2004		2005	-	Complete						
PRIOR YEARS	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$				
FY 1998 EQUIPMENT	4	0.479	5	0.0	1	0.153																	10	0.632
FY 1999 EQUIPMENT			1	.600	2	0.304																	3	0.904
FY 2000 EQUIPMENT							2	0.00															2	0.000
FY 2001 EQUIPMENT									1	0.00													1	0.000
FY 2002 EQUIPMENT											1	0.00											1	0.000
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
FY 2005 EQUIPMENT																								
TO COMPLETE																								
INSTALLATION SCHEDUI	E: 1 0 0	1 1	3 4	1 <u>FY</u>	2	- 4 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FY: 2 0 1	20000 3 4 1 0 0 1	1 2 2	FY 200 2 3 0 0 0 0	0	1 2 1 0 1 0	2002 3 0 0	0	FY: 1 2 1 0 1 0	2003 3 4 0 0	0	FY 200 2 3 0 0 0 0	4 0	TC	1	TAL 7		

5 FY98 KITS REQUIRE NO INSTALLATION FUNDING

FY00 - FY02 KITS REQUIRE NO INSTALLATION FUNDING Item No. 19

CLASSIFICATION: UNCLASSIFIE	D																			
РЗА		INDIVID	UAL MOD	IFICATION	ON															
MODELS OF SYSTEM AFFECTED:	NR-1						TYPE N	MODIFIC	ATION:			MODIFI	CATION :	TITLE:		DEEP S	UBMER	SENCE S	SYSTEMS P	PROGRAM (DSSP)
DESCRIPTION/JUSTIFICATION: SUBMAI	RINE NR	-1- HJ020	0																	
DEVELOPMENT STATUS/MAJOR DEVELO	DMENT M	III ESTON	JEQ.				NOT AD		E DSSD	FOLIDM	ENITS AS	DE ALL M	ATURE S	SVSTEMS	2					
DEVELOPMENT STATOS/MAJOR DEVELO																				
	QTY	1998 \$	FY 1 QTY	1 <u>999</u> \$	<u>FY</u> QTY	2000 \$	QTY	<u>2001</u> \$	QTY	<u>2002</u> \$	QTY	2003 \$	QTY	<u>2004</u> \$	QTY	2 <u>005</u> \$	TC QTY	\$	QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS)																				
<u>RDT&E</u>																				
PROCUREMENT																				
INSTALLATION KITS	7	2.016	6	1.039	7	0.816	2	0.278	4	0.756	3	0.290	2	0.295	7	1.222	VAR	VAR	38	6.712
INSTALLATION KITS NONRECURRING																				
EQUIPMENT																				
EQUIPMENT NONRECURRING			<u> </u>																	
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
OTHER																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALL COST																				
TOTAL PROCLIDEMENT	7	2.016	6	1 020	7	0.016	2	0 270	4	0.756	2	0.200	2	0.205	7	1 222			20	6 712

CLASSIFICATION: UNCLASS	SIFIED																						
P3A (Continued)						INDIVIDU	AL M	ODIFICAT	TION (Continued	d)												
MODELS OF SYSTEMS AFFE	CTED	: <u>IN</u> R	R-1					_ MO	DIFIC	ATION TI	TLE:	DEEP S	SUBN	MERGEN	CE S	YSTEMS	PRO	GRAM	(DSSF	P)	_		
INSTALLATION INFORMATIO METHOD OF IMPLEMENTATI ADMINISTRATIVE LEADTIME CONTRACT DATES: DELIVERY DATE:	ON:		Moni VAR VAR		_		- -	PRODUC FY 1999 FY 1999	:	I LEADTII VAR VAR	ME:	VAR	Мо		_ 2000: 2000:				<u> </u>				
									(\$ in	Millions)													
	FY19		FY 1		FY 2			2001		2002		2003		2004		2005		Complet			T T	1	
PRIOR YEARS	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			
FY 1998 EQUIPMENT	1	0.427	6	#####																		7	0.471
FY 1999 EQUIPMENT					4	0.089	2	0.017														6	0.106
FY 2000 EQUIPMENT					2	0.042	5	0.079														7	0.121
FY 2001 EQUIPMENT									2	0.165												2	0.165
FY 2002 EQUIPMENT											4	0.107										4	0.107
FY 2003 EQUIPMENT													3	0.234								3	0.234
FY 2004 EQUIPMENT															2	0.068						2	0.068
FY 2005 EQUIPMENT																	7					7	0.000
TO COMPLETE																						38	
INSTALLATION SCHEDUL In Out	E: 1 0 0	SHIP AVAILAR FY 1998 2 3 0 1 0 0	<u>4</u> 0		1	4 2 0 2	2	2000 3 1 3 1 2	6	FY 2001 2 3 0 0 4 0	0	1 2	0	4 1	2	2003 3 4 0 2 0 0	1	0 (04 3 4 0 0 0 0	TC 9 9	TOTAL 38 38		
1 FY99 KIT NEEDS NO	INST	ALL FUNDING	3																	P-	3A		

Item No. 19 ITEM NO. 20 PAGE 13 CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIE	D																	
РЗА		INDIVIDU	UAL MODIFICATI	ION														
MODELS OF SYSTEM AFFECTED:	SUBMA	ARINE RE	ESCUE CHAMBI	<u>ER</u>	TYPE N	ODIFIC	CATION:			MODIFI	CATION 1	TITLE:	DEEP S	UBMER	RGENCE	SYSTE	MS PROG	GRAM (DSSP)
DESCRIPTION/JUSTIFICATION: SUBMAI	RINE RE	SCUE CH	HAMBER- HJ08(0														
DEVELOPMENT STATUS/MAJOR DEVELO	PMENT M	ILESTON	ES:		NOT AP	PLICABL	E, DSSP	EQUIPM	ENTS AR	E ALL M	ATURE S	YSTEMS	3					
	<u>FY</u> QTY	<u>1998</u> \$	<u>FY 1999</u> QTY \$	<u>FY 2000</u> QTY \$	<u>FY 2</u> QTY	2 <u>001</u> \$	FY 2 QTY	2 <u>002</u> \$	FY 2 QTY	2 <u>003</u> \$	FY 2 QTY	2 <u>004</u> \$	FY2 QTY	: <u>005</u> \$	<u>TC</u> QTY	\$	QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS) RDT&E						,								•		•		
<u>PROCUREMENT</u>																		
INSTALLATION KITS	6	0.474													VAR	VAR	6	0.474
INSTALLATION KITS NONRECURRING																		
EQUIPMENT																		
EQUIPMENT NONRECURRING																		
ENGINEERING CHANGE ORDERS																		
DATA																		
TRAINING EQUIPMENT																		
SUPPORT EQUIPMENT																		
OTHER																		
OTHER																		
OTHER																		
INTERIM CONTRACTOR SUPPORT																		
INSTALL COST																		
TOTAL PROCUREMENT	6	0 474															6	0 474

CLASSIFICATION: UNCLAS	SIFIED																								
P3A (Continued)							INDIVIDU	JAL M	IODIFIC	CATION	(Con	tinued	d)												
MODELS OF SYSTEMS AFF	ECTED:		ISUB	MAR	INE RES	CUE C	HAMBER		_ 1	MODIFI	CATIC	TIT NC	ΓLE:	DEEP	SUB	MERG	ENCE	SYSTE	MS PR	OGRAM ((DSSF	')			
INSTALLATION INFORMATION METHOD OF IMPLEMENTAL	ΓΙΟΝ:	VARIOU						-																	
ADMINISTRATIVE LEADTIMI CONTRACT DATES:	E: FY 19	VAR		Mon		_			PROL FY 19	DUCTIC	N LEA VAI		1E:	VAR	Mc	onths	FY 200	n. '	VAR						
DELIVERY DATE:	FY 19			VAR			- -		FY 19		VA						FY 200	_	VAR		<u> </u>				
											(\$ in	Million	ns)												
	FY19	198		FY 1	999	FY 1	2000	FY	2001	ΕV	2002	,	FY 2	กกร	FY	2004	F۷	2005	To	Complete	. Tota	al			
PRIOR YEARS	Qty	\$		Qty			\$	Qty			\$		Qty			/ \$		/ \$		/ \$	Qty				
FY 1998 EQUIPMENT	3	0.000			0.000	2							j	-										6	0.021
FY 1999 EQUIPMENT		<u> </u>																							
FY 2000 EQUIPMENT		<u> </u>																							
FY 2001 EQUIPMENT		<u> </u>																							
FY 2002 EQUIPMENT																									
FY 2003 EQUIPMENT		<u> </u>																							
FY 2004 EQUIPMENT		<u> </u>																							
FY 2005 EQUIPMENT		<u> </u>			<u> </u>	<u> </u>																			
TO COMPLETE		L				\perp																			
INSTALLATION SCHEDUI	LE:	SHIP A\	VAILAE	BILIT	IES																				
	1	FY 19 2	9 <u>98</u> 3	4	1 2		4 1	2		4 1	2		4	1 :	Y 2002 2 3	4	1 2	<u>2003</u>			4	TC	ТО	TAL	
In Out	0	0 0	2 0	1 3	0 0		2 0 0 2			0 0			0		0 0		0 0		0 0		0			5 5	
4 Kits require no installation fu	unding																								
																						Р	-3A		

CLASSIFICATION: UNCLASSIFIE	ΕD																			
РЗА		INDIVID	UAL MOD	DIFICATION	ON															
MODELS OF SYSTEM AFFECTED:	TETHE	RED UNI	MANNE) WORK	VEHIC	LE SYST	EM	TYPE M	ODIFICA	TION:		MODIFI	CATION	TITLE:	DEEP S	SUBMER	RGENCE	SYSTE	MS PROG	RAM (DSSP)
DESCRIPTION/JUSTIFICATION: DEEP S	SUBMERO	BENCE V	/EHICLE	S - HJ06	60															
DEVELOPMENT STATUS/MAJOR DEVELO	OPMENT N	ILESTON	IES:				NOT AP	PLICABL	E, DSSP	EQUIPM	ENTS AF	RE ALL M	ATURE S	SYSTEMS	3					
	<u>FY</u> QTY	1998 \$	<u>FY 1</u> QTY	1999 \$	<u>FY</u> QTY	<u>2000</u> \$	FY 2 QTY	<u>2001</u> \$	FY 2 QTY	2002 \$	FY: QTY	2003 \$	FY: QTY	<u>2004</u> \$	<u>FY2</u> QTY	2 <u>005</u> \$	<u>TC</u> QTY	\$	QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS) RDT&E	Q I I				Q.I.				Q11		g i i				g i i		Q i i		Q11	
PROCUREMENT																				
INSTALLATION KITS	12	1.272	34	1.100	25	0.500	20	0.300	5	0.350	24	0.400	8	0.410	26	0.420	VAR	VAR	154	4.752
INSTALLATION KITS NONRECURRING		<u> </u>		<u> </u>																
EQUIPMENT				<u> </u>																
EQUIPMENT NONRECURRING		<u> </u>	<u> </u>	<u> </u>																
ENGINEERING CHANGE ORDERS		<u> </u>		<u> </u>																
DATA																				
TRAINING EQUIPMENT		<u> </u>																		
SUPPORT EQUIPMENT		<u> </u>		<u> </u>																
OTHER		<u> </u>		<u> </u>																
OTHER		<u> </u>		<u> </u>																
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALL COST																				
TOTAL DROCLIDEMENT	10	1 272	24	1 100	25	0.500	20	0.200	_	0.250	24	0.400	0	0.410	26	0.420			151	4.752

CLASSIFICATION:	UNCLASSIFIED	
P3A		INDIVIDUAL MODIFICATION

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

INSTALL COST

TOTAL PROCUREMENT

MODELS OF SYSTEM AFFECTED: SUBMARINE ESCAPE AND IMMERSION EQUIPMENT TYPE MODIFICATION: MODIFICATION TITLE: <u>DEEP SUBMERGENCE SYSTEMS PROGRAM (DSSP)</u>

NOT APPLICABLE, DSSP EQUIPMENTS ARE ALL MATURE SYSTEMS

DESCRIPTION/JUSTIFICATION: DEEP SUBMERGENCE VEHICLES - HJ100

0.168

13

4.000

9

8

4.299

FY 2000 FY2005 FY 1998 FY 1999 FY 2001 FY 2002 FY 2003 FY 2004 TC TOTAL QTY QTY QTY QTY \$ QTY QTY QTY QTY QTY QTY \$ \$ FINANCIAL PLAN (IN MILLIONS) RDT&E **PROCUREMENT** 2.324 INSTALLATION KITS 0.168 4.000 4.299 6 3.250 3.602 5 2.277 4.874 VAR VAR 24.794 13 9 8 9 5 11 66 INSTALLATION KITS NONRECURRING **EQUIPMENT EQUIPMENT NONRECURRING ENGINEERING CHANGE ORDERS** DATA TRAINING EQUIPMENT SUPPORT EQUIPMENT OTHER OTHER OTHER INTERIM CONTRACTOR SUPPORT

UNCLASSIFIED

24.794

66

9

3.602

5 2.277

2.324

5

11 4.874

6 3.250

Item No. 19 ITEM NO. 20 PAGE 19 CLASSIFICATION: UNCLASSIFIED

	BUDGE	T ITEM	JUSTIFICA	TION SHEE	Т			DATE:					
			P-40						F	EBRUARY 199	99		
APPROPRIATION/BUDG	SET ACTIVI	TY				P-1 ITEM NO	MENCLATURI	LINE ITEM #					
OTHER PROCURE	ΛΈΝΤ, ΝΑΊ	VY							21LC				
BA-1: SHIPS SUPPO	ORT EQUI	IPMENT	•						LCAC	097000			
Program Element for Co		OTHER RELA	TED PROGR	M ELEMENTS									
	Prior	ID										То	
	Years	Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY2004	FY2005	Complete	Total
QUANTITY			N/A	0	0	1	2	2	2	2	2	30	41
EQUIPMENT COST													
(In Millions) N/A A N/A \$4.3 \$0.0						\$4.0	\$6.4	\$7.9	\$5.2	\$6.8	\$6.9	\$113.1	\$154.6
SPARES COST													
(In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

ITEM DESCRIPTION/JUSTIFICATION:

LCAC SLEP will consist of procuring and installing a new C4N suite of electronics equipment in the command module on Landing Craft Air Cushion (LCAC). The LCAC mission is to transport from ship-to-shore and across the beach, weapon systems, equipment, cargo to personnel of the assualt elements of the Marine Air/Ground Task Force. The LCAC weighs 150 tons, is 88ft long with a beam of 47ft, rides on a cushion of air contained in a flexible skirt and is propelled by two aft mounted reversable variable pitch propellers. It is capable of speeds in excess of 40 knots.

LC001 - The new C4N electronics suite will replace the electronics suite currently being used on the LCAC. This replacement will reduce the life cycle cost of the craft's electronics, improve supportability and contribute toward extending the life of the craft. The new C4N also introduces new system architecture which allows simpler lower cost upgrades of individual components and future changes using software rather than hardware.

LC002 - Installation of the new and removal of the old will take place at the two Assault Craft Units (ACUs) each of which are currently responsible for half of the craft inventory.

LC830 - Production Engineering in support of the procurement and assembly/integration of the C4N suite.

Estimates include competitive outsourcing savings associated with consolidation of production support contracting efforts.

P-1 SHOPPING LIST

ITEM NO. 21 PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED CLASSIFICATION:

	WEAPONS SYSTE	M COST	ANALYSIS					Weapon Sy	rstem			DATE: FEBRUAR	V 4000	
APPROPRIATION/BU OTHER PROCURE	DGET ACTIVITY	- 5				ID Code	P-1 ITEM	NOMENCLA	TURE/SUB	HEAD		FEBRUAR	1 1999	
BA-1: SHIPS SUPF						Α		LCAC/21L	С					
			TOTAL CO	ST IN THO	USANDS O	FDOLLAR	S							
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000				
			QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT	TOTAL COST
	LCAC SLEP, N853		<u> </u>	333.	333.	<u> </u>	- 555.	333.	<u> </u>	333.	333.		000.	
LC001	C4N ELECTRONIC SUITE	Α			0				1	2,931	2,931			
LC002	INSTALLATION	Α			0						840			
LC830	PRODUCTION ENGINEERING	А			3,960						100			
LC900	CONSULTING SERVICES	А			350						177			
	-													
	-													
TOTAL DD FORM 2446, JUN 86				P-1 SHOPE	\$4,310						\$4,048	CLASSIFIC	ATION	
UU FUKIVI 2446, JUN 86				P-1 2HOPF	TING LIST							CLASSIFIC	ATION:	

> ITEM NO. PAGE NO. 2

BUDGET PROCURI	EMEN	T HISTO	RY AND PLANN	IING EXHIBI	T (P-5A)	Weapon System		A. DATE		
					,				Februa	ry 1999
B. APPROPRIATION	ON/BU	DGET A	CTIVITY		C. P-1 ITEI	M NOMENCLATURE	=		SUBHEAD	
OTHER PROCURE	MENT.	NAVY			LCAC				21	LC
BA-1: SHIPS SUPP	ORT E	QUIPME	NT							
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	AVAILABLE	IF NO WHEN AVAILABLE
FISCAL YEAR 1998										
LC001/C4N Electronic Suite	0	1,640.0	NAVSEA	9/98	SS/CPIF	TEXTRON, Marine & Land Systems, New Orleans,LA	12/99	9/00	NO	10/99
FISCAL YEAR 2000										
LC001/C4N Electronic Suite	1	3,771.0	NAVSEA	10/99	SS/FP	TEXTRON, Marine & Land	12/99	9/00	NO	10/99
						Systems, New Orleans,LA				

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 21 PAGE NO. 3

UNCLASSIFIED

		BU	DGET ITEM	1 JUSTIFICA	TION SHEE	ĒΤ				DATE:			
				P-40							February 199	9	
APPROPRIATION/BUD	GET ACTIV	/ITY						P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	ł .		
OTHER PROCURE	MENT, NA	VY											
BA-1: SHIPS SUPP	A-1: SHIPS SUPPORT EQUIPMENT									EEPING EQ	UIPMENT/	BLI #0975	
Program Element for 0	Code B Item	ıs:			OTHER REL	ATED PROGR	M ELEMENTS	1					
0603654N								0603654N					
	Prior	ID										То	
	Years	Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY													0
EQUIPMENT COST													
	N/A	В	N/A	\$4.8	\$0.4	\$16.3	\$13.0	\$13.6	\$8.8	\$8.9	\$9.1	N/A	75.0
SPARES COST													
(In Millions)	N/A			\$0.4	\$0.6	\$0.4	\$1.4	\$1.1	\$0.9	\$0.6	\$0.6	N/A	6.1

PROGRAM DESCRIPTION/JUSTIFICATION:

THIS BUDGET CONSOLIDATES SUBHEAD 81GG/BLI 18000 (OTHER PROPULSION EQUIPMENT) AND SUBHEAD 71HZ/BLI 114000 (EOD UNDERWATER EQUIPMENT) WITH SUBHEAD 71UQ/BLI 097500 (MINESWEEPING EQUIPMENT).

Mine Sweeping: This program provides systems, subsystems, and engineering change kits for minesweeping and mine neutralizationsystems 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.

Other Propulsion Equipment: Includes Solar Marine Gas Turbine (MGT) Modification Program for improvement to T1302S gas turbine engines used for driving electric pulse generators on MCM Class ships; MCM/MHC Diesel Engine Improvement Program to improve reliability and maintainability of installed MCM and MHC diesel engines; and Integrated Ship Control System (ISCS) to replace the existing MCM Machinery Control System (MCS) and implement condition-basedmaintenance. 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.

Underwater EOD Equipment: 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.

UQ013-AN/SLQ-48 UPGRADE: Funding is to procure retrofit kits for the AN/SLQ-48 MNS and Handling System to improve vehicle maneuverability and system interoperability.

UQ014-MAGNETIC SWEEP CABLES: 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.

UQ015-SOLAR MARINE GAS TURBINE (MGT) MODIFICATION MCM: Provides a standardized engine configuration, introduces reliability/maintainabilityimprovements, and implements an effective Integrated Logistics Support (ILS) program realizing fleet mission readiness improvements while supporting the operation of the Regional Repair Center.

UQ016-MCM/MHC DIESEL ENGINE PROGRAM: 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-Failurefor increased ship operationalavailability. 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 realiability 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.

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APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY		
BA-1: SHIPS SUPPORT EQUIPMENT	MINESWEE	PING EQUIPMENT/BLI #0975

UQ017-INTEGRATED SHIP CONTROL SYSTEM (ISCS): Funds the MCM 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.

UQ018-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.

UQ019-OUTFITTING EOD DETACHMENT: This line provides for the outfitting of diving systems/equipment which enhance mission capability for established EOD detachments.

UQ020-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.

UQ021-C4I UPGRADES: Provides for the upgrade of existing EOD Mobile Communication Systems (MCS) to C4I requirements.

UQ023-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

UQ024-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 aircraf

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BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-1: SHIPS SUPPORT EQUIPMENT DATE: February 1999 P-1 ITEM NOMENCLATURE/LINE ITEM # MINESWEEPING EQUIPMENT/BLI #0975

UQ830-PRODUCTION ENGINEERING: Provides 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. In addition for EOD equipment, review all technical data packages prior to procurement and provide procurement instruction to the procuring activity in support of the EOD unified procurement system.

UQ850-PRODUCT IMPROVEMENT: Engineering servcies to improve EOD Systems/Equipment in production to improve maintainablility, utilize current technology, and decrease cost.

UQ860-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.

UQTNG-INITIAL TRAINING: Provide training support packages which include curriculum material for Underwater EOD equipment

Note: Minesweeping Equipment, BLI 0975, controls for FY 2000 reflect the consolidation of Other Propulsion Equipment, 018000; Minesweeping Equipment, BLI 0975 and EOD Equipment, BLI 114000.

There is additional funding as follows which transferred from BLI 1140/ EOD Underwater. The database was locked before the error could be corrected.

FY 00 FY01 FY02 FY03 FY04 FY05 +292K +375K +664K +273K +370K +467K

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WEAPONS SYSTEM COST ANALYSIS Weapon System DATE: February 1999 P-5 APPROPRIATION/BUDGET ACTIVITY ID Code P-1 ITEM NOMENCLATURE/SUBHEAD Other Procurement, Navy **BA-1: SHIPS SUPPORT EQUIPMENT** В MINESWEEPING EQUIPMENT/097500 71UQ **TOTAL COST IN THOUSANDS OF DOLLAR!** COST **ELEMENT OF COST** ID FY 1998 FY 1999 FY 2000 CODE Code UNIT **TOTAL** UNIT **TOTAL** UNIT **TOTAL** UNIT **TOTAL** QTY COST COST QTY COST COST QTY COST COST QTY COST COST SPONSOR N85 UQ013 AN/SLQ-48 UPGRADE Α 4,265 UQ014 MAGNETIC SWEEP CABLES 398 Various Various Various Various 393 Various Various 695 UQ015 SOLAR MGMT MOD PROGRAM Α 351 UQ016 MCM/MHC DIESEL ENGINE PROGRAM 760 UQ017 INTEGRATED SHIP CONTROL SYS 6,235 UQ018 INFLATABLE CRAFT 413 UQ019 **OUTFITTING EOD DET** 370 2,591 Α UQ020 VSWMCM INITIAL OUTFITTING 1,939 C4I UPGRADES UQ021 Α 296 UQ023 **OBSTACLE AVOIDANCE** В 280 140 TRANSISTION FROM GASOLINE UQ024 1,029 UQ830 PRODUCTION ENGINEERING 103 392 Α UQ850 PRODUCT IMPROVEMENT 994 UQ860 ACCEPTANCE, TEST & EVAL Α 390 UQ900 CONSULTING SERVICES Α 50 UQTNG INITIAL TRAINING 123 16,488 393 TOTAL 4.816

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B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIPS SUPPORT EQUIPMENT Cost Element/ QTY UNIT LOCATION RFP ISSUE METHOD CONTRACTOR AWARD FIRST AVAILABLE WHE	BUDGET PROCUE		NT HIST		INING EXHIB	IT (P-5A)	Weapon System		A. DATE	=	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-1: SHIPS SUPPORT EQUIPMENT Cost Element/ FISCAL YEAR (98) UQ014 Various Various Various NAVSEA FISCAL YEAR (00) UQ014 Various Various Various NAVSEA NA				(1 0/1)	(i oh) Weapon System						
Other Procurement, Navy	B. APPROPRIAT	ION/B	UDGET	ACTIVITY		C. P-1 ITE	M NOMENCLATURE		<u> </u>		•
BA-1: SHIPS SUPPORT EQUIPMENT	Other Procuremen	nt. Nav	/ V			MINESWEEPI	NG EQUIPMENT				UQ
Cost Element/FISCAL YEAR		•	•	MENT							
FISCAL YEAR (98) Various Various NAVSEA 05/98 SS/FFP BIW, Boston, MA 01/98 06/98 YES FISCAL YEAR (99) Various Various NAVSEA N/A SS/FFP BIW, Boston, MA 12/98 06/99 YES FISCAL YEAR (00) Various Various NAVSEA N/A C/FFP UNKNOWN 12/99 06/00 YES UQ018 7 59 WR SURFLANT, VA/SURFPAC, CA 2/00 2/01 YES UQ019 7 370 WR SURFLANT, VA/SURFPAC, CA 2/00 2/01 YES		QTY	COST			METHOD			FIRST	AVAILABLE	IF NO WHEN AVAILABLE
UQ014 Various Various NAVSEA N/A SS/FFP BIW, Boston, MA 12/98 06/99 YES FISCAL YEAR (00) Various Various Various NAVSEA N/A C/FFP UNKNOWN 12/99 06/00 YES UQ018 7 59 WR SURFLANT, VA/SURFPAC, CA 2/00 2/01 YES UQ019 7 370 WR SURFLANT, VA/SURFPAC, CA 2/00 2/01 YES		Various		NAVSEA	05/98	SS/FFP	BIW, Boston, MA	01/98	06/98	YES	
UQ014 Various Various NAVSEA N/A C/FFP UNKNOWN 12/99 06/00 YES UQ018 7 59 WR SURFLANT, VA/SURFPAC, CA 2/00 2/01 YES UQ019 7 370 WR SURFLANT, VA/SURFPAC, CA 2/00 2/01 YES		Various	Various	NAVSEA	N/A	SS/FFP	BIW, Boston, MA	12/98	06/99	YES	
	UQ014 UQ018 UQ019	7 7	59 370	NAVSEA	N/A	WR WR	SURFLANT,VA/SURFPAC,CA SURFLANT,VA/SURFPAC,CA	2/00 2/00	2/01 2/01	YES YES	

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P-40									F	EBRUARY 19	98		
APPROPRIATION/BUD	GET ACTIV	ITY						P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	ļ		
OTHER PROCURE	MENT, N	AVY											
BA-1: Ships Support Equipment						Н	M&E ITEM	S UNDER \$.	2 MILLION ((81HK) (098	0)		
Program Element for C	ode B Item	s:						OTHER RELA	ATED PROGR	M ELEMENTS	3		
	Prior	ID										То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		Complete	Total
QUANTITY													0
EQUIPMENT COST													
(In Millions)			\$51.6	\$51.4	0*	0*	0*	0*	0*	0*			\$103.0
SPARES COST													
(In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

This program 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.

This program was consolidated with P-1 #24, Items Under \$5 Million, BLI:0981, in FY 2000.

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BUDGET ITEM JUSTIFICATION SHEET										DATE:			
P-40										F	EBRUARY 1999)	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							P-1 ITEM NOMENCLATURE/LINE ITEM #						
BA-1: Ships Supp	A-1: Ships Support Equipment							ITEMS U	INDER \$5 M	IILLION (81L)	T) (0981)		
					OTHER RELA	OTHER RELATED PROGRM ELEMENTS							
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)			\$56.5	\$66.7	\$126.1	\$143.4	\$108.1	\$168.3	\$143.0	\$144.6			\$956.7
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. A list of these items is provided below. In addition, this category purchases and installs various machinery pumps, generators, ships propellers and shafts, and steam propulsion items.

A. VARIOUS HM&E

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LT(HK)052 - 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.

LT(HK)830 - 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.

LT(HK)215 - 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.

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OTHER PROCUREMENT, NAVY	ITEMS UNDER \$5 M	ILLION (81LT) (0981)
BA-1: Ships Support Equipment		

LT(HK)067 - AEC (ASSESSMENT OF EQUIPMENT CONDITION) - This supports the implementation of Condition Based Maintenance (CBM) by providing work package validation for HM&E systems; pre-deployment HM&E systems condition assessment, OJT and repair assistance to ships during Type Commander's TARGET process. AEC assessment visits facilitate early identification of material deficiencies and eliminate unnecessary repairs, provide meaningful sea/shore rotation opportunities for enlisted maintainers and hands on training of ship's force for greater self-sufficiency. These funds are for the outfitting and periodic replacement of the AEC team's Test Measurement and Diagnostic Equipment (TMDE) inventories, provide deckplate diagnostic capability to improve the quality of AEC process and products and to leverage technology to streamline the visit process. Many of these items are specialized, state of the art, high cost instruments not O&M,N supportable. Examples of OPN supported TMDE are: microprocessor based instruments, vibration monitoring equipment, alignment instruments, leak detectors, flow meters, IR cameras, etc. Although the overall number of ships is decreasing, the scope of AEC assessments has increased to meet TYCOM requirements. Procurement of state of the art TMDE is necessary to support new ship classes as they are inducted into the operating fleet and to replace aging TMDE.

LT(HK)213 - LANDING CRAFT AIR CUSHION (LCAC) - This 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).

LT(HK)261 - 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.

LT(HK)122 - 363 TON AIR CONDITIONER - This programs procures and installs Air ConditioningPlants on CVN-68 Class. It provides the necessary Air Conditioningcapacity 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.

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OTHER PROCUREMENT, NAVY	ITEMS UNDER \$5 M	ILLION (81LT) (0981)				
BA-1: Ships Support Equipment						
LT(HK)068 - COMMAND AND CONTROL UPGRADES -Modifications to enhance extensive communications, and support for Fleet Commanders and embarked staff. LT(HK)262, LT(HK)263, LT(HK)265, LT(HK)266, 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, Somosis Desalination units. LT(HK)5IN - INSTALLATIONOF EQUIPMENT - Funding is for the Installation of equipment including Fleet M and installation of equipment in other shore facilities.	, ,					

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OTHER PROCUREMENT, NAVY	ITEMS UNDER \$5 MILLION (81LT) (0981)		
BA-1: Ships Support Equipment			

B. VARIOUS GENERATORS

LT(G6)024 - 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.

LT(G6)035 - 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)

LT(G6)5IN - 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.

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BA-1: Ships Support Equipment		

C. VARIOUS MACHINERY PUMPS- used in shipboard fluid systems such as fireman, fuel oil, portable water, lube oil, waste and drain.

LT(GP)211 - AERP - The AERP is a rotable pool program in which "A" condition (ready for issue/use) pumps are delivered to a submarine undergoing overhaul and switched with installed pumps. The removed pump is sent away for refurbishment and ultimately shipped to another submarine in overhaul. Assets are continually rotated between overhauls. Procurement is required to replace pumps that can no longer be repaired.

LT(GP)212 - 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.

LT(GP)5IN - EQUIPMENT INSTALLATION - Funding is for the installation of equipment including Fleet Modernization Program Installation, installation of training equipment and installation of equipment in other shore facilities.

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BA-1: Ships Support Equipment	
LT(GP)213 - FLUID SYSTEM - Fluid Systems on board navy surface ships and submarines consist of any of lube oil or air and all of the ancillary hardware that supports the system, such as pumps, pipe hangers, turk virtue of the operating conditions within the conduit, (ie Piping), and the equipment transporting the fluid. The equipment are the biggest life cycle cost drivers for HM&E equipment in the operating navy. Proper invitechnology can drastically reduce maintenance costs, extend the operating life of the equipment and increase LT(GP)214 - PUMP ROTABLES - This program provides for immediate fixes to reduce maintenance cost engineering solutions developed as part of the LHA Mid-Life Maintenance Upgrade Program and is a joint OF initiative. LT(GP)XXX - 2000 GPM FIRE PUMP (LHD) - This program is to replace steam fire pumps with electric fire	oines, motors, etc. These systems suffer abuse and degradation by maintenance and upkeep of these systems and associated support estigation and utilization of commercially available state of the art ses the operational availability and reliability of the equipment. It incorporates PNAV, CINCLANTFLT, SURFLANT, CINCPACFLT, and SURFPAC

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BA-1: Ships Support Equipment		

D. VARIOUS "S" COGNIZANCE SHIPS PROPELLERS AND SHAFTS - which are not listed as separate P-1 Items. 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. 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. These propellers and shafts can be installed during drydocking, Selected Restricted Availabilit 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.

LT(GR)044 - BLADE SET, PORT/STBD DDG-51 CL - 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. Three units have been procured in Prior years. Two are included in the Budget years. Five are to be procured in subsequent years. Unit cost is estimated at \$779K.

LT(GR)045 - HUB SET PORT/STBD DDG-51 CL - 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 the budget years. Seven are to be procured in subsequent years. Unit Cost is estimated at \$900K.

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BA-1: Ships Support Equipment		

LT(GR)046 - PROP SHAFT DDG-51 CL - The Maintenance Stock Objective (MSO) for Prop Shaft DDG 51 CL is 12 to support DDG-51 CL ships. Two are being procured by SCN. One is included in the budget years. Nine are to be procured in subsequent years. Unit cost is estimated at \$534K.

LT(GR)061) - INTERMEDIATE SHAFT, PORT, AOE 6 CL - The Maintenance Stock Objective for the Intermediate Shaft, Port, AOE 6 CL is 2, to support the AOE 6 CL ships. One has been procured in prior years and one is included in the budget years. Unit cost is estimated at \$186K.

LT(GR)063 - STERN TUBE SHAFTS PORT (GR063) AND LT(GR)064 - STBD, AOE 6 CL - The Maintenance Stock Objective for the AOE 6 CL Port and Stbd Stern Tube Shafts is 2 each to support the AOE 6 CL ships. Two units each are included in the budget years. Unit cost is estimated at \$321K for the Port Stern Tube Shaft and \$368K for the Starboard Stern Shaft. The Unit cost is different for the shafts because the shafts are different lengths.

LT(GR)066) - HUB SET PORT/STBD CG 66-73 - Because of a change in the ship propulsion system, the Hubs installed in the CG 66 thru 73 are a different configuration from the prior ships of the CG 47 class. The Maintenance Stock Objective is two to support the eight ships. One set will be procured in the budget years and one in subsequent years.

LT(GR)830 - 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.

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E. VARIOUS STEAM PROPULSION EFFORTS - 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, and 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.

LT(KQ)052 - PROPULSION PLANT INSPECTION TOOLING - 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.

LT(KQ)065) - HYDRAULIC EXPANSION EQUIPMENT FOR LARGER BOILER TUBES - 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.

LT(KQ)830 - 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 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

P-1 SHOPPING LIST

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CLASSIFICATION:

UNCLASSIFIED

DD Form 2454, JUN 86

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	ITEMS UNDER \$5 M	ILLION (81LT) (0981)
BA-1: Ships Support Equipment		
LT(KQ)067 - LHA BOILER DESUPERHEATER - Because the LHA boiler desuperheater is so large, it preve tube therefore requires about five days to repair, considering that a 2700 lb. desuperheater must be remove for meeting commitments. A new desuperheater has been designed that permits access, and SHIPALT nur also help resolve water drum blind flange leakage which has occurred on various LHA. LT(KQ)5IN - INSTALLATIONOF EQUIPMENT - Funding is for installation of equipment including Fleet Mo and installation of equipment in other shore facilities.	d and replaced. The ca nber LHA 660 has bee	apability to quickly plug a leaking tube is vital en assigned. Installation of this SHIPALT will

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P-1 SHOPPING LIST

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	ITEMS UNDER \$5 M	IILLION (81LT) (0981)
BA-1: Ships Support Equipment		

F. OTHER INITIATIVES

LTXXX - SMART SHIP - This provides for the procurement and installation of proven initiatives into several Navy ship classes including LSD 41/49 and Aircraft Carriers. These initiatives include Fiber Optic Ship-wide Area Network (WAN), Damage Control Quarters/Ballast Control System (DCQ/BCS), Integrated Bridge System (IBS), Machinery Control System (MCS), Remote Monitoring Cameras, and Integrated Comm Advanced Network. These installations will be coordinated with other unprogrammed initiatives. Initially the goal of the Smart Ship effort was to evaluate and select solutions which demonstrated major workload reductions while maintaining or improving readiness. Lessons learned and technology previously demonstrated on ships such as the CG 47 and the LSD 47 have confirmed the value and applicability of smart ship technologies and should result in future life cycle cost avaidance in manpower and ship maintenance.

LTYYY - INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS) - This provides for ICAS procurement and installation in a variety of amphibious and surface combatants and aircraft carriers. ICAS is an installed, state of the art, automated system which can analyze hundreds of sensor inputs continuously. The heart ICAS is the Machinery Work Station (MWS) which is an integrated software program. The MWS is a collection electronic programs loosely coupled to form the basis of a Condition Based Monitoring System. MWS integrates measurement tools, performance analysis tools, and an expert inference image within a single integrated software package. The MWS is configurable to meet the maintenance needs of a wide variety of machinery and systems commonly found onboard Naval vessels. Much of the MWS' effectiveness is derived from its ability to measure and analyze maintenance information while operating from a single, configuration driven software shell. The ship classes scheduled to undergo the ICAS effort include: DD963, FFG7, LCC, AGF, LHA-1, LHD-1, AOE, and CV/CVN.

LTZZZ - VARIOUS EQUIPMENT PROCUREMENT INITIATIVES - This provides for the procurement and installation of a variety of backlogged requirements pertaining to the ARS-50, command and control ships, and amphibious ships, chiefly the LHA and LHD classes, as will as initiatives to reduce the backlog for MACHALTS, hubs and shafts for the DDG-51 Class and instituting the replacement of water tight doors. The equipments being procured include generators, low pressure air compressors (LPAC), air conditioning plants, and slewing arm davits..

LT5IN - INSTALLATIONOF EQUIPMENT - Funding is for installation of equipment including Fleet Modernization Program Installation, Installation of training equipment, and installation of equipment in other shore facilities.

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CLASSIFICATION:

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	WEAPONS S	YSTEM (COST ANA	LYSIS				Weapon Sy	stem			DATE:		February 1999
APPRO	PRIATION/BUDGET ACTIVITY	1-5				ID Code	P-1 ITEM	NOMENCLA	TURE/SUI	BHEAD		1		1 ebruary 1998
	Procurement, Navy													
BA-1:	Ships Support Equipment							ITEMS UN	NDER \$5	MILLION ((81LT) (098	B1)		
			TOTAL C	OST IN TH	OUSANDS (OF DOLLA	RS							
COST	ELEMENT OF COST	ID		FY 1998			FY 1999			FY 2000				
CODE		Code		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
Note: Co	l ost Codes have not been adjusted for nev	l v P-1	QTY				COST	COST	QTY	COST	COST	QTY	COST	COST
HK213	MOD KITS LAND CRAFT CUSHION	Α			0			661			1,023			
HK260	CIRC PUMP MOTORS	Α				2	60	120						
HK262	REVERSE OSMOSIS	Α	4	393	1,572	4	438	1,752	12	360	4,320			
HK263	UPGRADE CHT SYSTEMS	Α	2				507	1,014						
HK264	STAR ROTARY COMPRESSORS	Α	4	236	942	8	214	1,709	4	215	860			
HK265	300 TON AC PLANTS	Α	1	861	861	2	1,034	2,068	1	1,287	1,287			
HK266	BALLAST DEBALLAST		2	192	384									
HK267	CARGO HANDLING MONORAIL	Α				1	268	268						
GP212	LHA MIDLIFE GPM FIRE PUMPS	Α	1	150	150	2	150	300	1	150	150			
GP213	FLUID SYSTEMS IMPROVEMENT	Α				N/A		320	N/A		319			
GP214	PUMP ROTATABLES	Α							5	89	450			
G6024	LHA MIDLIFE UPGRADE (Solid State Frequency Changer)						320	4,806						
KQ067	BOILER LOW PROFILE DESUPERHTRS		2	192	383	2	183	366	6	194	1,162			
	SUBTOTAL N85				\$5,306			\$13,384			\$9,571			
												01 4 0 0 1 5		

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

	WEAPONS	SYSTEM	COST A	NALYSIS				Weapon Sy	/stem			DATE:		
		P-5	<u> </u>			lin o i								February 1999
	PRIATION/BUDGET ACTIVITY Procurement, Navy					ID Code	P-1 ITEM	NOMENCLA	ATURE/SU	BHEAD				
	Ships Support Equipmen							ITEMS UN	NDER \$5 I	MILLION (81LT) (09	81)		
			TOTAL C	COST IN TH	HOUSANDS	OF DOLL	ARS			,				
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000			FY 2001	
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HK067	AEC	Α			835			399			403			
HK068	COMMAND & CONTL UPGRADES	А			183									
HK261	MACHALTS	А			6,716			3,837			2,090			
HK830	PRODUCTION ENGINEERING	А			200			195			202			
G6035	COMMAND & CONTROL UPGRADE		2	846	1,692	4	945	3,780						
KQ052	PROPULSION PLANT INSPECTION	А			20			30			30			
KQ830	PRODUCTION ENGINEERING	А			14			12			6			
GR044	BLADE SET PORT/STBD, DDG-51 CL	А	2	779	1,559									
GR045	HUB SET PROT/STBD, DDG-51 CL	А				1	900	900						
GR046	PROP SHAFT DDG-51 CL	А	1	549	549									
GR061	INTERM SHAFT, PORT AOE-6 CL	А				1	186	186						
GR063	STERN TUBE SHAFT, PORT AOE-6 CL	А							1	321	321			
GR064	STERN TUBE SHAFT, STBD AOE-6 CL	А							2	369	737			
GR066	HUB SET PORT/STBD, CG 66-73	А												
GR830	PRODUCTION ENGINEERING	А						36			141			
	SUBTOTAL N86				\$11,768			\$9,375			\$3,930			
	GRAND TOTAL													
	GIVAND TOTAL									1		ı		

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CLASSIFICATION:

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	WEAPONS			ALYSIS				Weapon Sy	ystem			DATE:		
	PRIATION/BUDGET ACTIVITY	P-	-5			ID Code	P-1 ITEM	NOMENCLA	ATURE/SUE	BHEAD				February 1999
	Procurement, Navy Ships Support Equipmen							ITEMS UI	NDER \$5 N	AILLION (81LT) (09	B1)		
			TOTAL CO	ST IN THO	USANDS C	F DOLLAR	S				, (,		
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000				
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HK122	363 TON A/C PLANT	А	1	902	\$902	2	900	1,800	2	939	1,871			
KQ052	PROPULSION PLANT INSPECTION	Α			\$66			103			122			
KQ065	HYDRAUL EXP BOIP LG BOILER TUBES	А			\$29			32						
KQ830	PRODUCTION ENGINEERING				\$17			21			27			
	SUBTOTAL N88				\$1,014			\$1,956			\$2,020			
LTXXX	SMART SHIP AMPHIBIOUS SHIP CARRIERS										\$24,429			
LTYYY	ICAS AMPHIBIOUS SHIPS SURFACE SHIPS CARRIERS UNREPLENISHMENT SHIPS								7 10 1 3	372 759 2,881 1,440	\$2,603 \$7,589 \$2,881 \$4,321			
LTZZZ	VARIOUS EQUIPMENT AMPHIBIOUS SHIPS SURFACE SHIPS										\$29,525			
	SUBTOTAL N85/N86/N88				\$0			\$0			\$71,348			
	TOTAL EQUIPMENT		\$18,089					\$24,715			\$86,869			
	GRAND TOTAL													

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

	WEAPONS			ALYSIS				Weapon S	ystem			DATE:		Fab
	DPRIATION/BUDGET ACTIVITY	P-	5			ID Code	P-1 ITEM	NOMENCLA	ATURE/SUE	BHEAD				February 1999
	Procurement, Navy Ships Support Equipmen							ITEMS U	NDER \$5 N	MILLION (81LT) (098	31)		
			TOTAL CO	ST IN THO	USANDS C	F DOLLAR	S				, (,		
COST	ELEMENT OF COST	ID		FY 1998			FY 1999			FY 2000				
CODE		Code	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST
HK5IN	INSTALLATION OF EQUIPMENT		QII	0031	0031	QII	0031	0001	QII	0031	- 0001	QII	0031	0031
	AMPHIBIOUS SHIPS				11,719			26,777			18,871			
	SURFACE SHIPS				11,540									
	CARRIERS				14,723			10,840			13,873			
GP5IN	INSTALLATION OF EQUIPMENT													
	AMPHIBIOUS SHIPS			286				393			390			
G65IN	INSTALLATION OF EQUIPMENT													
	AMPHIBIOUS SHIPS				176			1,177			1,396			
	SURFACE SHIPS							2,738			4,671			
KQ5IN	INSTALLATION OF EQUIPMENT													
	AMPHIBIOUS SHIPS				5			50			63			
LT5IN	INSTALLATION OF EQUIPMENT													
	SURFACE SHIPS													
	TOTAL INSTALLATION				\$38,449			\$41,975			\$39,264			
	GRAND TOTAL				\$56.537			\$66,690			\$126.133			

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CLASSIFICATION:

UDGET PROCUREME	NT HIS	STORY A	ND PLANNING	EXHIBIT (P-	5A)	Weapon System		A. DATE		
4 555 655 4 7 6 1 / 5		T 40TN/			lo 5 / 1==1					ry 1999
APPROPRIATION/E		T ACTIV	ITY		C. P-1 ITE	M NOMENCLATURI	E		SUBHEAD	
ther Procurement, Na	-									
A-1: Ships Support E	quipm	ent		1	CONTRACT	ER \$5 MILLION		DATE OF	81LT (0981) SPECS	IF NO
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	_	AVAILABLE	WHEN
FISCAL YEAR		COST (000)	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY		AVAILABLE
FY 98		,								
HK266 BALLAST/DEBALLAST	2	192	NAVSEA		WR	NSY PUGET	May-98	May-99	YES	
HK122 363 TON A/C PLANTS	1	902	NAVSEA		OPT	YORK YORK, PA	Feb-98	Jun-99	YES	
HK067 AEC	N/A	835	NAVSEA		WR/RC	NSWC PHILA, PA	Mar-98	Mar-99	N/A	
HK261 MACHALTS	N/A	6,716	NAVSEA		WR	NSWC PHILA, PA	Mar-98	Mar-99	N/A	
HK263 UPGRADE CHT SYSTEMS	2	507	NAVSEA		WR	NSY PUGET/NORFLK	Feb-98	Aug-98	YES	
HK264 STAR ROTARY	4	236	NAVSEA		OPT	RIX INDUSTRIES	Feb-98	Feb-99	YES	
HK265 300 TON AC PLANTS	1	861	NAVSEA		OPT	YORK YORK, PA	Jan-98	Mar-99	YES	
HK 262 REVERSE OSMOSIS	4	393	NAVSEA		C/FP	VILLAGE MARINE	Jun-98	Jun-99	YES	
REMARKS										

D. REMARKS

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P-1 SHOPPING LIST CLASSIFICATION:

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BUDGET PROCUREME	IN I HIS	OIOKI A	IND PLAINING	EVUIDII (L-	SA)	Weapon System		A. DATE		ry 1999
B. APPROPRIATION/E	BUDGE	T ACTIV	ITY		C. P-1 ITE	M NOMENCLATURE	<u> </u>		SUBHEAD	19 1999
Other Procurement, Na	vy									
BA-1: Ships Support E	quipm	ent			ITEMS UND	ER \$5 MILLION			81LT (0981)	
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 AVAILABL
FY 98 (CONT'D)		(CCC)								
G6035 Command and Control Upgrade	2	846	NAVSEA		C/FP	CARTER INC, NORFOLK VA	May-98	Jan-99	YES	
GP212 LHA MID-LIFE GPM FIRE PUMP	1	150	NAVSEA		WR	PUGET NSY	Feb-98	Feb-99	YES	
GR044 BLADE SET	2	779	NAVICP MECH		RCP/FP/OPT	BIRD JOHNSON, MA	Mar-98	Sep-99	YES	
GR046 PROPELLER SHAFT	1	549	NAVICP MECH		RCP/FP	ERIE FORGE, PA	May-98	Nov-99	YES	
KQ067 BOILER DESUPERHEATER	2	192	NAVSEA		RCP	NSWC, PHILA, PA	Sep-98	Sep-99	YES	
D REMARKS										

D. REMARKS

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P-1 SHOPPING LIST

CLASSIFICATION:

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BUDGET PROCUR	REMEN	NT HISTO	RY AND PLAN	NING EXHIBI	T (P-5A)	Weapon System		A. DATE	=	
									Februa	ry 1999
B. APPROPRIATI	ON/B	JDGET A	CTIVITY		C. P-1 ITEI	M NOMENCLATUR	E		SUBHEAD	
Other Procuremen	it, Nav	y								
BA-1: Ships Supp	ort Ec	quipment			ITEMS UND	ER \$5 MILLION			81LT (0981)	
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	661	NAVSEA		WR	NSY PUGET SOUND	Feb-99	Feb-00	N/A	
HK260 CIRC PUMP MOTOR	2	60	NAVSEA		WR	NSY PUGET SOUND	Apr-99	Apr-00	YES	
HK267 CARGO HANDLING	1	268	NAVSEA		C/FP	UNKNOWN	Jun-99	Oct-00	YES	
HK122 363 TON A/C PLANTS	2	900	NAVSEA		OPT	YORK, YORK PA	Feb-99	May-00	YES	
HK067 AEC	N/A	399	NAVSEA		WR	NSWC PHILA, PA	Mar-99	Mar-00	N/A	
HK261 MACHALTS	N/A	3,837	NAVSEA		WR	NSWC PHILA, PA	Feb-99	Feb-00	N/A	
HK263 UPGRADE CHT SYSTEMS	2	507	NAVSEA		WR	NSY PUGET/NORFLK	Feb-99	Aug-99	YES	
HK264 STAR ROTARY	8	214	NAVSEA		OPT	RIS INDUSTRIES	Feb-99	Feb-00	YES	

D. REMARKS

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BUDGET PROCUREMEN	T HIST	ORY AND P	LANNING EXHIBIT	(P-5A)		Weapon System		A. DATE		
										ry 1999
B. APPROPRIATION/BU	DGET A	ACTIVITY			C. P-1 ITEM	NOMENCLATURE			SUBHEAD	
Other Procurement, Navy										
BA-1: Ships Support Equi	pment		Г	T		R \$5 MILLION	1		81LT (0981)	
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	1,034	NAVSEA		OPT	YORK, YORK PA	Jan-99	Mar-00	YES	
HK262 REVERSE OSMOSIS	4	438	NAVSEA		OPT	UNKNOWN	Feb-99	Feb-00	N/A	
GP212 LHA ML - GPM FIRE PUMP GPM FIRE PUMP	2	150	NAVSEA		WR	PUGET NSY	Feb-99	Feb-00	YES	
GP213 FLUID SYSTEMS		320	NSWC PHILA		WR	NSWC PHILA, PA	Nov-98	Sep-99		
G6024 Solid State Freq Changes	15	320	NAVSEA		C/FP/OPT	UNKNOWN	Jan-99	Jan-00	YES	
G6035 Command and Contl Upgrades	4	945	NAVSEA		C/FP/OPT	CARTER INC.	Feb-99	Oct-99	YES	
GR045 HUB SET	1	900	NAVICP MECH		RCP/FP	UNKNOWN	May-99	Nov-00	YES	
GR061 INT SHAFT	1	186	NAVICP MECH		RCP/FP	UNKNOWN	May-99	May-98	YES	
KQ067 BOILER DESUPERHEATER	2	183	NAVSEA		RCP/OPT	NSWC, PHILA, PA	Feb-99	Feb-00	YES	

D. REMARKS

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BUDGET PROCUREMEN		ORY AND P	LANNING EXHIBIT	(P-5A)		Weapon System		A. DATE		
				,		, ,				ry 1999
B. APPROPRIATION/BU	IDGET A	ACTIVITY			C. P-1 ITEM I	NOMENCLATURE			SUBHEAD	
Other Procurement, Navy										
BA-1: Ships Support Equi	pment			1	ITEMS UNDE	R \$5 MILLION	1		81LT (0981)	
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 00		·								
HK213 LAND CRAFT CUSHION	N/A	1,023	NAVSEA		WR	NSY PUGET SOUND	Feb-00	Feb-01	N/A	
HK262 REVERSE OSMOSIS	12	360	NAVSEA		OPT	UNKNOWN	Feb-00	Feb-01	N/A	
HK264 STAR ROTARY	4	215	NAVSEA		ОРТ	RIS INDUSTRIES	Feb-00	Feb-01	YES	
HK265 300 TON AC PLANTS	1	1,287	NAVSEA		CFP	TBD	Mar-00	Jun-01	YES	
HK261 MACHALTS	N/A	2,090	NAVSEA		wx	NSWC PHILA, PA	Feb-00	Feb-01	N/A	
HK122 363 TON A/C PLANTS	2	939	NAVSEA		OPT	YORK, YORK PA	Feb-00	May-01	YES	
HK067 AEC	N/A	403	NAVSEA		wx	UNKNOWN	Mar-00	Mar-01	N/A	
GP212 LHA ML GPM FIRE PUMP	1	150	NAVSEA		WR	PUGET NSY	FEB 00	FEB 01	YES	
GP213 FLUID SYSTEMS		319	NSWC PHILA		WR	NSWC PHILA, PA	NOV 99	SEP 00		
GR063, PORT GR064, STBD (STERN TUBE SHAFTS)	1 2	321 369	NAVICP MECH NAVICP MECH		RCP/FP RCP/FP	UNKNOWN	MAY 00 MAY 00	MAY 02 MAY 02	YES YES	
KQ067 LHA BOILER	6	194	NAVSEA		RCP/OPT	NSWC, PHILA, PA	FEB 00	FEB 01	YES	

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CLASSIFICATION:		499ILIED								
BUDGET PROCUREMEI	NT HISTO	ORY AND P	LANNING EXHIBIT	(P-5A)		Weapon System		A. DATE		
									Februa	ry 1999
B. APPROPRIATION/BI	JDGET A	CTIVITY			C. P-1 ITEM	NOMENCLATURE			SUBHEAD	-
Other Procurement, Navy	/									
BA-1: Ships Support Equ					ITEMS UNDE	R \$5 MILLION			81LT (0981)	
					CONTRACT			DATE OF	SPECS	IF NO
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	WHEN
FISCAL YEAR	Q 1 1	COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY		AVAILABLE
TISOAL TEAR		(000)	01 1 00	DAIL	Q III L	AND ECCATION	DAIL	DELIVERT	INOVV	AVAILABLE
FY 00 (Cont'd)		(000)								
FT 00 (Cont a)										
LTXXX SMART SHIP										
LSD41/49		24,429	TBD	TBD	TBD	TBD	TBD	TBD		
202,		2 ., .20	.55				.55			
LTYYYICAS										
AMPHIB SHIPS	7	372	TBD	TBD	TBD	TBD	TBD	TBD		
SURFACE SHIPS	10	759	TBD	TBD	TBD	TBD	TBD	TBD		
CARRIERS	1	2,881	TBD	TBD	TBD	TBD	TBD	TBD		
UNREP SHIPS	3	1,440	TBD	TBD	TBD	TBD	TBD	TBD		
D. REMARKS	1						1	l	l	
J. NEIVIANNO										

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CLASSIFICATION: UNCLASSIFIED																							
P3A		INDIVIE	DUAL N	MODIFI	CATIC	N																	_
MODELS OF SYSTEM AFFECTED:	STAR R		(LHA N	ЛIDLIFE	UPG	RADE)	TYPI	E MODIF	CATION	ON:				_	MOD	DIFICAT	ION T	TTLE:	ITE	MS UNDE	R 5M		
DESCRIPTION/JUSTIFICATION:	(HK264)	#831																					
DEVELOPMENT STATUS/MAJOR DEVEL			ONES:											-									
	FY 1997 QTY	& Prior \$	FY QTY	′ 1998 \$	FY QTY	′ 1999 \$	F` QTY	Y 2000 \$	F\ QTY	′ 2001 \$	FY QTY	2002	F\ QTY	7 2003 \$		′ 2004 \$		/ 2005 \$	QTY	TC \$	T QTY	OTAL \$	
FINANCIAL PLAN (IN MILLIONS)						•				,		,										*	_
RDT&E																					0	0.0	
PROCUREMENT																							
INSTALLATION KITS																					0	0.0	
INSTALLATION KITS NONRECURRING																						0.0	
EQUIPMENT	4	1.2	4	0.9	8	1.7	4	0.9													20	4.7	
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					8	26	4	17	8	21											20	6.4	

CLASSIFICATION: UNCLASSIFIED

4.7

0.9

TOTAL PROCUREMENT

CLASSIFICATION: UNCLASS	SIFIED																				
P3A (Continued)					INDIVIDI	JAL M	ODIFICATI	ION (Co	ontinued)												
MODELS OF SYSTEMS AFFE		AR RC (264)	OTARY (LHA N	MIDLIFE	UPGRA	DE)	_ MO	DIFICA	TION TIT	LE:	ITEMS	UNDER	5M								
INSTALLATION INFORMATIO	N:`	,				_															
METHOD OF IMPLEMENTATI ADMINISTRATIVE LEADTIME		Mor				_	PRODUC	TION	LEADTIM	=-	1	12 Mont	ths								
CONTRACT DATES:	FY 1998:	IVIOI	Feb-9	98			FY 1999		LL/\D I IIVII	 Feb-99		IZ WOIII		2000:			Feb-00				
DELIVERY DATE:	FY 1998:		Feb-9	99			FY 1999	:		Feb-00)		FY	2000:	_		Feb-01	_			
									(\$ in Milli	ons)											
Cost:	Prior Years		FY 1998	F	Y 1999	F	Y 2000	FY	′ 2001		2002		FY 200	3	FY 2004		FY 2005	To C	omplete	-	Total
	Qty \$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																				0	0
FY 1997 EQUIPMENT				4	1.	3														4	1.3
FY 1998 EQUIPMENT				4	1.	3														4	1.3
FY 1999 EQUIPMENT						4	1.7	4	1.0											8	2.7
FY 2000 EQUIPMENT								4	1.0											4	1.0
FY 2001 EQUIPMENT																				0	0
FY 2002 EQUIPMENT																				0	0.0
FY 2003 EQUIPMENT																				0	0.0
FY 2004 EQUIPMENT																				0	0.0
FY 2005 EQUIPMENT																				0	0.0
TO COMPLETE																				0	0.0
INSTALLATION SCHEDUL FY 1997 & Prior In 0 Out 0	7 FY 1998	4		1999 3 0 4	4 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 4	2000 - 3 4 0 0 0 4		FY 200 2 3 4 0 0 4	1 4 0 4	F 1 2 0 0 0 0 0 0	0	4 0 0	FY 20 1 2 0 0 0 0	3 2	1 1 0 0 0	0	0 2	TAL 20		

CLASSIFICATION: UNCLASSIFIED																					
P3A		INDIVIE	DUAL	MODIFI	CATIC	DN															
MODELS OF SYSTEM AFFECTED:	BALLAS	T/DEBA	LLAST	(HK26	66)	•	TYPI	E MODIF	FICATION	ON:				_			ITE	MS UNDE	R 5M		
DESCRIPTION/JUSTIFICATION:	(LHA MI	DLIFE U	PGRA	DE) #1:																	
DEVELOPMENT STATUS/MAJOR DEVEL	ODMENT	MIII ECT	ONICO																		
DEVELOPMENT STATUS/MAJOR DEVEL														-							
	FY 1997 QTY	& Prior \$	FY QTY	′ 1998 \$		′ 1999 \$	F' QTY	Y 2000 \$	F\ QTY	/ 2001 \$	FY QTY	2002	FY QTY	/ 2003 \$	2004 \$	Y 2005	QTY	TC \$	QTY	OTAL \$	
FINANCIAL PLAN (IN MILLIONS)																					_
RDT&E																			0	0.0	
PROCUREMENT																					
INSTALLATION KITS																			0	0.0	
INSTALLATION KITS NONRECURRING																				0.0	
EQUIPMENT	8	1.6	2	0.4															10	2.0	
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	8	16			2	0.5													10	21	

UNCLASSIFIED

CLASSIFICATION:

2.0

TOTAL PROCUREMENT

1.6

2

P3A (Continued)						INDIVIDU	JAL M	ODIFICATIO	N (Co	ntinued)											
MODELS OF SYSTEMS AFF	ECTED:		.LAST/ 266)	DEBALLAST	LHA M	IIDLIFE U	PG)	_ MOD	IFICA ⁻	ΓΙΟΝ TITLE:		ITEMS	UNDER 5M								
INSTALLATION INFORMATI METHOD OF IMPLEMENTA	TION:	AIT	,				_														
ADMINISTRATIVE LEADTIM			3 Mon						TON L	EADTIME:		1	2 Months								
CONTRACT DATES: DELIVERY DATE:		1998: 1998:	_	May-98 May-99				FY 1999: FY 1999:						Y 2000: Y 2000:	_			_			
									(\$ in	Millions)											
Cost:		or Years		FY 1998		Y 1999		FY 2000		FY 2001		Y 2002	FY 2003		2004		Y 2005		omplete		otal
DDIOD VEADO	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty \$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS FY 1997 EQUIPMENT	8	1.6	3																	8	0.0
FY 1998 EQUIPMENT					2	0.9	5													2	0.5
FY 1999 EQUIPMENT																				0	0.0
FY 2000 EQUIPMENT																				0	0.0
FY 2001 EQUIPMENT																				0	0.0
FY 2002 EQUIPMENT																				0	0.0
FY 2003 EQUIPMENT																				0	0.0
FY 2004 EQUIPMENT																				0	0.0
FY 2005 EQUIPMENT																				0	0.0
TO COMPLETE																				0	0.0
INSTALLATION SCHEDU FY 199		SHIP A\			1999		F\	⁷ 2000		FY 2001		FY	7 2002	FY 2	003	F	Y 2004				
ln & Prid	or 1 0	$\frac{2}{0} \frac{3}{0}$			$\frac{2}{0} \frac{3}{2}$	4 0 0		$-\frac{3}{0}$ $-\frac{4}{0}$	1 0	$-\frac{2}{0}$ $\frac{3}{0}$	40	1 2		$\frac{1}{0} \frac{2}{0}$	3 4			3 4		TOTA 10	
Out 8	0	0 0		0	0 2	0 0		0 0	0	0 0	0	0 0		0 0	0 0			0		10	

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIE	DUALI	MODIFI	CATIC	DN																
MODELS OF SYSTEM AFFECTED:	300 TON		HA MI	DLIFE U	IPGR/	ADE)	TYP	E MODIF	ICATI	ON:				_	MOE	DIFICAT	T NOI	TITLE:	ITE	MS UNDE	R 5M	
DESCRIPTION/JUSTIFICATION:	(HK265)	#418																				
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT	MILEST	ONES	<u> </u>																		
	FY 1997	' & Prior	F۱	′ 1998	FΥ	′ 1999	F	Y 2000	F۱	⁄ 2001	FY	2002	F۱	Y 2003	FY	2004	F۱	Y 2005		TC	Т	OTAL
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)							-		-													
RDT&E									1												0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	1	1.3	1	0.9	2	2.1	1	1.3													5	5.6
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	6.4	1	6.6	1	7.0	2	8.7											5	28.7

0.9

1.3

TOTAL PROCUREMENT

CLASSIFICATION: UNCLASSIFIED

5.6

ITEM NO 24

CLASSIFICATION: UNCLAS	SIFIED)																									
P3A (Continued)								INDIVI	DUAL N	MODIF	ICATIC	N (Co	ontinued)														
MODELS OF SYSTEMS AFF	ECTE	D:		TON .	A/C (LI	HA MIDL	LIFE U	PGRAD	E)		MOD	IFICA	TION TITLE	i:	ITEM	S UNDE	ER 5M							_			
INSTALLATION INFORMATION INFORMATION OF IMPLEMENTATION OF IMPLEMEN		SH	· ·IIPYD/		P																						
ADMINISTRATIVE LEADTIM				Mor						PR	ODUCT	TION L	_EADTIME:			15 M	onths										
CONTRACT DATES:	FY	1998	3:			Jan-98	8	_		FY	1999:	_	Jan-9	9				FY 200				Mar-					
DELIVERY DATE:	FY	1998	3:			Mar-99	9	=		FY	1999:	-	Mar-0	0				FY 200	00:			Jun-	-01	_			
													(\$ in Million	ıs)													
Cost:	Pi	rior Y	ears		FY 19	998	F	Y 1999		FY 20	00		Y 2001		Y 2002		FY 2	:003	F	Y 2004		FY 2005	5	To Co	mplete	-	Total
	Qty		\$	Qty		\$	Qty		Qt			Qty	\$	Qty		Qt		\$	Qty		Qty			Qty	\$	Qty	\$
PRIOR YEARS						-															Í					0	0.0
FY 1997 EQUIPMENT				1		6.4	4																			1	6.4
FY 1998 EQUIPMENT							1		6.6																	1	6.6
FY 1999 EQUIPMENT										1	7.0	1	4.	4												2	11.4
FY 2000 EQUIPMENT												1	4.:	3												1	4.3
FY 2001 EQUIPMENT																										0	0.0
FY 2002 EQUIPMENT																										0	0.0
FY 2003 EQUIPMENT																										0	0.0
FY 2004 EQUIPMENT																										0	0.0
FY 2005 EQUIPMENT																										0	0.0
TO COMPLETE																						<u></u>				0	0.0
INSTALLATION SCHEDU			HP AV		BILITIE	:S FY 19	999		E,	Y 2000			FY 2001			FY 2002	>		FY 20	103		FY 200	<u></u>		TC		
& Pric					1	2	3	4	1 2		4	1	2 3	4	1	2 3		1	2	3 4	1		3			TOT	AL
In 0	0				0	0	0		0 1		0		1 0	0		0 0		0	0	0 0		0	0		0	5	
Out 0	0			0	0	0	1		0 1		1	0	0 1	0	1	0 0		0	0	0 0			0		0	5	

РЗА		INDIVIE	UAL	MODIFI	CATIC	N																
MODELS OF SYSTEM AFFECTED:	363 TON		NDIT	IONER		<u>-</u> ,	TYP	E MODIF	ICATI	ON:					MOE	IFICAT	ION T	TTLE:	ITE	MS UNDER	R 5M	
DESCRIPTION/JUSTIFICATION:	(HK122)	CVN																				
The air conditioning plants provide cooling these vital systems has a serious effect on																				ontinuous s	upply of chi	lled water to
DEVELOPMENT STATUS/MAJOR DEVELO	PMENT M	ILESTON	NES:																			
	FY 1997 QTY			1998		′ 1999		Y 2000		/ 2001		2002		2003		2004 \$		′ 2005	QTY	TC	T QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	QIT	<u> </u>	QII	* <u>\$</u>	QII	<u>\$</u>	QTY	<u> </u>	QIT	<u>\$</u>	UIT T	\$	QIT	\$	I QIT	Φ	QTY	<u> </u>	QIT	<u> </u>	QII	Ψ
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	12	11.2	1	0.9	2	1.8	2	1.9	3	3.1	1	1.0	1	1.0							22	20.9
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

1.9 3 3.1 P-1 SHOPPING LIST

2

14.3

CLASSIFICATION:

UNCLASSIFIED

22

0.0

0.0

158.8

20.9

14.1

2

10.9

1.8

OTHER

INSTALL COST

TOTAL PROCUREMENT

INTERIM CONTRACTOR SUPPORT

9

12

47.4

11.2

14.7

0.9

24.2

1.0

8.7

10.3

14.2 3

1.0

CLASSIFICATION: UNC	LASSIF	FIED					INDIV	IDLIA	LMOD	IEIO A TI	ON (Ca	4:														
P3A (Continued)							INDIVI	IDUA	L MOD	IFICATION	ON (Co	ontin	iuea)													
MODELS OF SYSTEMS	AFFEC	TED:	363 T	ON A	C (HK122)) CVN				МС	DDIFIC	ATI	ON TITLE:		ITEM	IS UNDER	\$5M						_			
INSTALLATION INFORM METHOD OF IMPLEMEN	OITATIO		SHIPYD/C						- -																	
ADMINISTRATIVE LEAD CONTRACT DATES:) I IME:	FY 19		Mon		eb-98				PRODU FY 1999		I LE	ADTIME: Feb-99			15 Moi	nths FY 2000:			Feb-00		FY 200	1:			
DELIVERY DATE:		FY 19				ın-99	_			FY 1999) :		May-00				FY 2000:		-	May-01		FY 200	1:			_
									1				(\$ in Millions)					ı							1	
Cost:		Prio Qty	r Years \$	Qty	FY 1998 \$	Qty	FY 1999		Qty	Y 2000 \$	C	Qty	FY 2001 \$	Qty	Y 200 £		FY 2003		Qty	FY 2004 \$	Qty	FY 2005 \$	To Co	mplete \$	Qty	otal \$
PRIOR YEARS		9	47.4			14.7		6.5				x.y		Qty		, Qiy	Ψ		Qty	<u> </u>	Qty		Qiy	Ψ	12	68.6
FY 1997 EQUIPMENT																										
FY 1998 EQUIPMENT						A/F	•	0.2	1		6.8														1	7.0
FY 1999 EQUIPMENT						A/F	•	0.2	1		6.8	1	6.8												2	13.8
FY 2000 EQUIPMENT						A/F	,	4.0	A/P		0.5	1	6.8	1		11.2									2	22.5
FY 2001 EQUIPMENT											A	A/P	0.7	A/P		3.0 3	;	22.8							3	26.5
FY 2002 EQUIPMENT																A/P		0.7	1	7.7					1	8.4
FY 2003 EQUIPMENT																A/P		0.7	A/P	1.0	1	10.3	3		1	12.0
FY 2004 EQUIPMENT																									0	0.0
FY 2005 EQUIPMENT																									0	0.0
TO COMPLETE																									0	0.0
INSTALLATION SCHE	EDULE:	:	SHIP AVA	ILABII	LITIES																					
	′ 1997 Prior		FY 1998 2 3	4		FY 1999 2 3	4	1	FY 2	2000	4	1	FY 2001 2 3	4	1	FY 2002 2 3	4	1	FY:	2003 3 4	1	FY 2004 2 3	4	TC		TOTAL
In Out	9		0 1 0 1	0	1	0 1 1 0	0	2	0	0	0		1 0 0 1	0	0	0 1 0	0	1	0	1 1 0 0	0 2		1 0	1		22 22

CLASSIFICATION: UNCLASSIFIED																							
P3A		INDIVIE	DUAL I	MODIFI	CATIC	N																	
MODELS OF SYSTEM AFFECTED:			(LHA N	/IDLIFE	UPG	RADE)	TYP	E MODIF	ICATI	ON:				_	MOE	DIFICAT	ION T	ITLE:	ITE	MS UNDE	R \$5M		_
DESCRIPTION/JUSTIFICATION:	(HK262)	#834																					
DEVELOPMENT STATUS/MAJOR DEVEL	ODMENIT	MII EST	ONES																				
DEVELOPINIENT STATOS/MAJOR DEVEL										_				-							_		
	FY 1997 QTY	7 & Prior \$	FY QTY	′ 1998 \$	FY QTY	′ 1999 \$	F QTY	Y 2000 \$	F` QTY	Y 2001 ' \$	F\ QTY	2002 \$	F) QTY	2003		′ 2004 \$	F) QTY	2005	QTY	TC ′\$	QTY	OTAL \$	
FINANCIAL PLAN (IN MILLIONS)																							_
RDT&E																					0	0.0	
PROCUREMENT																							
INSTALLATION KITS																					0	0.0	
INSTALLATION KITS NONRECURRING																					0	0.0	
EQUIPMENT			4	1.6	4	1.8	12	4.3													20	7.7	
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					4	1.7	4	2.1	12	3.1											20	6.9	

CLASSIFICATION: UNCLASSIFIED

7.7

1.6

TOTAL PROCUREMENT

CLASSIFICATION: UNCLASS	IFIED																										
P3A (Continued)						I	INDIVIDU	JAL M	IODIFI	ICATI	ION (C	Continued)															
MODELS OF SYSTEMS AFFE	CTED		/ OSM (262)	MOSIS (LHA	MIDL	IFE	UPGRA	DE)	_	МО	DIFIC	ATION TIT	LE:	-	ITEMS	UNDEF	R \$5M							_			
INSTALLATION INFORMATION METHOD OF IMPLEMENTATION	ON:	SHIPYD	/COM					<u> </u>	55	2011	27.01	LEADTIN	_														
ADMINISTRATIVE LEADTIME CONTRACT DATES: DELIVERY DATE:	FY '	 1998: 1998:	Mor	Jun-98 Jun-99					FY	1999: 1999:	:		E: <u>b-99</u> b-00		1	2 Mor	ntns	FY 20		_		Feb-00 Feb-01		_			
												(\$ in Million	>														
Cost:	Dri	or Years		FY 1998		ΕV	/ 1999		FY 200	20		FY 2001	is)	ΕV	2002		FY 200	U3	F	Y 2004		EV '	2005	То	Complete	Т	otal
Cost.	Qty	\$	Qty		Q	ty	\$	Qty		\$	Qty	\$	-	Qty	\$	Qty		\$	Qty	\$		Qty	\$	Qt		Qty	\$
PRIOR YEARS	Giy	Ψ	Qiy	Ψ	•	,	Ψ	Qiy		Ψ	Qty	Ψ	Ì	Q.I.J		Q.y		Ψ	Qiy	· ·		Qiy	Ψ	Q.		0	0.0
FY 1997 EQUIPMENT																										0	0.0
FY 1998 EQUIPMENT						4	1.	7																		4	1.7
FY 1999 EQUIPMENT								4	4	2.1																4	2.1
FY 2000 EQUIPMENT											12		3.1													12	3.1
FY 2001 EQUIPMENT																										0	0.0
FY 2002 EQUIPMENT																										0	0.0
FY 2003 EQUIPMENT																										0	0.0
FY 2004 EQUIPMENT																										0	0.0
FY 2005 EQUIPMENT																										0	0.0
TO COMPLETE																										0	0.0
INSTALLATION SCHEDUL		SHIP AV		BILITIES	Y 1999	1		ΕV	2000		1 [FY 200	11		EV	2002			FY 2	2003		EV	2004				
& Prior		2 3			2		4 1	2		4	1		3	4	1 2		4	1	2		4	1	2 3	3 T	OTAL		
In 0 Out 0	0	0 0	0	0	0	0	4 0 0 0		0	0	4	4 4	4 3	0	0 0	0	0	0	0	0	0	0	0	0	20 20		
				- ·																							

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVID	UAL	MODIFI	CATIO	NC																
MODELS OF SYSTEM AFFECTED:	CHT UP	GRADE	(LHA	MIDLIF	E UPG	RADE)	TYP	E MODIF	ICATI	ON:				_	MOE	DIFICAT	TON	ΓITLE:	ITE	MS UNDE	R \$5M	
DESCRIPTION/JUSTIFICATION:	(HK263)	#942																				
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT	MILESTO	ONES	:										-								
	FY 1997		F\ QTY	/ 1998 \$		/ 1999 ′ \$	F QTY	Y 2000 \$	F) QTY	/ 2001 \$	FY QTY	′ 2002 \$	F` QTY	Y 2003		/ 2004 * \$	F` QTY	Y 2005	QTY	TC ′\$	T QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	QTY	<u>\$</u>	QIT	Φ	QIT	, p	QII	<u> Ф</u>	QIT	<u></u>	QIT	<u>ф</u>	QIT	, p	QIT	<u> </u>	QIT		QII	Φ	QIT	Φ
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT			2	1.0	2	1.0															4	2.0
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					2	11.3	1	6.1	1	5.1											4	22.5

CLASSIFICATION: UNCLASSIFIED

2.0

1.0

1.0

TOTAL PROCUREMENT

CLASSIFICATION: UNCLASS	IFIED																					
P3A (Continued)				I	INDIVIDUA	L MOI	DIFICATIO	ON (Co	ntinued)													
MODELS OF SYSTEMS AFFE	(HT UPGRA HK263)	ADE (LHA I	UPGRAI	DE)		_ MC	DIFIC	ATION TITL	E:	ITEN	MS UNDEI	R \$5M									
INSTALLATION INFORMATION						_																
METHOD OF IMPLEMENTATION		/D/COMP	_			_	DDODII	OTION	LEADTIME			0.14-										
ADMINISTRATIVE LEADTIME:		5 Month		20					LEADTIME			6 Mc	ntns	EV 00	000							
CONTRACT DATES: DELIVERY DATE:	FY 1998: FY 1998:		Feb-9				FY 1999 FY 1999		Feb-					FY 20		-						
DELIVERY DATE.	F1 1990.		Aug-9	90			F1 1998		Aug-9	1 9				F1 20	000.				-			
									(\$ in Millions	s)												
Cost:	Prior Years		Y 1998		Y 1999		Y 2000		FY 2001		FY 200		FY 200			Y 2004		FY 2005		Complete		Total
PRIOR YEARS	Qty \$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	/	\$	Qty	\$		Qty	Qt	у \$	Qty 0	\$ 0.0
FY 1997 EQUIPMENT																					0	0.0
FY 1998 EQUIPMENT				2	11.3	3															2	11.3
FY 1999 EQUIPMENT						1	6.1	1	5	.1											2	11.2
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																					0	0.0
INSTALLATION SCHEDULE		AVAILABIL		1000		EVO	000	1	EV 2004	·		EV 2000			EV	2002		EV 2004				
FY 1997 & Prior	_		1 2	1999 3	4 1	FY 2	3 4	1	FY 2001 2 3	4	1	FY 2002 2 3		1	FY 2	2003	1 1	FY 2004 2	3 T	OTAL		
In 0			1 0	$-\frac{3}{0}$	1 0	1			$\frac{2}{0}$ 0	0	0	$\frac{2}{0} \frac{3}{0}$		0	0	0 0	0	0	0	4		
Out 0			0 0	1	0 0	1	0 0		0 1	0	0	0 0	-	0	0	0 0	0	0	0	4		

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVI	DUAL	MODIFI	CATIC	N																
MODELS OF SYSTEM AFFECTED:	COMMA		NTRO	L UPG (250 T	ON A/C) TYPI	E MODIF	FICATI	ON:				_	MOD	IFICAT	ION T	TTLE:	ITEI	MS UNDEF	R \$5M	
DESCRIPTION/JUSTIFICATION:	(HK068)																					
L DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT	MILEST	ONES	:										<u> </u>								
	FY 1997 QTY	' & Prior \$	F` QTY	Y 1998 ' \$	FY QTY	/ 1999 \$	F QTY	Y 2000 \$	F` QTY	Y 2001	FY QTY	2002		/ 2003 \$	FY QTY	2004 ¢	F\ QTY	/ 2005 \$	QTY	TC \$	T QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	QIII	Ψ	QII	<u>Ψ</u>	QII	<u>Ψ</u>	QII	Ψ	QIII	Ψ	Į į	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QTT	Ψ
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	4	3.5													4	4.4					8	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	11.6									A/P	0.5	A/P	1.4	4	10.7			8	24.2

P-1 SHOPPING LIST

UNCLASSIFIED

CLASSIFICATION:

TOTAL PROCUREMENT

CLASSIFICATION: UNCLASSI	IFIED																											
P3A (Continued)							INDIVII	DUAL	. MODI	IFICAT	ION (Contin	ued)															
MODELS OF SYSTEMS AFFE	CTED:		<u>MMAN</u> (068)	D/CONT	ROL UP	G (25	0 TON	A/C)		MC	DDIFIC	CATIO	N TITLE	Ē:	ITEI	MS UN	NDER \$5	5M							_			
INSTALLATION INFORMATION METHOD OF IMPLEMENTATION		SHIPYD)																								
ADMINISTRATIVE LEADTIME: CONTRACT DATES:	_		9 Mon									N LEA	DTIME:			12	2 Mont		FY 20									
DELIVERY DATE:	FY 1 FY 1		_							Y 1999 Y 1999									FY 20		_				_			
												/ \$	in Millic	nc)														
Cost:	Pric	or Years		FY 199	18	F	Y 1999		FY 2	2000		FY 2			FY 200	02	F	Y 2003		F`	Y 2004		FY	2005	ТоС	Complete	1	Total
PRIOR YEARS	Qty	\$	Qty	9	\$	Qty	\$	(Qty	\$	Qty		\$	Qty	;	\$	Qty		6	Qty	\$		Qty	\$	Qty	\$	Qty 0	\$ 0.0
FY 1997 EQUIPMENT			4		11.6																						4	11.6
FY 1998 EQUIPMENT																											0	0.0
FY 1999 EQUIPMENT																											0	0.0
FY 2000 EQUIPMENT																											0	0.0
FY 2001 EQUIPMENT																											0	0.0
FY 2002 EQUIPMENT																											0	0.0
FY 2003 EQUIPMENT																											0	0.0
FY 2004 EQUIPMENT																	A/P		0.5	A/P	1	.4	4	10.	7		4	12.6
FY 2005 EQUIPMENT																									<u> </u>		0	0.0
TO COMPLETE																									L		0	0.0
INSTALLATION SCHEDULE FY 1997		SHIP AV		BILITIES	FY 199	20			FY 200	20	- I		Y 2001			FV.	2002			FY 20	202		EV.	2004				
& Prior	1	2 3	4	1	2	3		1	2 3	3 4		2	3	4	1	2	3	4	1	2	3 4	4	1	2 3	_	TC	TOT	
In 0 Out 0	0	0 4 0 0	0 4	0	0	0			0 0	0 0		0	0	0	0	0	0	0	0	0		0	0	0 0		4	8 8	

P3A		INDIVIE	DUAL N	ODIFIC	CATION	N																
MODELS OF SYSTEM AFFECTED:	LANDIN		T AIR (CUSHIC	ON (LC	AC) (Al	TYPE	MODIF	ICATIO	N:					MOD	IFICAT	TON TI	TLE:	ITEN	MS UNDE	R \$5M	
DESCRIPTION/JUSTIFICATION:	,																					
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT			1998	FY	1999	FY	2000	FY	2001	FY	2002	FY	2003	FY	2004	FY	2005		TC		TOTAL
DEVELOPMENT STATUS/MAJOR DEVEL				1998	FY QTY		FY QTY	2000 \$	FY: QTY	2001	FY QTY		FY QTY	2003	FY QTY		FY QTY		QTY	_	QTY	TOTAL
	FY 1997	& Prior	FY	1998															QTY	_		TOTAL \$
FINANCIAL PLAN (IN MILLIONS)	FY 1997	& Prior	FY	1998															QTY	_		TOTAL \$ 0.0
FINANCIAL PLAN (IN MILLIONS) RDT&E	FY 1997	& Prior	FY	1998															QTY	_	QTY	\$
FINANCIAL PLAN (IN MILLIONS) RDT&E PROCUREMENT INSTALLATION KITS	FY 1997	& Prior	FY	1998															QTY	_	QTY	\$

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		3.6	3.5	2.0	2.4	2.4	2.4	2.5	2.5		21.3
TOTAL PROCUREMENT		0.0	0.7	1.0	1.1	0.2	1.0	1.0	2.3		7.3

0.7

EQUIPMENT

EQUIPMENT NONRECURRING

1.0

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

7.3

0.0

0.2

1.0

1.0

P3A (Continued)	SIFIED					INDIVI	DUAL I	MODI	FICATIO	N (Co	ntinued))													
MODELS OF SYSTEMS AFFI	CTED:		IDING (213)	CRAFT A	AIR CU	SHION (LCAC)		_ M	ODIFI	CATION	N TITLE	≣:	ITEMS	UNDE	R \$5M						_			
INSTALLATION INFORMATIO	N:	(,																						
METHOD OF IMPLEMENTAT	ON:	AIT																							
ADMINISTRATIVE LEADTIME				nths					PRODU						Mor										
CONTRACT DATES:	FY 1			RIOUS		_			FY 199			RIOUS					FY 20		VARI				2001:		
DELIVERY DATE:	FY 1	1998:	VAI	RIOUS		_			FY 199	19:	VA	RIOUS	8			F	FY 20	000:	VARI	ous		FY	2001:		
											(\$ in M	illions)													
Cost:		or Years		FY 1998		FY 1999			2000		FY 20	_		Y 2002		FY 2003			Y 2004		Y 2005		omplete		Total
PRIOR YEARS	Qty	\$	Qty	\$	Qty	\$		Qty	\$	Q	ty	\$	Qty	\$	Qty	\$		Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 1997 EQUIPMENT				3	3.6																				3.6
FY 1998 EQUIPMENT																									0.0
FY 1999 EQUIPMENT							3.5																		3.5
FY 2000 EQUIPMENT									2	2.0															2.0
FY 2001 EQUIPMENT												2.4													2.4
FY 2002 EQUIPMENT														2	2.4										2.4
FY 2003 EQUIPMENT																	2.4								2.4
FY 2004 EQUIPMENT																			2.5						2.5
FY 2005 EQUIPMENT																					2.5	5			2.5
TO COMPLETE																									
INSTALLATION SCHEDUL	F·	SHIP A\	/AII AI	BII ITIES																					
FY 199 & Prior	7	FY 1998	3	F	Y 1999 2 3		1	FY 2		4	FY 1 2	7 2001 3	4		Y 2002 2 3		1	FY 2	2003	1	FY 2004 2 3	тс	TAL		
In 0	0	$\frac{2}{0} \frac{3}{0}$			0		0	0			0 0		0		0 0		0	0	$\frac{3}{0}$ $\frac{4}{0}$	0			0		
	11 -	- 0	_		0		0	0			0 0		0		0 0	- 1	-	0	0 0	l o	0 0		0		

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVID	DUAL	MODIFIC	OITAC	V																
MODELS OF SYSTEM AFFECTED:	PION	NEER				<u>-</u>	TYPE	MODI	FICATION	ON:				.	MOD	IFICATION	ITIT NC	LE:	ITEM	IS UNDI	R \$5M	
DESCRIPTION/JUSTIFICATION:																						
L DEVELOPMENT STATUS/MAJOR DEVEL	ОРМЕ	NT MILE	STO	NES:																		
		997 & Pi \$			FY QTY	′ 1999 \$	FY QTY	2000	FY QTY	′ 2001 \$	FY QTY	′ 2002 \$		′ 2003 \$	FY QTY	2004 \$	FY QTY	2005 \$		TC \$	QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS)		<u> </u>	<u> </u>		<u> </u>		Ţ	Ť			Ţ	<u> </u>	Ţ		<u> </u>			<u> </u>				<u> </u>
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS NONRECURRING																					0	0.0
EQUIPMENT	3	2.1																			3	2.1
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	1	1.2	1	1.8	1	0.9															3	3.9
TOTAL PROCUREMENT	3	2.1																			3	2.1

ITEM N 24 21 PAGE NO. 36

CLASSIFICATION: U	NCLASS	IFIED)																				
P3A (Continued)							INDIVIDUA	L MC	DIFICATION	۷ (Cor	ntinued)												
MODELS OF SYSTEM	AC AEEE	OTER). DIO	NEEL	5				N	ODIEI	CATION TI	TI E.	ITEMS U	NDED	¢en.								
MODELS OF STSTEM	VIS AFFE	CIEL). <u>FIO</u>	INEE	`				IVI	ODIFI	CATION II	ILE.	TIENISU	INDER	Ινισφ					=			
INSTALLATION INFO			AIT					-															
ADMINISTRATIVE LE				Mo	nths			-	PRODUC	TION	LEADTIME	:	16	Mon	nths								
CONTRACT DATES:			1998:				_		FY 1999:							2000:				_			
DELIVERY DATE:		FY '	1998:	_			-		FY 1999:						FY	2000:				_			
										(\$	in Millions)												
Cost:		Pric	r Years	F	Y 1998	F	Y 1999		FY 2000		Y 2001		Y 2002	F	Y 2003	F	Y 2004		FY 2005	To Con	nplete		Total
		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS		1	1.2	! 1	1.8	3																2	3.0
FY 1997 EQUIPMEN	IT					1	0.9															1	0.9
FY 1998 EQUIPMEN	IT																				<u> </u>	0	0.0
FY 1999 EQUIPMEN	IT																				L	0	0.0
FY 2000 EQUIPMEN	IT																				L	0	0.0
FY 2001 EQUIPMEN	IT																				<u> </u>	0	0.0
FY 2002 EQUIPMEN	IT																				<u> </u>	0	0.0
FY 2003 EQUIPMEN	IT																				<u> </u>	0	0.0
FY 2004 EQUIPMEN	IT																				<u> </u>	0	0.0
FY 2005 EQUIPMEN	IT																				1	0	0.0
TO COMPLETE																					1	0	0.0
INSTALLATION SO	CHEDULE FY 1996 & Prior 0 0	1 0	FY 1997 2 3	4	1 2	1998 3 0 1	4 1	2	1999 3 4 1 0 1 0		FY 20000 2 3 0 0 0 0	- 4 0 0	FY: 1 2 0 0 0 0	2001 3 0 0	4 0 0 0	2	2002 3 4 0 0 0 0	0	0 0 0	TOTAI		NG! A	SSIFIED
												PA	GE 3/						CLAS	SIFICATI	JUIN: UI	INCLA	SSIFIED

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIE	DUAL	MODIFI	CATIC	ON																
MODELS OF SYSTEM AFFECTED:	CARGO	MONOF	RAIL (L	_HA MI	DLIFE	UPG)	TYP	E MODIF	ICATI	ON:				_	MOI	DIFICAT	TION T	ΓITLE:	ITE	MS UNDE	R \$5M	
DESCRIPTION/JUSTIFICATION:	(HK267)																					
DEVELOPMENT STATUS/MAJOR DEVELO	OPMENT	MILEST	ONES	:										=								
	FY 1997 QTY	' & Prior \$		/ 1998 ′ \$		/ 1999 · ¢		Y 2000 ′ \$		Y 2001 \$		/ 2002 \$		Y 2003		2004		Y 2005 ′\$	QTY	TC '\$	T QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	QIT	Ψ	QII	Ψ	QII	φ	QII	Į Į	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	Q I I	Φ	QII	Ψ	QII	Φ
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT					1	0.3															1	0.3
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	0.6											1	0.6

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

0.3

0.3

TOTAL PROCUREMENT

P3A (Continued)					INDIVIDU	JAL MC	DIFICAT	ION (C	ontinued)											
MODELS OF SYSTEMS AFFE		RGO M((267)	ONORAI	L (LHA	MIDLIFE	UPG)	_ MC	DDIFIC	ATION TITLE	≣:	ITEMS	UNDER	R \$5M							
INSTALLATION INFORMATIO	N:`	.20. /				_														
METHOD OF IMPLEMENTATI						_	DD O DI I	071011												
ADMINISTRATIVE LEADTIME CONTRACT DATES:	: <u> </u>	Mont	hs	_			FY 1999		LEADTIME: Jun-9	_	1	6 Mon		2000:						
DELIVERY DATE:	FY 1998:						FY 1999		Oct-0					2000:			_			
J																				
Cost:	Prior Years	ΕV	′ 1998	l F	Y 1999	E	Y 2000		(\$ in Million FY 2001		Y 2002	F	Y 2003	FY 2004		FY 2005	To C	omplete	1 7	Total
COSt.	Qty \$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty		Qty \$	Qty		Qty	\$	Qty	\$
PRIOR YEARS		۵.,							· · ·					1.9		Ť			0	0.0
FY 1997 EQUIPMENT																			0	0.0
FY 1998 EQUIPMENT																			0	0.0
FY 1999 EQUIPMENT								1	0	.6									1	0.6
FY 2000 EQUIPMENT																			0	0.0
FY 2001 EQUIPMENT																			0	0.0
FY 2002 EQUIPMENT																			0	0.0
FY 2003 EQUIPMENT																			0	0.0
FY 2004 EQUIPMENT																			0	0.0
FY 2005 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
INSTALLATION SCHEDULI FY 1997 & Prior In Out 0	FY 1998	4		0	4 1 0 0 0 0		2000 3 4 0 0 0 0	0	FY 2001 2 3 0 1 0 1	4 0 0	1 2 0 0 0 0 0	0	4 1 0 0 0 0	0 0 0	0	0 0	ТО	I		

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIE	DUAL	MODIF	ICATIO	ON																
MODELS OF SYSTEM AFFECTED:	ICAN (CVN CL	ASS				TYP	E MOD	IFICAT	ION:				-	MOD	IFICAT	ION T	ITLE:	ITEN	AS UNE	ER \$5	М
DESCRIPTION/JUSTIFICATION:																						
DEVELOPMENT STATUS/MAJOR DEVELO)PMENT	MILES	TONE	=8.																		
DEVELOR MENT STATEO, MANOR DEVELO					5) (1000	-	, , , , , ,			-	, ,,,,,,	-		-	0004	-	, 0005		T 0	-	OTAL
	QTY	97 & Prio \$	QTY		QTY	1999 \$	QTY	′ 2000 \$	QTY	2001 \$	QTY	' 2002 \$	QTY	2003 \$	QTY	2004		′ 2005 \$		TC \$	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS NONRECURRING																					0	0.0
EQUIPMENT											5	7.5	3	4.6	4	6.4	5	8.2			17	26.7
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									A/P	1.0	5	9.4	3	5.6	4	7.5	5	10.6			17	34.1
TOTAL PROCUREMENT								D 4 6'	IODE::	10.1.107	5	7.5	3	4.6	4	6.4	5	8.2	01.11		17	26.7
								P-1 SF	HOPPIN	NG LIST									CLAS	SSIFICA	ATTON:	

P3A (Continued)	SIFIED					INDI	VIDU/	AL MC	DDIFICAT	TION (Continu	red)													
MODELS OF SYSTEMS AFF	ECTED:	ICAI	.N						M	ODIFIC	1OITAC	N TITLE:	:	ITEMS	UNDE	:R \$5M									
INSTALLATION INFORMATION		A 1.T						_	=													_			
METHOD OF IMPLEMENTAT ADMINISTRATIVE LEADTIM		AIT 3	3 Mor	nths				-	PRODU	JCTIO ¹	N LEAD	OTIME:			6 Mo	onths									
CONTRACT DATES:	FY 1								FY 199								FY 2					_			
DELIVERY DATE:	FY 1	998:				_			FY 199	9:	-						FY 2	000:				_			
				-) (1000		E)/ 40/			.,			Millions		7/ 0000		<u></u>			-1/ 0004			T= -			T
Cost:	Qty	or Years \$	Qty	FY 1998 \$	Qt	FY 199	99 \$	Qty	Y 2000 \$	Qty	FY 20	\$ \$	Qty	Y 2002 \$	Qty	FY 2003		Qty	Y 2004 \$	Qty	FY 2005	Qty	Complete \$	Qty	Total \$
PRIOR YEARS	Qty	Ψ	Qty	Ψ	Q	<u>, </u>	Ψ	Qty	Ψ	Qty		Ψ	Qty		Qty	Ψ		Qty	Ψ	Qty	Ψ	Qty	Ψ	0	0.0
FY 1997 EQUIPMENT																								0	0.0
FY 1998 EQUIPMENT			\downarrow								<u> </u>			ļ		<u> </u>	\dashv	\Box		<u> </u>		<u> </u>		0	0.0
FY 1999 EQUIPMENT				<u> </u>						_	 			 	_	<u> </u>	4	_		<u> </u>	<u> </u>	╀	-	0	0.0
FY 2000 EQUIPMENT			₩			_					<u> </u>			 	_		4	_		<u> </u>	<u> </u>	╀	-	0	0.0
FY 2001 EQUIPMENT				<u> </u>	\perp	_				_	<u> </u>			 	_	<u> </u>	\perp			<u> </u>		↓_	<u> </u>	0	0.0
FY 2002 EQUIPMENT	\perp			<u> </u>	\perp	_				A/P	<u> </u>	1.0	5	9.	.4	<u> </u>	\dashv			<u> </u>		↓	<u> </u>	5	10.4
FY 2003 EQUIPMENT			₩			_					<u> </u>			 	3	3	5.6	_		<u> </u>	<u> </u>	₩	-	3	5.6
FY 2004 EQUIPMENT			₩			_					 			—		<u> </u>	\dashv	4	7.5	<u> </u>		₩	-	4	7.5
FY 2005 EQUIPMENT	\perp		—	<u> </u>		_					 			 		 	\dashv	\dashv		5	10.6	3		5	10.6
TO COMPLETE														<u> </u>										0	0.0
INSTALLATION SCHEDUI FY 199 & Pric In Out 0	97	SHIP AV FY 1998 2 3 0 0 0 0	3 4 0	1 : 0	Y 199 2 3 0 0	3 4	1 0 0	FY 2 2 0 0	3 4	4 1 0 0 0 0	0	7 2001 3 0 0	4 0 0	FY 1 2 0 0 0 0 0 0	0	<u>4</u> 0	1 0 0	FY 2 0 0	2003 3 4 0 0 0 0	1 0 0	FY 2004 - 2 3 0 0 0 0		DTAL 0 0		

CLASSIFICATION: UNCLASSIFIED P3A INDIVIDUAL MODIFICATION MODELS OF SYSTEM AFFECTED: 2000 GPM FIRE PUMP MODIFICATION TITLE: ITEMS UNDER \$5M TYPE MODIFICATION: LHA MIDLIFE UPGRADE DESCRIPTION/JUSTIFICATION: DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FY 1997 & Prior FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 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 0.2 **EQUIPMENT** 1 0.2 0.2 2 0.3 1 5 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

P-1 SHOPPING LIST

2

0.4

0.3

0.2

0.2

0.4

0.3

INTERIM CONTRACTOR SUPPORT

INSTALL COST

TOTAL PROCUREMENT

CLASSIFICATION:

UNCLASSIFIED

5

0.0

1.4

0.9

0.3

CLASSIFICATION: UNC P3A (Continued)	CLASSIF	IED					II	NDIVIDU	JAL N	IODIFIC	CATIO	N (Cor	ntinued)																	
MODELS OF SYSTEMS		ED:			FIRE PL					_	MODII	FICAT	ION TITL	E:	ITE	MS UN	DER \$5	5M												
METHOD OF IMPLEMEI ADMINISTRATIVE LEAD CONTRACT DATES: DELIVERY DATE:	OTIME:	l: FY 1998 FY 1998	:	Mont	ths Feb-98 Feb-99					PRO 1999: 1999:	DUCTI - -	ON LE	EADTIME Feb- Feb-	.99	 _ _	12	Month: FY 200 FY 200	00: _		Feb-00 Feb-01	 _		FY 200 FY 200	1: 1:						
		D: 1/		E) / 40		1-	->/ 40/		le.	2000	I			(\$ in Mi			E) / 000			F)/ 000 /		E) / 000E		E) (0						
Cost:	(Prior Ye		FY 19 Qty	98 \$		TY 199 Qty	99 \$	Qty	2000		Y 2001 Qty	<u> </u>	Qty	2002	\$	FY 200 Qty	\$		FY 2004 Qty	\$	FY 2005 Qty	\$	FY 2 Qty	⁰⁰⁵		Qty	mplete \$	Qty	otal \$
PRIOR YEARS				1		0.3														,				ĺ					1	0.3
FY 1998 EQUIPMENT							1	0.4	4																				1	0.4
FY 1999 EQUIPMENT										1	0.4	1	(0.1															2	0.5
FY 2000 EQUIPMENT												1	(0.2															1	0.2
FY 2001 EQUIPMENT																														
FY 2002 EQUIPMENT																														
FY 2003 EQUIPMENT																														
FY 2004 EQUIPMENT																														
FY 2005 EQUIPMENT																														
TO COMPLETE																														
INSTALLATION SCHI				AILABI	ILITIES	F)/ 400	0						EV 0004		7	F)/ 0	000			F)/ 0000			F)/ 000 4			- F) (O([TO]	
	Y 1997 & Prior		1998 3	4	1	FY 199 2		4 1		<u>2000</u> 3	4	1 :	FY 2001 2 3		1	<u>FY 2</u>		4	1	FY 2003 2 3	4	1	FY 2004 2	3 4	1	FY 20 2	3	4	TC	TOTAL
In Out		0 0 0 0	0		0		0	1 0 0 0	1	0	0	1			0		0		0	0 0	0	0		0	0		0	0	0	5 5
·		-																												
		·												Р	AGE	43				·			С	LASSIF	ICATIO	N: UN	CLASS	SIFIED	·	

CLASSIFICATION: UNCLASSIFIE	D																							
P3A		INDIVIE	DUAL	MODIF	ICATIO	10																		
MODELS OF SYSTEM AFFECTED:	LHD 200	00 GPM I	PUMP			_	TYPI	MODIF	ICATIO	ON:							MOD	FICATI	ON TI	TLE:	ITEM	IS UNDER	\$5M	
DESCRIPTION/JUSTIFICATION:																								
DEVELOPMENT STATUS/MAJOR DEVELO	OPMENT	MILESTO	ONES:																					
	FY 1997 QTY	<u>' & Prior</u> \$		<u>1998</u> \$		<u>/ 1999</u> \$	<u>F`</u> QTY	<u>Y 2000</u> \$	<u>F\</u> QTY	<u>/ 2001</u> \$	<u>FY</u> QTY	2002 \$	<u>F\</u> QTY	<u>/ 2003</u> \$		<u>2004</u> \$	OTY	<u>FY 2</u> \$	005 OTY	\$	QTY	<u>TC</u> \$	<u>T</u> QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)		Ι	Į.	Ψ 	I	Ψ 	<u> </u>	Ψ	Į.	<u> </u>	<u> </u>	Ψ	<u> </u>	Ψ	L	Ψ		Ψ		Ψ	L	Ψ	QII	Ψ
<u>RDT&E</u>																							0	0.0
<u>PROCUREMENT</u>																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT											4	0.3	4	0.4									8	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													4	0.3	4	0.3							8	0.6
	1	1	1	I	1	1	1		1	ı	1	ı	1	ı	1	l	1		1		1 1			i

P-1 SHOPPING LIST

TOTAL PROCUREMENT

UNCLASSIFIED

CLASSIFICATION:

0.7

CLASSIFICATION: UNCLASS	SIFIED																							
P3A (Continued)						INDIVID	UAL N	IODIFICA	ATION (Co	ntinued))													
MODELS OF SYSTEMS AFFE	CTED:	LHD	200	O GPM PUMP				_ M	ODIFICAT	ION TITL	LE:	ITEN	MS UNDE	ER \$5M							_			
INSTALLATION INFORMATIO METHOD OF IMPLEMENTATI ADMINISTRATIVE LEADTIME CONTRACT DATES: DELIVERY DATE:	ON:	18 998:	Mon	nths			_	PRODU FY 1999 FY 1999					18 Ma	onths FY 20 FY 20				<u>-</u>		FY 2001: FY 2001:				= =
2 1				F) / 1000		7/ 4000		7/ 0000	E) (000	(\$ in Mil			le.	2000	le.	0004	F\(0	225			TIT 6			-
Cost:	Qty	r Years \$	Qty	FY 1998 \$	Qty	Y 1999 \$	Qty	Y 2000 \$	FY 2001 Qty	<u>1</u> \$	FY 2 Qty			2003	Qt	2004 v \$	FY 2 Qty		Qty	\$	Qty	Complete \$	Qty	Total \$
PRIOR YEARS	Qiy	ð	Qiy	φ	Qiy	Ф	Qiy	Φ	Qiy	Φ	Qiy	φ	o Qi	у э	QI	у Ф	Qiy	Ф	Qiy	Ф	Qiy		Qiy	v
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT														4	0.3								4	0.3
FY 2003 EQUIPMENT																4 0	.3						4	0.3
FY 2004 EQUIPMENT																								
FY 2005 EQUIPMENT																								
TO COMPLETE																								
INSTALLATION SCHEDUL FY 1997 & Prior In 0 Out 0		SHIP AVA FY 1998 2 3 0 0 0 0	4 0 0	BILITIES FY 19 1	<u>3</u>	0 (1 2		1 0	0 (3 4 0 0 0 0	1 0 0	FY 2000 2 3 0 0 0 0	<u>4</u> 0	1 2	Y 2003 2 3 4 1 0 (0	FY 200 2 3 4 0 0 0	3 4 0	1 2 0 0 0 0		4 0 0	<u>TC</u> 0 0	TOTAL 8 8
																				P-3	Α			

P3A		INDIVID	DUAL N	MODIFI	CATIO	N																	
MODELS OF SYSTEM AFFECTED:	SOLID ST		EQUEN	CY CHA	NGER	S	TYPI	E MODIF	ICATIO	N:						MOD	IFICAT	TION TI	ΓLE:	ITEM	IS UNDER	\$5M	
DESCRIPTION/JUSTIFICATION:	LHA MIDI	LIFE																					
Solid frequency Changers priority #20C.																							
L DEVELOPMENT STATUS/MAJOR DEVELO	OPMENT N	MILESTO	DNES:																				
	FY 1997	& Prior	FY	1998	FY	1999	F	Y 2000	FΥ	2001	FV ·	2002	ΕV	2003		FY	2004				<u>TC</u>	т	OTAL
	QTY	\$	QTY	\$	QTY		QTY		QTY	\$	QTY	\$	QTY		QTY	\$ QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																							
<u>RDT&E</u>																						0	0.0
<u>PROCUREMENT</u>																							
INSTALLATION KITS																						0	0.0
INSTALLATION KITS NONRECURRING					15	4.8																15	4.8
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												15	4.8
TOTAL PROCUREMENT					15	4.8																15	4.8

P-1 SHOPPING LIST CLASSIFICATION:

P3A (Continued)				INDIVIDU	JAL M	ODIFICAT	ION (Continued	i)													
MODELS OF SYSTEMS AFFEC		LID STATE A MIDLIFE		NCY CHAN	IGERS	s MC	DIFIC	ATION TI	TLE:	ITEMS	UNDER	\$5M							_			
INSTALLATION INFORMATION:	<u> </u>	- WIDEII E																				
ADMINISTRATIVE LEADTIME:		4 Months						LEADTIN		1	12 Mon											
CONTRACT DATES: DELIVERY DATE:	FY 1998: FY 1998:			<u> </u>		FY 1999 FY 1999			n-99 n-00			FY 200 FY 200					_					
									(¢ :-	n Millions)												
Cost:	Prior Years	FY 19	98	FY 1999	F	Y 2000		FY 2001	(φ ιι	FY 2002		FY 2003		FY 2004	FY 2	005	F	Y 2003	To Co	mplete	Т	otal
PRIOR YEARS	Qty \$	Qty	\$ Qt	y \$	Qty	\$	Qty	\$	Q	ty \$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT				3 1.:	2 3	3 1.4	9		2.2												15	4.8
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT																						
TO COMPLETE																						
INSTALLATION SCHEDULE: FY 1996 & Prior In Out 0	SHIP A' FY 199 1 2 3 0 0 0 0 0 0	4 1 0 0	FY 199 2 3 0 0	3 4 1 0 0		3 0	1 0 0	3	0 -			4 1 0 0 0 3		3 4 0	1 0 0	0 0	4 0		TO ⁻	5		
																		P-:	3 A			

CLASSIFICATION: UNCLASSIFIED P3A INDIVIDUAL MODIFICATION 1200KW GENERATORS AIT TYPE MODIFICATION: MODIFICATION TITLE: ITEMS UNDER \$5M MODELS OF SYSTEM AFFECTED: DESCRIPTION/JUSTIFICATION: Required dedicated power for I. Also relieves shortage of available power. DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FY 1997 & Prior FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 TC **TOTAL** QTY \$ QTY QTY QTY \$ FINANCIAL PLAN (IN MILLIONS) RDT&E 0.0 PROCUREMENT 0.0 **INSTALLATION KITS** 0 0.0 INSTALLATION KITS NONRECURRING 0.0 **EQUIPMENT** 1.7 3.8 2 2.1 8 7.6 **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

P-1 SHOPPING LIST

4

2.7

A/P

0.2

INTERIM CONTRACTOR SUPPORT

INSTALL COST

TOTAL PROCUREMENT

CLASSIFICATION:

UNCLASSIFIED

0.0

10.4

0.0

7.6

4.7

A/P

2

0.2

2.1

2

2.6

CLASSIFICATION: UNCL P3A (Continued)	ASSIFIED				INDIVIDU	AL MO	DIFICATION	ON (Co	ntinued)													-	
MODELS OF SYSTEMS A	FFECTED: 12	00KW (GENERATOR	RS AIT			_ M	ODIFIC	ATION TITLE	i:	ITEMS U	NDER \$	5M							_			
INSTALLATION INFORMA						_																	
METHOD OF IMPLEMENT ADMINISTRATIVE LEADT		RD 8 Mor	- 4b			_	DDODLIG	TION	EADTIME.			O Man	44-0										
CONTRACT DATES:	FY 1998:	8 IVIOI	May-98				FY 1999:	TION	_EADTIME: Feb-	99		8 Mon Y 2000		FY 2001									
DELIVERY DATE:	FY 1998:		Jan-99				FY 1999:		Oct-					FY 2001									
			=1/								in Million							1					
Cost:	Prior Years Qty \$	Qty	FY 1997	Qty	Y 1998 \$	Qty	FY 1999 \$	Qty	FY 2000 \$	Qty	Y 2001 \$	Qty	FY 2002 \$	Qty	FY 2003	Qty	2004	Qty	FY 2005 \$	Qty	Complete \$	Qty	Total \$
PRIOR YEARS	Qiy V	Qty	ų ,	Qty	Ψ	Qty	Ψ	Qiy	Ψ	Qty	Ψ	Qty	Ψ	Qty	•	Giy	•	Qiy	Ψ	Qty		Qty	Ψ
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT				AP	0.2	2	2.70															2	2.90
FY 1999 EQUIPMENT								4	4.70													4	4.70
FY 2000 EQUIPMENT																						4	
FY 2001 EQUIPMENT																					-	1	
FY 2002 EQUIPMENT												A/P	0.2	2	2.60							2	2.60
FY 2003 EQUIPMENT																							
FY 2004 EQUIPMENT																						<u> </u>	
FY 2005 EQUIPMENT																							
TO COMPLETE																							
INSTALLATION SCHE				′ 2000			2001	7	FY 2002			FY 2003			Y 2004		FY 2005	1	TC				
& Prio	r 1 2 3	4	1	2 3	4 1	2	3 4	1	2 3	4	1 :	<u> </u>	4	1 2	3	4 1	2 3	3 4	TC	-	TOTAL		
In 0 Out 0	2 0 0			0 0	0 0 4 0		0 0	0	0 0			0 0		0 0		0 0 0	0 (0 0	0		8		
<u> </u>				0 0	- [0		0 0		0 0	U		0 0	0	0		<u> </u>	0 (<u> </u>					
																			P-3A				

24

UNCLASSIFIED

РЗА	INDIVIE	DUAL	MODIF	ICATIO	ON																	
MODELS OF SYSTEM AFFECTED:	LHA MID LIFE DES	SUPER	HEATE	R	-	TYPI	E MODIF	ICATIO	ON:						MODIFICAT	ON T	TTLE:	ITEM	IS UNDER	\$5M		
DESCRIPTION/JUSTIFICATION:																						
The capability to quickly plug a lacking tub which has occurred on various LHA. I/O	e is vital for meeting	g com	mitmen	nts. An	iew desi	uperhe	eater has	been o	designed	d that p	ermits	access. Insta	allatior	of this	ShipAlt will als	o help	resolv	e wate	er drum blind	J Flange le	akage	
DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT MILESTO	ONES:		N/A		FINA	NCIAL F	PLAN (TOA, \$	IN MIL	LIONS)										
	FY 1996 & Prior QTY \$	<u>F\</u> QTY	<u>/ 1997</u> ′ \$		<u>′ 1998</u> \$	<u>F</u> QTY	<u>Y 1999</u> \$	<u>FY</u> QTY	<u>′ 2000</u> \$		2001 \$	FY 2002 QTY \$	<u>F`</u> QTY	<u>Y 2003</u> ′ \$	<u>FY 2004</u> QTY \$		<u>/ 2005</u> / \$	QTY	<u>TC</u> \$	<u>1</u> QTY	TOTAL	\$
FINANCIAL PLAN (IN MILLIONS)																					<u> </u>	
RDT&E																						
PROCUREMENT																				Ì		
INSTALLATION KITS																						
INSTALLATION KITS NONRECURRING																				<u> </u>		
EQUIPMENT				2	0.4	2	0.4	6	1.2											10	<u> </u>	2.0
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																				 		
DATA																						
TRAINING EQUIPMENT																				<u></u>	<u> </u>	
SUPPORT EQUIPMENT																						
OTHER																				<u> </u>		
OTHER																						
OTHER																				<u> </u>		
INTERIM CONTRACTOR SUPPORT																				<u> </u>	<u> </u>	
INSTALL COST				AP	0.005		0.50		0.65		0.89									10		2.05
TOTAL PROCUREMENT				2	0.4	2	0.4	6	1.2											10	4	2.00

CLASSIFICATION:

UNCLASSIFIED

P-1 SHOPPING LIST

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

CLASSIFICATION: UNCLA	ASSIF	IED																						;	
P3A (Continued)						INDIVIDU	JAL MO	DDIFICATIO	N (Co	ntinued)														
MODELS OF SYSTEMS AI	FECT	ED: LI	IA MIE	DESUPER	HEATE	₹		МО	DDIFIC	ATION T	TITLE:		ITEMS UN	IDER \$	5M							_			
INSTALLATION INFORMATION INFORMATION OF IMPLEMENT			RD				_																		
ADMINISTRATIVE LEADTI			6 Moi					PRODUC	TION L			_		2 Mon		_									
CONTRACT DATES: DELIVERY DATE:		1998: 1998:		Sep-98 Sep-99		-		FY 1999: FY 1999:			Feb-99 Feb-00				<u>Feb-00</u> Feb-01	FY 2001 FY 2001		_							
DELIVERY DATE.		1330.		Оср-33		-		1 1 1555.			1 65-00		' ' '	2000	1 65-01	1 1 2001		-							
												(\$	in Millions)												
Cost:	Pr	ior Years		FY 1997	F	FY 1998		FY 1999		FY 200	00		Y 2001		FY 2002	FY	2003	FY	2004		FY 2005	To Co	omplete		Total
PRIOR YEARS	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty		\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT					AP	0.005	2	0.50																2	0.505
FY 1999 EQUIPMENT									2	0.65														2	0.065
FY 2000 EQUIPMENT												6	0.89											6	0.089
FY 2001 EQUIPMENT																								Ш	
FY 2002 EQUIPMENT																								Щ	
FY 2003 EQUIPMENT																								Щ	
FY 2004 EQUIPMENT																								$\perp \perp \mid$	
FY 2005 EQUIPMENT																								Ш	
TO COMPLETE																									
INSTALLATION SCHED FY 1994 & Prior In 0 Out 0	3	FY 199 2 3	9 3 4 0 0	1 0	7 2000 2 3 2 0 2 0	4 1 0 2 2 0	2 2		0	2	2002 3 0	4 0 0	1 2	Y 2003 - 3 0 0	4 1 0 0 0 0		004 2 3 4 0 0 0 0 0 0	1 0	FY 2005 2 3 0 0 0 0	4 0	TC 0 0		OTAL 10 10		
																					P-3A				

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CLASSIFICATION:	UNCLASSIFIED				
P3A		INDIVIDUAL MODIFICATION			
MODEL O OF OVOTE	MA AFFECTED.	CMART CATOR (LOR 44 OL) (ALT)	TVDE MODIFICATION	MODIFICATION TITLE	ITEMO LINDED CEM
MODELS OF SYSTE	M AFFECTED:	SMART GATOR (LSD 41 CL) (AIT)	TYPE MODIFICATION:	 MODIFICATION TITLE:	ITEMS UNDER \$5M
		(LTXXX)			

DESCRIPTION/JUSTIFICATION:

Funds in this line are for the procurement and installation of proven technological, administrative, procedural, and policy innovations to increase efficiencies, particularly in ship manning and maintenance. These technology initiatives focus on systems such as the following: Integrated Bridge System (IBS), Machinery Control System (MCS), Damage Control Quarters (DCQ), Ballast Control System (BCS), Local Area Network (LAN), and Wireless Communication. Installation is "turnkey" effort with Smart Ship integrator.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FY 1997 & Prior FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 20

	FY 1997			1998		1999		Y 2000		2001		2002		2003		2004		2005	OT) (TC		TOTAL
FINANCIAL PLAN (IN MILLIONS)	QTY	<u>\$</u>	QTY	\$	QTY	<u>\$</u>	QTY	\$	QTY	<u>\$</u>	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	<u> </u>
RDT&E																						0.0
PROCUREMENT																						0.0
INSTALLATION KITS																						0.0
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT							3	15.0	2	10.0	1	5.0	1	5.0							7	35.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER								9.4		4.5												13.9
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST									1	5.1	3	12.1	3	12.0							7	29.2
TOTAL PROCUREMENT				0.0		0.0	3	24.4	2	19.6	1	17.1	1	17.0		0.0		0.0			7	78.1

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

ITEM NO 24 PAGE NO. 51

CLASSIFICATION: UN	NCLASSII	FIED																						
P3A (Continued)							INDIVI	DUAL	MODII	FICATION	(Continu	ied)												
MODELS OF SYSTEM	IS AFFEC	CTED:		ART G	ATOR (L	SD 41 (CL) (AIT)		_ MO	DIFICAT	ION TITLI	E:	ITEMS L	JNDER	\$5M					_			
INSTALLATION INFOR	RMATION	l:	`	,																				
METHOD OF IMPLEME	ENTATIC	N:	AIT																					
ADMINISTRATIVE LEA	ADTIME:			Mor	nths					PRODUC	CTION L	EADTIME:	:		Mon	ths								
CONTRACT DATES:		FY 1	998:	N/A						FY 1999:	:	N/A				FY 2	2000:	VA	RIOUS		FY	2001:	VAR	RIOUS
DELIVERY DATE:		FY 1	998:	N/A			_			FY 1999:	:	N/A				FY 2	2000:	VA	RIOUS		FY:	2001:	VAR	RIOUS
											∕¢ ii	n Millions)												
Cost:		Dric	r Years		Y 1998		FY 1999	,	EV	2000		′ 2001		Y 2002		Y 2003		Y 2004		Y 2005	To C	omplete		Total
COSI.		Qty	\$	Qty	\$	Qty			Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty		Qty	\$
PRIOR YEARS		Qty	Ψ	Qty	Ą	Qty	Ψ		Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qiy	Ψ
FY 1997 EQUIPMENT	Г																							0.0
FY 1998 EQUIPMENT	Г																							0.0
FY 1999 EQUIPMENT	Г																							0.0
FY 2000 EQUIPMENT	Γ										1	5.1	2	8.1									3	13.2
FY 2001 EQUIPMENT	Γ												1	4.0) 1	4.0							2	8.0
FY 2002 EQUIPMENT	Γ														1	4.0							1	4.0
FY 2003 EQUIPMENT	Γ														1	4.0							1	4.0
FY 2004 EQUIPMENT	Г																							0.0
FY 2005 EQUIPMENT	Г																							0.0
TO COMPLETE																								
INSTALLATION SCI	HEDULE FY 1997 & Prior 0 0	1 0 0	SHIP AV FY 1998 2 3 0 0 0 0	3 4 0	1 0	Y 1999 2 3 0 0	0	1 0 0	FY 20 2 0 0	000 3 4 0 0 0 0	0	FY 2001 2 3 0 1 0 1	4 0 0	1 2 0 2 0 0		4 1 1 1 0	2	2003 3 4 1 1 1 2	1 0	FY 2004 2 3 0 0 0 0		DTAL 7		

P3A UNCLASSIFIED		INDIVID	UAL N	MODIFIC	CATIC	N																
MODELS OF SYSTEM AFFECTED:	INTEGR (LTYYY)		DNDIT	ION AS	SESS	MENT :	SYS (I	CAS) (AI	<u>T</u>)	TYPE N	MOD:				MOD	IFICAT	ION T	ITLE:	ITEM	IS UNDER	\$5M	
DESCRIPTION/JUSTIFICATION:	(=1111)																					
continuously. The heart of ICAS is the Ma within a single integrated software package DEVELOPMENT STATUS/MAJOR DEVELO	e. Progran	m is curre	ently p	lanned (orograi	m. The	MWS ir	ntegrate	s mea	sureme	nt tools	s, perfor	rmanco	e analys	sis tool	s, and an e	expert infere	ence image
	FY 1997	& Prior	FY	1998	FY	′ 1999	F۱	Y 2000	F١	2001	FY	2002	FY	2003	FY	2004	FY	2005		TC	7	TOTAL
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						0.0
PROCUREMENT																						
INSTALLATION KITS																						0.0

FINANCIAL FLAN (IN WILLIONS)													
RDT&E													0.0
PROCUREMENT													
INSTALLATION KITS													0.0
INSTALLATION KITS NONRECURRING													0.0
EQUIPMENT				21	8.2							21	8.2
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				21	9.2							21	9.2
TOTAL PROCUREMENT				21	8.2	0.0	0.0	0.0	0.0	0.0		21	8.2

P-1 SHOPPING LIST

CLASSIFICATION:

CLASSIFICATION: UNC	LASSIFI	IED						INDIVID	IAL MO	DIFICA	TION	(Conti	nued)													
F3A (Continued)							'	IINDIVID	DAL WO	DIFICA	TION	(COIII	nueu)													
MODELS OF SYSTEMS	AFFEC1	ΓED:		EGRA YYY)	TED C	ONDI	TION .	ASSESS	SMENT S	SYS (IC	AS)(A	AIT)	MOD T	ITLE:		_	ITEN	MS UNE	DER \$5	M						
INSTALLATION INFORM	MATION:		(L1	111)																						
METHOD OF IMPLEMEN		۱:	AIT						_					_												
ADMINISTRATIVE LEAD CONTRACT DATES:		FY 1	998.	Mor N/A						FY 1		I ION L	.EADTIM N/A	E:			Mont		FY 200	n٠	VΔR	IOUS		FY 2001:		
DELIVERY DATE:		FY 1		N/A						FY 1			N/A			_			FY 200			IOUS		FY 2001:		
																										
												(\$	in Millio	ns)												
Cost:		Prio	r Years	F	Y 199	8	FY	′ 1999	F	Y 2000			Y 2001		FY 20	02	F	Y 2003		FY	2004	F	Y 2005	To Complete		Total
DD10D \/EAD0	(Qty	\$	Qty	\$;	Qty	\$	Qty	\$		Qty	\$	Qty		\$	Qty	\$	C	Qty	\$	Qty	\$	Qty \$	Qty	\$
PRIOR YEARS																									+-+	
FY 1997 EQUIPMENT																										0.
FY 1998 EQUIPMENT																										0.
FY 1999 EQUIPMENT																										0.
FY 2000 EQUIPMENT									21		9.2														21	9.
FY 2001 EQUIPMENT																										0.
FY 2002 EQUIPMENT																										0.
FY 2003 EQUIPMENT																										0.
FY 2004 EQUIPMENT																										0.
FY 2005 EQUIPMENT																										0.
TO COMPLETE																										
INSTALLATION SCH	EDULE:		SHIP AV	/AILAE	BI <u>LITI</u> E	S *_																				
	1997		FY 1998			FY 1		. 1		2000			FY 200		$\prod_{i=1}^{n}$		2002	. [[FY 20			Y 2004			
In	Prior 0	0	2 3 0 0	<u>4</u> 0	0		3	4 1 0 2		3	0	0		$\frac{3}{0} - \frac{4}{0}$			<u>3</u> 0	4 0	0 -	0	3 4 0 0	1 0	0 0			
Out	0	0	0 0	0	0	0	0	0 0		0	21	0		0 0			0	0	0	0	0 0	0	0 0			
* Specific ships have r	not been	ident	ified at th	nis time	e, only	the nu	ımber	of ships	in the s	elected	ship	classes	s. Install	ation sc	nedule	e simply	y reflec	cts ships	s begin	ning a	availability	in begi	nning of	FY and		

UNCLASSIFIED

		BU	DGET ITEM JUSTIFICA	TION SHEE	Т				DATE:			
			P-40						F	EBRUARY 19	99	
APPROPRIATION/BUD	GET ACTIVI	TY					P-1 ITEM NO	MENCLATURE	LINE ITEM #			
OTHER PROCURE	MENT, NA	VY										
BA 1: SHIPS SUPP	ORT EQUI	PMENT	•					SURFAC	EIMA BLI:	098300 SB	HD: 81K6	
Program Element for C	ode B Items	s:			OTHER RELA	TED PROGRA	AM ELEMENTS	3				
	Prior	ID									То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY												
EQUIPMENT COST												
(In Millions)			\$0.5	\$7.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$8.1
SPARES COST												
(In Millions)												

PROGRAM DESCRIPTION/JUSTIFICATION:

AS A RESULT OF LINE ITEM CONSOLIDATION, THIS LINE ITEM WILL BE SHOWN UNDER OPERATING FORCES IPE, BLI:144500, SUBHEAD 81KN EFFECTIVE FY 00 AND OUT.

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 subsurface 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 - IMA Upgrade 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 equipment is procured to satisfy realignment of capabilities at IMAs in support of new systems.

PEARL HARBOR PILOT PROGRAM:

This line item provides funding for the newly established consolidated Pearl Harbor Naval Shipyard/Intermediate Maintenance Facility. Funds will be used for the procurement and execution of Class 2 plant property projects, minor construction projects, and Class 3 & 4 industrial plant equipment projects to maintain, modernize, and improve the PHNSY/IMF infrastructure and industrial base. Funding will allow PHNSY/IMF to perform the mission of repairing, conversion, and modernization of fleet ships and submarines in the most economical, efficient, environmentally sound, and safe manner possible. As this is a pilot program having impact on other fleet depot maintenance activities, it is critical these projects be funded in order to most accurately determine the economic and operational success or failure of the program itself.

P-1 SHOPPING LIST

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CLASSIFICATION:

UNCLASSIFIED

DD Form 2454, JUN 86

CLASSIFICATION: UNCLASSIFIED

	WEAPON		I COST AN	ALYSIS				Weapon Sy	/stem			DATE:		
	OPRIATION/BUDGET ACTIVITY	P-	5			ID Code	P-1 ITEM	NOMENCLA	ATURE/SUE	BHEAD		F	EBRUARY 1	999
	Procurement, Navy SHIPS SUPPORT EQUIPMENT							SURFACE	IMA BLI:	098300 S	BHD: 81K	6		
			TOTAL CO		USANDS O	F DOLLAR								
COST CODE	ELEMENT OF COST	ID Code		FY 1998			FY 1999	_		FY 2000			FY 2001	
			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)				0			0			0			0
	IPE REPLACEMENT				547			56			0)		0
	IMA UPGRADE				0			0			0)		0
											0			
	PEARL HARBOR PILOT				0			7,602			0)		0
TOTAL	l	<u> </u>			547			7,658			0			0

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

		BU	DGET ITEN	JUSTIFICA	ATION SHE	ET				DATE:			
				P-40							February 199	9	
APPROPRIATION/BUE	GET ACTIV	/ITY						P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	#		
OTHER PROCURE	MENT, N	AVY											
BA-1: Ships Supp	ort Equip	ment						RAD	IOLOGICAL	CONTROL	S SBHD: 8	31 <i>G7 BLI: 0</i> 9	8700
Program Element for 0	Code B Item	ıs:						OTHER REL	ATED PROGR	AM ELEMENT	rs		
	Prior	ID										То	
	Years	Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY													
EQUIPMENT COST													
(In Millions)				\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$0.2
SPARES COST													
(In Millions)													
PROGRAM DESCI	RIPTION/J	IUSTIFI	CATION:	•	•		•		•		•	•	

Program funding realigned to fund higher priority requirements.

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CLASSIFICATION:

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		BU	DGET ITEM JUSTIFICA	TION SHEE	ΞT				DATE:			
			P-40						F	EBRUARY 19	99	
APPROPRIATION/BUD	GET ACTIV	/ITY					P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	ŧ		
OTHER PROCURE	MENT, NA	VY										
BA: 1 SHIPS SUPP	ORT EQU	IPMENT	-				MINI/MICROMI	NIATURE ELEC	TRONIC TEST	AND REPAIR B	LI: 098800 SBH	D: 81G4
Program Element for (Code B Item	s:					OTHER REL	ATED PROGR	AM ELEMENT	rs		
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY	N/A	А										0
EQUIPMENT COST												
(In Millions)			\$0.5	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$1.0
SPARES COST												
(In Millions)												0

PROGRAM DESCRIPTION/JUSTIFICATION:

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. 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 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 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 avoidance's. 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

*62634 Consolidaion of Programs Below \$5M

The MINI/MICROMINATURE ELECTRONIC TEST AND REPAIR Program is consolidated with "Operating Forces IPE" (81KN), BLI 144500 in FY 00 and out.

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CLASSIFICATION:

CLASSIFICATION: UNCLASSIFIED

	WEAPO				Weapon Sy	stem			DATE:	FERRIL	ARY 1999			
Other I	PRIATION/BUDGET ACTIVITY Procurement, Navy Ships Support Equipment	P-	<u> </u>			ID Code		NOMENCLA			AID BII-0088	00 SBHD: 81G		AICT 1999
DA 1. C	Ships Support Equipment		TOTAL CO	ST IN THO	USANDS OI	DOLLARS		MINIATURE EL	ECTRONIC TE	SI AND KEP	AIR BLI: 0900	JU 3BHD: 61G	4	
COST	ELEMENT OF COST	ID		FY 1998			FY 1999			FY 2000			FY 2001	
CODE		Code	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT	TOTAL COST
G4001	Diagnostic and Repair Tools		9	55	484	9	55	515	0	0	0	0	0	0
	-													
TOTAL					484			515			0			0

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

		BUI	DGET ITEM	JUSTIFICA	TION SHE	ĒΤ				DATE:			
				P-40							February 1999	9	
APPROPRIATION/BUD	GET ACTIV	ΊΤΥ						P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	!		
OTHER PROCURE	MENT, NA	AVY											
BA-1: Ships Supp	ort Equip	ment						SUB	MARINE LII	FE SUPPOR	T SBHD: 8	815D BLI: 09	99000
Program Element for C	rogram Element for Code B Items:									AM ELEMENT	s		
	Prior	ID										То	
	Years	Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY													
EQUIPMENT COST													
(In Millions)						\$0.9	\$4.9	\$5.0	\$3.0	\$3.1	\$3.1		\$20.0
SPARES COST													
(In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

5D007 - THE ELECTROLYTIC OXYGEN GENERATOR CONTROLLER - A replacement digital controller developed to replace the antiquated analog controller currently being used on all Electrolytic Oxygen Generators (EOG). This Controller was designed in the 1950's and redesigned in the 1960's is no longer logistically serviceable.

The replacement controller will require 12,000 fewer parts, replace the gas analyzer, provide greater reliability and allow for self diagnostics. In addition, this change will completely automate EOG including start-up, shut-downs and purging situations. The EOG will be modified by installation teams during the ships refit period and will take eight days to complete.

5D830 - 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); Engineering & support for final design reviews. This work can be accomplished by NSWC PHILA as the in-service engineering agent, other Naval activities or contractors as appropriate.

5D5IN - INSTALLATION OF EQUIPMENT -Funding is for the installation of equipment including Fleet Modernization Program installation of training equipment and installation of other shore equipment

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CLASSIFICATION:

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CLASSIFICATION: UNCLASSIFIED

	WEAPONS S	YSTEM COST	Γ ANALYS	ils			Weapon Sy	/stem							DATE: February	, 1999
	PRIATION/BUDGET ACTIVITY Procurement, Navy	1-3			ID Code	P-1 ITEM N	IOMENCLAT	URE/SUBHE	AD						i ebidary	y 1333
	Ships Support Equipment								SUBMAR	RINE LIFE S	SUPPORT	SBHD: 81	5D BLI: 0	99000		
COST	Simpo Gapport Equipmont	IDENT		FY 1998	ļ		FY 1999			FY 2000	Jon City	02.12.01	FY 2001		то	
CODE	ELEMENT OF COST	CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT	TOTAL COST	COMPLETE	TOTAL COSTS
	N87 SUBMARINE WARFARE															
5D007	ELECTROLYTIC OXYGEN GENERATOR (EOG) CONTROLS	A							1	949	949					
5D830	PRODUCTION ENGINEERING															
	TOTAL EQUIPMENT				0			0			949					
5D5IN	INSTALLATION OF EQUIPMENT	А														
	N87 SUBMARINE WARFARE															
	TOTAL INSTALLATION				0			0			0					
	GRAND TOTAL				0			0			949					

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PAGE NO.

2

CLASSIFICATION:

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT H	IISTOF	RY AND F	PLANNING EXH	IBIT (P-5A)		Weapon System		A. DATE		
B. APPROPRIATION/BUDG	ET AC	`TI\/IT\/			C DAITE	│ MINOMENCLATURE	1		Februa SUBHEAD	ry 1999
Other Procurement, Navy	JE I AC	, 1 1 V 1 1 1			C. P-IIIEN	M NOWENCLATURE			SUBHEAD	
Other Procurement, Navy					SUBMARINE L	LIFE SUPPORT BLI: 099	9000		815D	
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 2000 N87 SUBMARINE WARFARE										
EOG CONTROLLER	1	949.0	NAVSEA		SS/FFP	TREADWELL	MAY 00	MAY 01	YES	
D. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

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		BU	DGET ITEM JUSTI	FICATION S	HEET				DATE:			
			P-40							February 199	9	
APPROPRIATION/BUD	GET ACTIV	/ITY					P-1 ITEM NO	MENCLATUR	E/LINE ITEM	#		
OTHER PROCURE	MENT, NA	VY										
BA-1: SHIPS SUP	PORT EQ	UIPMEN	NT				Divin	g and Salva	ge Equipme	ent BLI: 113	3000 SBHD:	81HY
Program Element for C	Code B Item	ıs:				OTHER REL	ATED PROGR	RAM ELEMEN	гѕ			
	Prior	ID									То	
	Years	Code	FY 19	98 FY 199	9 FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY												
EQUIPMENT COST												
(In Millions)			\$5.0	\$5.7	\$5.5	\$5.7	\$5.8	\$5.8	\$5.9	\$6.0		45.4
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 to 190 feet of seawater (FSW) for up to a six hour mission performing ship husbandry, light salvage, and underwater inspection tasks. 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.
- b. 3000 PSI Flask Replacement:

This item replaces the composite flasks used in the LWDS which have reached their 15 year service life. I/O is 528.

c. Engineering Change Proposals: Required to upgrade the LWDS for 190 fsw capability and 5000 psi service.

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CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40 CONTINUATION	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	
BA-1: SHIPS SUPPORT EQUIPMENT	Diving and Salvage Equipment BLI: 113000

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. Navv. 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 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 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 19 High Pressure Air Systems and 5 Mixed Gas Systems.

HY132 Recompression Chamber: The Recompression Chambers are to be conventional chambers designed to be built using standard commercial specification and standards. Chambers will be capable of providing a full range of recompression treatment to two patients and two attendants. Two types will be procured, a portable chamber (containerized) and a fixed chamber. These will replace aging and difficult to maintain recompression chambers that will be retired due to fatigue and material flaws. Required I/O's are 7 portable and 5 fixed chambers.

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 equipment's 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 Production Support Facilities (BLI 1415).

HY183 Emergency Evacuation Hyperbaric Stretcher: This system is a portable and collapsible pressurized stretcher that provides a means of transporting diving personnel suffering from decompression sickness or gas embolism to a recompression treatment chamber. The EEHS provides a ready means of quickly recompressing the casualty at the dive site and transporting the casualty under pressure to a recompression chamber or a land based/hospital hyperbaric facility. Required I/O is 52.

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BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY		
BA-1: SHIPS SUPPORT EQUIPMENT	Diving and S	Salvage Equipment BLI: 113000

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 equipment's to be procured are:

HY016 Deck Capstans: The portable hydraulic capstan system consists of one portable hydraulic driven capstan, one portable hydraulic power unit, and all necessary controls and hydraulic hoses. The capstans are rated to pull up to 7,500 pounds. Required I/O is 39.

HY043 ROV Umbilicall: The Navy maintains the ORION, DEEP DRONE, CURV III and MAGNUM remotely operated vehicles for use in hazardous salvage, inspection, and pollution operations. These vehicles are remotely controlled through umbilicals which transmit all command and control functions to the vehicle as well as transmitting all sensor data from the vehicle to the ship. They are procured in different lengths for use in varying ocean depths down to 20,000 feet. The umbilical also acts as the handling line. Required I/O is 16 (12 plus 4 spares).

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 ROV 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).

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.

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BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #	
OTHER PROCUREMENT, NAVY		
BA-1: SHIPS SUPPORT EQUIPMENT	Diving and S	alvage Equipment BLI: 113000

HY145 Cofferdam System: This system will contain a variety of cofferdams necessary to accomplish underwater repair tasks to hull plating, shafts, stern tubes and s 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 15.

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 8.

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 8.

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.

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.

P-1 SHOPPING LIST

CLASSIFICATION:

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DD Form 2454, JUN 86

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCL	ATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY		
BA-1: SHIPS SUPPORT EQUIPMENT	Diving and Sa	alvage Equipment BLI: 113000

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 replace GRP domes 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 and Bearing Repair Equipment: Provides tools necessary to repair and replace propulsion shafts and bearings underwater thereby eliminating the requirement for drydocking. Required I/O is 3.

HY162 Trash Pump System: The Trash Pump System consists of one portable hydraulically driven, submersible pump and 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 14.

HY165 Underwater Welding Equipment: Improved welding equipment 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.

P-1 SHOPPING LIST

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CLASSIFICATION:

DD Form 2454. JUN 86

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA- 1 : SHIPS SUPPORT EQUIPMENT DATE: February 1999 P-1 ITEM NOMENCLATURE/LINE ITEM # Diving and Salvage Equipment BLI: 113000

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 emerge 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

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.

HY172 Lightweight Beach Gear: Lightweight Beach Gear is a lightweight and highly portable system for exerting a retraction force on stranded vessels. The syst 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 Seachest Inspection Systems: A non-destructive, non-intrusive inspection system which is inserted into a sea chest to measure and record the material condition. This inspection information is used to support condition based maintenance decisions regarding the necessity to replace worn, deteriorated or damaged seachest piping systems. Total I/O required is 2.

HY175 Closed Cycle Blasting Equipment: System blasts underwater hull surfaces in preparation for underwater painting. Blast equipment 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.

HY180 Equipment Storage System: System will protect maintenance equipment from the environment. This system will provide a more cost effective alternative to current warehouse storage. I/O is 1.

HY181 MHC Propeller Replacement Kit: Provide all tools necessary to replace damaged MHC cycloidal propellers. These are the only USN cycloidal propellers, therefore existing propeller replacement hardware is ineffective. I/O is 2.

P-1 SHOPPING LIST

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BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40 CONTINUATION	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	
BA- 1 : SHIPS SUPPORT EQUIPMENT	Diving and Salvage Equipment BLI: 113000

HY182 Propulsion Strut Repair Equipment: Provides special tooling necessary to repair DD 963 Class struts which experience accelerated corrosion-erosion damage. Equipment will make waterborne repairs cost effective. I/O is 1.

HY184 Salvage Support Systems: These systems are used to support Fleet salvage operations and include equipment required for command and control, communications, supply, repair, rigging, and personnel support. Each system includes the storage and shipping containers necessary to forward deploy the equipment to a salvage site. Required I/O is 30.

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 Reserve
 231
 260
 108
 119
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 129

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 equipment's to be procured are:

HY105 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 a six hour mission performing ship husbandry, light salvage, and underwater inspection tasks. Required I/O is 11.

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.
- b. 3000 PSI Flask Replacement: This item replaces the composite flasks used in the LWDS which have reached their 15 year service life. Required I/O is 132.

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 12.

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.

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASS	FICATION: UNCLASSIF	FIED												
	WEAPONS	SYSTE	I COST AN	ALYSIS				Weapon Sy	/stem			DATE:		
		P-	-5			,							February	1999
	OPRIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM	NOMENCLA	ATURE/SUB	HEAD				
	Procurement, Navy													
BA- 1	SHIPS SUPPORT EQUIPMENT							Diving and	d Salvage l	Equipmer	nt BLI: 113	3000 SBHI	D: 81HY	
			TOTAL CO	ST IN THO	USANDS O	F DOLLAR	S							
COST	ELEMENT OF COST	ID		FY 1998			FY 1999			FY 2000			FY 2001	
CODE		Code												
			QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST
	DIVING EQUIPMENT - (N873)		QIT	COST	COST	QIT	COST	COST	QIT	COST	COST	QIT	COST	COST
HY106	Lightweight Dive System													
1111100	a. System	Α												
	b. 3000 PSI Flask Replacement	A												
	c. Engineering Change Proposals	Α												
HY107	Portable Recompression Chamber													
	a. Portable Chamber	Α							2	219	438			
	b. Engineering Change Proposals	Α												
	c. Environmental Upgrade Package	Α												
HY123	Flyaway Dive System III													
	a. High Pressure Air System	Α	2	210	420	3	221	663						
	b. Engineering Change Proposals	Α												
	c. Mixed Gas System	Α							1	1,200	1,200			
111/400	d. Control Console/Volume Tank Assembly	Α			289									
HY132	Recompression Chamber a. Portable/Containerized Chamber	Α				,	470	940						
	b. Fixed Chamber	A	1	449	449	2	505	505	1	494	494			
	c. Fixed Chamber Support Equipment	A		443	443	'	303	303		725	725			
	d. Engineering Change Proposals	A								120	720			
HY179	Navy Experimental Diving Unit	Α						263			285			
HY183	Emergency Evacuation Hyperbaric Stretcher	Α							3	40	120			
	SUBTOTAL:				1,158			2,371			3,262			
	SALVAGE EQUIPMENT - (N869)													
HY016	Deck Capstans	Α							3	29.7	89			
HY050	Synthetic Line	Α	8	47.4	379									
HY062	ROV Sonar System	Α				2	251.5	503						
HY116	Portable Submersible Pumps	Α							4	66	264			
HY131	ROV Handling System	Α				1	592	592						
HY145	Cofferdam System	A	9		448	_								
HY146	Propeller Grooming Kit	A	5		447	1	92	92						
HY147	ROV Telemetry System	A	1	1,152	1,152		404.5	000						
HY151	Closed Cycle Hull Cleaning System	A				2	484.5	969		25.7	100			
HY153 HY155	Tensiometer Systems 15 KW Generators	A A							7 10	25.7 21.7	180 217			
HY156	Salvage Vans	A							7	27.7	189			
HY158	ROV Propulsion Systems	A							1	370	370]
HY159	Sonar Dome Repair Kits	A							2	117	234]]
HY160	UWSH Gas Free Equipment	A							3	53	159]]
HY161	Underwater Shaft & Bearing Repair Equip	Α							1	326	326]]
HY162	Trash Pump Systems	Α]]
HY165	Underwater Welding Equipment	Α												

CLASSIFICATION: DD FORM 2446, JUN 86 P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS Weapon System DATE: P-5 February 1999 APPROPRIATION/BUDGET ACTIVITY ID Code P-1 ITEM NOMENCLATURE/SUBHEAD Other Procurement, Navy **BA-1: SHIPS SUPPORT EQUIPMENT** Diving and Salvage Equipment BLI: 113000 SBHD: 81HY TOTAL COST IN THOUSANDS OF DOLLARS COST **ELEMENT OF COST** ID FY 1998 FY 1999 FY 2000 FY 2001 CODE Code UNIT TOTAL TOTAL TOTAL UNIT UNIT UNIT TOTAL QTY COST COST QTY COST COST QTY COST COST QTY COST COST HY166 **ROV Tool Package** Α HY167 Flyaway Weld Van Α 232 464 HY168 SHT Replacement Kits Α HY169 **UWSH Power Tools** Α HY172 Lightweight Beach Gear 2 61.5 123 Α HY180 400 400 **Equipment Storage System** Α HY181 400 MHC Propeller Replacement Kit Α 400 HY182 Propulsion Strut Repair Equipment Α 78 78 SUBTOTAL: 2.890 3,034 2,151 RESERVE EQUIPMENT - (N869) HY105 Lightweight Dive System a. System Α b. 3000 PSI Flask Replacement Α HY178 H.P. Air Compressors 77 231 86.7 260 108 108 SUBTOTAL: 231 108 260 EQUIPMENT INSTALLATION (FMP) - (N869) HYINS Installation/Alteration (FMP) 784 SUBTOTAL: 784 TOTAL EQUIPMENT: 4,279 5,665 5,521 TOTAL INSTALL: 784 **GRAND TOTAL** 5,063 5,665 5,521 5,521 TOTAL 5,063 5,665

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

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CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREME	NT HI	STORY A	AND PLANNING	EXHIBIT (P	-5A)	Weapon System		A. DATE	•	
									Februa	ry 1999
B. APPROPRIATION/B	BUDGE	ET ACTIV	/ITY		C. P-1 ITE	M NOMENCLATURE			SUBHEAD	
Other Procurement, Na	VV								81	HY
BA-1: SHIPS SUPPOR	•	IIDMENT	-		Diving and Sa	Ilvage Equipment				
BA- 1 . 31111 3 301 1 010	LOC) V _ V		T	CONTRACT			DATE OF	SPECS	IF NO
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	FIRST DELIVERY	AVAILABLE NOW	WHEN AVAILABLE
FISCAL YEAR (98)		(000)								
TISCAL TEAR (90)										
DIVING EQUIPMENT - (N873) HY123 Flyaway Dive System III										
a. H.P. Air System	2	210	Arlington, VA	11/15/93 (OPTION)	C/CPAF	GPC - Norfolk, VA	03/98	03/99	YES	
a. Thi Thi Gystein		210	rumgton, vrt	11/10/00 (01 11014)	0/01/11	GI & INDITION, V/	00/00	00/00	120	
HY132 Recompression Chamber										
b. Fixed Chamber	1	449	Washington, DC	03/98	F/FP	UNKNOWN	04/99	10/99	YES	
SALVAGE EQUIPMENT - (N869)										
HY050 Synthetic Line	8	47.4	Arlington, VA	11/15/93 (OPTION)	C/CPAF	GPC - Norfolk, VA	03/98	08/99	YES	
HY145 Cofferdam System	9	49.8	Arlington, VA	10/97	C/CPAF	Phoenix Marine - Arlington, VA	04/98	12/98	YES	
HY146 Propeller Grooming Kit	5	89.4	Arlington, VA	10/97	C/CPAF	Phoenix Marine - Arlington, VA	02/98	05/99	YES	
HY147 ROV Telemetry System	1	1152	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	10/97	C/CPAF	Phoenix Marine - Arlington, VA	05/98	12/98	YES	
RESERVE EQUIPMENT - (N869)	_									
HY178 H.P. Air Compressors	3	77	Arlington, VA	11/15/93 (OPTION)	C/CPAF	GPC - Norfolk, VA	03/98	11/98	YES	
FISCAL YEAR (99)										
DIVING EQUIPMENT - (N873)										
HY123 Flyaway Dive System III										
a. H.P. Air System	3	221	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/99	03/00	YES	
HY132 Recompression Chamber										
 a. Portable/Containerized Chamber 	2	470	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/99	05/00	YES	
b. Fixed Chamber	1	505	Washington, DC	02/99	F/FP	UNKNOWN	04/99	03/00	YES	
DD 5 0440 4. IIII. 07				1	D_1 SHODDIN	L .				

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

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UNCLASSIFIED CLASSIFICATION:

BUDGET PROCUREME	-141 111	SIUKI	AND PLANNIN	G EVUIDIT (L	-5A)	Weapon System		A. DATE		ry 1999
B. APPROPRIATION/E	BUDG	ET ACTIV	/ITY		C. P-1 ITE	M NOMENCLATUR	RE		SUBHEAD	iy 1999
		,			0	in itomicitoc/tion	-			
Other Procurement, Na	•								81	HY
BA-1: SHIPS SUPPOR	RTEQ	UIPMENT	Ī		Diving and Sa	Ivage Equipment				
					CONTRACT			DATE OF	SPECS	IF NO
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	FIRST DELIVERY	AVAILABLE NOW	WHEN AVAILABLE
FISCAL YEAR (99)		(222)								
SALVAGE EQUIPMENT - (N869)										
HY062 ROV Sonar System	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	
HY146 Propeller Grooming Kit	1	92	Arlington, VA	10/97 (OPTION)	C/CPAF	UNKNOWN	02/99	05/00	YES	
HY151 Closed Cycle Hull Clean Sy	2	484.5	Arlington, VA	06/30/95 (OPTION)	C/CPAF	UNKNOWN	03/99	03/00	YES	
HY180 Equipment Storage System	1	400	Arlington, VA	10/98	C/CPAF	UNKNOWN	03/99	12/99	YES	
HY181 MHC Prop Replacement Kit	1	400	Arlington, VA	10/98	C/CPAF	UNKNOWN	03/99	03/00	YES	
HY182 Propulsion Strut Repair Equ	1	78	Arlington, VA	10//98	C/CPAF	UNKNOWN	02/99	06/99	YES	
RESERVE EQUIPMENT - (N869) HY178 H.P. Air Compressors	3	86.7	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	03/99	11/99	YES	
FISCAL YEAR (00)		00.7	Allington, VA	11/10/00 (01 11014)	0/01 /11	SIMINOVIIV	03/33	11/33	120	
TOOAL TEAR (00)										
DIVING EQUIPMENT - (N873)										
HY107 Portable Recomp Chamber						_				
a. Portable Chamber	2	219	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	02/01	YES	
HY123 Flyaway Dive System III										
c. Mixed Gas System	1	1,200	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	02/01	YES	
HY132 Recompression Chamber										
b. Fixed Chamber	1	494	Washington, DC	02/00	F/FP	UNKNOWN	04/00	03/01	YES	
c. Fixed Chamber Support Equip	1	725	Washington, DC	02/00	F/FP	UNKNOWN	04/00	03/01	YES	
HY183 Emerg Evac Hyprbrc Strchr	3	40	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	09/00	YES	
SALVAGE EQUIPMENT - (N869)										
HY016 Deck Capstans	3	29.7	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	04/01	NO	10/99
HY116 Port. Submersible Pumps	4	66	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	06/01	YES	
HY153 Tensiometer Systems	7	25.7	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	12/00	YES	
HY155 15 KW Generators	10	21.7	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	04/01	NO	10/99
HY156 Salvage Vans	7	27	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	06/01	NO	10/99
HY158 ROV Propulsion Systems	1	370	Arlington, VA	06/30/95 (OPTION)	C/CPAF	UNKNOWN	02/00	02/01	NO	06/99
HY159 Sonar Dome Repair Kits	2	117	Arlington, VA	10/99	C/CPAF	UNKNOWN	03/99	12/99	YES	
HY160 UWSH Gas Free Equip	3	53	Arlington, VA	10/99	C/CPAF	UNKNOWN	03/99	03/00	YES	
HY161 U/W Shaft/Bearing Rpr Equ	1	326	Arlington, VA	10/99	C/CPAF	UNKNOWN	03/99	01/00	YES	
HY172 Lightweight Beach Gear	2	61.5	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	05/01	NO	10/99
	<u> </u>			1	P-1 SHOPPIN	L		L CLASSIFIC <i>E</i>		

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CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMEN	NT HIS	STORY A	ND PLANNING	EXHIBIT (P-5	5A)	Weapon System		A. DATE		
										ry 1999
B. APPROPRIATION/B	UDGE	T ACTIV	ITY		C. P-1 ITE	M NOMENCLATURE	=		SUBHEAD	
Other Procurement, Nav	/y								81	HY
BA-1: SHIPS SUPPORT	ΓEQU	IPMENT			Diving and Sa	Ivage Equipment				
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 (00)		(2.2.2)								
RESERVE EQUIPMENT - (N869) HY178 H.P. Air Compressors	1	108	Arlington, VA	11/15/93 (OPTION)	C/CPAF	UNKNOWN	02/00	10/00	YES	
					P-1 SHOPPIN			CI ASSIFICA		

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION: UNCLASSIFIED Date: February 1999 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, 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 1996 & Prior FY 1997 FY 1998 FY 1999 FY 2001 FY 2002 FY 2003 FY 2004 FY 2000 FY 2005 QTY QTY QTY QTY \$ \$ \$ QTY \$ QTY \$ QTY \$ QTY \$ \$ \$ \$ QTY FINANCIAL PLAN (IN MILLIONS) RDT&E 0 0.0 **PROCUREMENT** INSTALLATION KITS 0.8 0.4 3 1.2 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** 0.8 1.9 1.1 3.8 TOTAL PROCUREMENT 0.0

P-1 SHOPPING LIST CLASSIFICATION:

CLASSIFICATION: UNCLAS	SIFIED	l																				Date:	Febru	uary 1999
P3A (Continued)						INDIVI	DUAL I	MODIFICA	TION ((Continue	ed)													
MODELS OF SYSTEMS AFF	ECTED): <u>M</u> c	odel S	eries 322	2			MC	DIFIC	ATION T	TLE:	To	owing S	System M	oderniz	zation					=			
INSTALLATION INFORMATI																								
METHOD OF IMPLEMENTA			ntract																					
ADMINISTRATIVE LEADTIN	_		2 Mor							I LEADTI			4 Mon			.,								
CONTRACT DATES: DELIVERY DATE:		1997: 1997:		ious ious				FY 1998 FY 1998		Various Various					Y 1999: Y 1999:		rious rious		_					
DELIVERT DATE.	FI	1997.	Val	lous		:		F1 1990).	various	1				1 1999.	. <u>va</u>	iious		_					
										(\$ in N	/lillions)												
Cost:	Pric	r Years	F	Y 1997	F	Y 1998		FY 1999	F	Y 2000	F	Y 2001	F'	Y 2002	F	Y 2003	F	Y 2004	FY	2005		omplete		Total
PRIOR YEARS	Qty 2	\$ 1.9	Qty	\$	Qty	\$	Qty	/ \$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 1997 EQUIPMENT			1	1.1																				
FY 1998 EQUIPMENT					1	0.8																		
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
FY 2005 EQUIPMENT																								
TO COMPLETE																								
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INSTALLATION SCHEDU FY 199		FY 199			Y 1998		F۱	/ 1999		FY 200	0	F'	Y 2001		FY	2002	7	FY 2003	3	TC				
& Prio	1 1	2 3		1 2		4	1 2		1	2 3		1 2		4 1		3 4	1	2 3			TOT	AL		
In 0	0	0 0		0 0		0	0 0			0 0		0 (0 0		0 0		0 0	0	0	C)		
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	C)		
																				P-	3A			

Exhibit P-20, Require	ments Study	Y Y Y	eas) Code/CC			No.	Date: Feb	ruary 1999	
P-1 Line Item Nomen	alatuma	OP,N 1810	BA 1 Ships	Support Equ ltime (after C		antha	Drad Land	time: 15 mont	h _a
	quipment (BLI 1130)		Admin Leac	itilie (arter C)Ct 1). 4 III	onuis	Flou Leau	ume. 15 mom	115
Diving and Salvage E	quipment (BLI 1130)	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
113701 (D 1 C	4								
HY016 Deck C	apstans	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary				3					
Unit Cost				29.7					
Total Cost				89					
Asset Dynamics									
Beginning Asset Posit		7	7	7					
Deliveries from all pri									
Deliveries from FY 19									
Deliveries from FY 20									
Deliveries from FY 20	2								
Deliveries from subse	equent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	ge								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements	s/Attritions/etc.								
End of Year Asset Po	osition	7	7	7					
Inventory Objective o	r Current Authorized Allowance	39	39	39					
Inventory Objective	Actual Training Expenditures	Other than 7	Fraining	Disposals		Vehicles E	ligible for	Aircraft:	
39		Usage		(Vehicles/O	ther)	BY1 Repla	cement:	TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E	ligible for	PAA:	
Combat Loads:	:	:		:		BY2 Repla	cement:	TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	gment:	Attrition Re	s:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	:
TOTAL:								Storage:	
REMARKS:	•	•	-	•	•	•	•		•

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Exhibit P-20, Require	ments Study	X X ,	eas) Code/CC			No.	Date: Feb	ruary 1999	
P-1 Line Item Nomen	alatura	OP,N 1810	BA 1 Ships	Support Equ ltime (after C		a.u.41a.a	Duod Lood	time: 18 mon	ı l. o
Diving and Salvage E			Admin Lead	itime (after C	oct 1): 4 m	ontns	Prod Lead	time: 18 mon	ins
Diving and Salvage E	quipment (BLI 1130)	1	~~~			T		T	
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HY050 Syntheti	ic Line	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary		8							
Unit Cost		47.4							
Total Cost		379.2							
Asset Dynamics									
Beginning Asset Posit	tion	131	131	135					
Deliveries from all pri	ior year funding		8						
Deliveries from FY 19									
Deliveries from FY 20									
Deliveries from FY 20	001 funding								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements			4						
End of Year Asset Po		131	135	131					
Inventory Objective o	r Current Authorized Allowance	200	200	200)				
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E		Aircraft:	
200		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	
Combat Loads:	<u> :</u>	:		:		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	s:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	·
TOTAL:								Storage:	
REMARKS:									

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Exhibit P-20, Requirer	nents Study	* * * .	eas) Code/CC BA 1 Ships			No.	Date: Feb	ruary 1999	
P-1 Line Item Nomeno	clature	, , , , , , , , , , , , , , , , , , , ,		ltime (after C		onths	Prod Lead	time: 18 mont	ths
Diving and Salvage Ed	quipment (BLI 1130)			`	ŕ				
	,	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HY062 ORION	/D2/CURV III Sonar System	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary			2						
Unit Cost			251.5						
Total Cost			503						
Asset Dynamics									
Beginning Asset Posit	ion	6	6	5					
Deliveries from all pri	or year funding								
Deliveries from FY 19				2					
Deliveries from FY 20									
Deliveries from FY 20	001 funding								
Deliveries from subsec	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usage	2								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements			1						
End of Year Asset Po		6	5	7	,				
Inventory Objective or	r Current Authorized Allowance	8	8	8					
Inventory Objective	Actual Training Expenditures	Other than T	raining	Disposals		Vehicles El		Aircraft:	
8		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles El		PAA:	
Combat Loads:	:	:		:		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	gment:	Attrition Re	s:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	:
TOTAL:								Storage:	
REMARKS:									

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Exhibit P-20, Require	ments Study	X X ,	eas) Code/CC / BA 1 Ships			No.	Date: Feb	ruary 1999	
P-1 Line Item Nomeno	clature	0 - ,- , - , - , - , - , - , - , - , - ,		dtime (after C		onths	Prod Lead	time: 7 month	ıs
Diving and Salvage Ed	quipment (BLI 1130)			`	ŕ				
	ight Dive System (RES)	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
	sk Replacement	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary									
Unit Cost									
Total Cost									
Asset Dynamics									
Beginning Asset Posit		0	0	0)				
Deliveries from all pri	or year funding								
Deliveries from FY 19									
Deliveries from FY 20									
Deliveries from FY 20									
Deliveries from subsec	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usage	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements									
End of Year Asset Po		0)				
Inventory Objective or	r Current Authorized Allowance	132	132	132					
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E		Aircraft:	
132		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	
Combat Loads:	:	:		<u> </u>		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	gment:	Attrition Re	s:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	:
TOTAL:								Storage:	
REMARKS:									

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Exhibit P-20, Require	ments Study		eas) Code/CC / BA 1 Ships			No.	Date: Feb	ruary 1999	
P-1 Line Item Nomen	clature	01,11,1010		dtime (after C		onths	Prod Lead	time: 7 montl	ns
Diving and Salvage E	quipment (BLI 1130)				,				
	eight Dive System	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
	sk Replacement	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary									
Unit Cost									
Total Cost									
Asset Dynamics									
Beginning Asset Posit		0	0	0)				
Deliveries from all pri	ior year funding								
Deliveries from FY 19	999 funding								
Deliveries from FY 20	000 funding								
Deliveries from FY 20	001 funding								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements									
End of Year Asset Po	osition	0	0	0					
Inventory Objective o	r Current Authorized Allowance	528	528	528	3				
Inventory Objective	Actual Training Expenditures	Other than 7	 	Disposals		Vehicles E	ligible for	Aircraft:	
528	2 Politics	Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	
Combat Loads:	:	:		:		BY2 Repla	cement:	TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	gment:	Attrition Re	es:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	7:
TOTAL:								Storage:	
REMARKS:					_				

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Exhibit P-20, Require	ments Study	* * * .	eas) Code/CC			No.	Date: February 1999			
P-1 Line Item Nomen	alations	[OP,N 1810]	BA 1 Ships	Support Equ dtime (after C		a m 4 la a	Duo d I ao d	time: 13 mont	1 _{a a}	
			Admin Leac	itime (after C)Ct 1): 4 m	onuis	Prod Lead	ume: 13 mon	IIS	
Diving and Salvage E		1	~~~			T				
	e Recompression Chamber	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
a. Portable Cha	amber	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary				2	2					
Unit Cost				219						
Total Cost				438						
Asset Dynamics										
Beginning Asset Posit	tion	9	12	. 12						
Deliveries from all pri	ior year funding	3								
Deliveries from FY 19	999 funding									
Deliveries from FY 20										
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po		12	12	. 12	,					
Inventory Objective o	r Current Authorized Allowance	16	16	16	i					
Inventory Objective	Actual Training Expenditures	Other than T	Training	Disposals		Vehicles E		Aircraft:		
16		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:	<u> </u>	:		:		BY2 Repla		TAI		
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	s:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv		
TOTAL:								Storage:		
REMARKS:										

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Exhibit P-20, Require	ments Study	X X \	eas) Code/CC			No.	Date: February 1999		
DAT' L M	1	OP,N 1810	/ BA 1 Ships			.1	D 17 1	01	
P-1 Line Item Nomen			Admin Lead	ltime (after C	Jet 1): 4 m	ontns	Prod Lead	time: 9 month	ıS
Diving and Salvage E		1		1	1	1			
HY107 Portable	e Recompression Chamber	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
	tal Upgrade Package	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary									
Unit Cost									
Total Cost									
Asset Dynamics									
Beginning Asset Posit		0	0	0)				
Deliveries from all pri									
Deliveries from FY 19									
Deliveries from FY 20									
Deliveries from FY 20	001 funding								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage)								
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements									
End of Year Asset Po									
Inventory Objective o	r Current Authorized Allowance	16	16	16	5				
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E		Aircraft:	
16		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	
Combat Loads:	<u> </u>	:		:		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	s:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	1
TOTAL:								Storage:	
REMARKS:									

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Exhibit P-20, Require	ments Study	11 1	,	C/BA/BSA/It		No.	Date: Feb	ruary 1999	
P-1 Line Item Nomen	alatura	JOP,N 1810		Support Equalitime (after C		onthe	Drod Lead	time: 17 mont	he
	quipment (BLI 1130)		Adiiiii Lead	itilie (artei C)Ct 1): 4 III	onuis	Prou Leau	ume. 17 mom	118
Diving and Sarvage E	quipinent (BLI 1130)	DV	CV	DXZI	DYZ	DVO 1	DY/O O	DV/O O	D1/2 4
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HY116 Portable	e Submersible Pumps	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary				4	-				
Unit Cost				66					
Total Cost				264					
Asset Dynamics									
Beginning Asset Posit	tion	41	41	41					
Deliveries from all pri	ior year funding								
Deliveries from FY 19	999 funding								
Deliveries from FY 20									
Deliveries from FY 20	001 funding								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements									
End of Year Asset Po		41	41						
Inventory Objective o	r Current Authorized Allowance	53	53	53					
Inventory Objective	Actual Training Expenditures	Other than 7	Training	Disposals		Vehicles E		Aircraft:	
53		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	
Combat Loads:	<u></u> :	:		:		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	s:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	
TOTAL:								Storage:	
REMARKS:									

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Exhibit P-20, Require	ments Study	X X X	eas) Code/CC			No.	Date: Feb	Date: February 1999		
Dir to M	1	OP,N 1810	BA 1 Ships			.1	D 17 1	.: 12	1	
P-1 Line Item Nomen			Admin Lead	ltime (after C	oct 1): 4 m	onths	Prod Lead	time: 13 mon	ins	
	quipment (BLI 1130)			1		1				
HY123 FADS II	II .	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
a. H.P. Air Syst	tem	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary		2	-							
Unit Cost		210	221							
Total Cost		420	663							
Asset Dynamics										
Beginning Asset Posit		8	8	10						
Deliveries from all pri			2							
Deliveries from FY 19				3						
Deliveries from FY 20										
Deliveries from FY 20	2									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po		8								
Inventory Objective o	r Current Authorized Allowance	19	19	19						
Inventory Objective	Actual Training Expenditures	Other than T	Training	Disposals		Vehicles E	ligible for	Aircraft:		
19		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru	,	Vehicles E		PAA:		
Combat Loads:	:	:		:		BY2 Repla	cement:	TAI		
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au		Attrition Re	s:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	:	
TOTAL:								Storage:		
REMARKS:	EMARKS:				<u>-</u>					

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Exhibit P-20, Require	ments Study			C/BA/BSA/Ite S Support Equ		No.	Date: February 1999		
P-1 Line Item Nomen	clature	01,11 1010		dtime (after C		onths	Prod Lead	time: 13 mon	
	quipment (BLI 1130)		7 Kullilli Lea	diffic (after c)Ct 1). + III	onuis	1 Tou Leau	time. 13 mon	uis
HY123 FADS I		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
c. Mixed Gas S	System	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary				1					
Unit Cost				1200					
Total Cost				1200					
Asset Dynamics									
Beginning Asset Posit	tion	3	3	3					
Deliveries from all pr	ior year funding								
Deliveries from FY 19	999 funding								
Deliveries from FY 20	000 funding								
Deliveries from FY 20	001 funding								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements	s/Attritions/etc.								
End of Year Asset P	osition	3	3	3					
Inventory Objective o	r Current Authorized Allowance	5	5	5 5					
Inventory Objective	Actual Training Expenditures	Other than 7	 	Disposals		Vehicles E	ligible for	Aircraft:	
5	Training Experiences	Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru	,	Vehicles E		PAA:	1
Combat Loads:	:	:		:		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au		Attrition Re	es:
Pipeline:	PY-2:	PY-2:		PY-2:			Ĭ	BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive In	v
TOTAL:								Storage:	
REMARKS:				•	•	•	•		•

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Exhibit P-20, Require	ments Study	* * * .	eas) Code/CC			No.	Date: Feb	ruary 1999	
P-1 Line Item Nomen	alatuma	OP,N 1810	BA 1 Ships			a.m.41n.a	Duo d I c : 1	time: 19 mont	la o
			Admin Lead	ltime (after C)C(1): 4 m	onuns	Prod Lead	iiiie: 19 mont	IIS
Diving and Salvage E	quipment (BLI 1130)								
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HY131 ROV H	andling System	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary			1						
Unit Cost			592						
Total Cost			592						
Asset Dynamics									
Beginning Asset Posit	ion	4	5	5					
Deliveries from all pri	or year funding	1							
Deliveries from FY 19	999 funding			1					
Deliveries from FY 20	000 funding								
Deliveries from FY 20	001 funding								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage	;								
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements	s/Attritions/etc.								
End of Year Asset Po	osition	5	5	6					
Inventory Objective o	r Current Authorized Allowance	10	10	10					
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E	ligible for	Aircraft:	
10		Usage		(Vehicles/O	ther)	BY1 Repla	cement:	TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E	ligible for	PAA:	
Combat Loads:	:	:		:		BY2 Repla	cement:	TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	s:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	
TOTAL:								Storage:	
REMARKS:									

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Exhibit P-20, Require	ements Study		eas) Code/CC			No.	Date: February 1999		
P-1 Line Item Nomen	. Alatina	OP,N 1810	/ BA 1 Ships	Support Equalitime (after (a.u.41.a	Dun et 1 - 1	time: 15 mon	ıl. o
			Admin Lead	itime (after C	JCt 1): 4 m	ontns	Prod Lead	time: 15 mon	ins
	Equipment (BLI 1130)	1		T					
_	oression Chamber	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
a. Portable/Con	ntainerized Chamber	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary			2						
Unit Cost			470						
Total Cost			940	1					
Asset Dynamics									
Beginning Asset Posi	tion	C	0	()				
Deliveries from all pr	ior year funding								
Deliveries from FY 1	999 funding			2	2				
Deliveries from FY 2	000 funding								
Deliveries from FY 2	001 funding								
Deliveries from subse	equent years' funding								
Other Gains									
Combat Losses/Usage	e								
Training Losses/Usag	ge								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirement	s/Attritions/etc.								
End of Year Asset P	osition	C	0	2	2				
Inventory Objective of	or Current Authorized Allowance	7	7	7	7				
Inventory Objective	Actual Training Expenditures	Other than '	Training	Disposals		Vehicles E	ligible for	Aircraft:	
7	Actual Training Expenditures	Usage		(Vehicles/C	l Other)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	
Combat Loads:	:					BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au		Attrition Re	es:
Pipeline:	PY-2:	PY-2:		PY-2:			Ĭ	BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	7
TOTAL:								Storage:	
EMARKS:			•	•		•	•		

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Exhibit P-20, Require	ments Study	X X X '	,	C/BA/BSA/Ito Support Equ		No.	Date: February 1999			
P-1 Line Item Nomeno	clature	01,1110107		dtime (after C		onths	Prod Lead	time: 12 mont	hs	
Diving and Salvage Ed	quipment (BLI 1130)			(,					
	ression Chamber	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
b. Fixed Chaml	oer	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary		1	1	1						
Unit Cost		449	505	494						
Total Cost		449	505	494						
Asset Dynamics										
Beginning Asset Posit	ion	0	1	2						
Deliveries from all pri	or year funding	1	1							
Deliveries from FY 19	999 funding			1						
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subsec	quent years' funding									
Other Gains										
Combat Losses/Usage	;									
Training Losses/Usage	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements	Attritions/etc.									
End of Year Asset Po	osition	1	2	. 3						
Inventory Objective or	r Current Authorized Allowance	5	5	5						
Inventory Objective	Actual Training Expenditures	Other than T	Γraining	Disposals		Vehicles E		Aircraft:		
5		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:	:	:		:		BY2 Repla		TAI		
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	gment:	Attrition Re	s:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	:	
TOTAL:								Storage:		
REMARKS:	EMARKS:						<u>-</u>	- 	·	

Page No 27 Exhibit P-20 Requirements Study

Exhibit P-20, Require	ments Study	* * .		C/BA/BSA/I s Support Eq		l No.	Date: February 1999			
P-1 Line Item Nomen	clature	01,111010		dtime (after (onths	Prod Lead	time: 12 mo	nths	
Diving and Salvage E	Equipment (BLI 1130)			dillio (dillor	0001)		1100 2000			
	ression Chamber	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
c. Fixed Chamb	oer Support Equipment	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary				1						
Unit Cost				725						
Total Cost				725						
Asset Dynamics										
Beginning Asset Posit	tion	0	C	0)					
Deliveries from all pr	ior year funding									
Deliveries from FY 19										
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subse	equent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements	s/Attritions/etc.									
End of Year Asset Po	osition	0	(0)					
Inventory Objective o	or Current Authorized Allowance	5	5	5 5						
Inventory Objective	Actual Training Expenditures	Other than	Training	Disposals		Vehicles E	ligible for	Aircraft:		
5		Usage		(Vehicles/C	Other)	BY1 Repla	cement:	TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E	ligible for	PAA:		
Combat Loads:	:	:		<u> </u>		BY2 Repla	cement:	TAI		
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition R	es:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive In	v:	
TOTAL:								Storage:		
REMARKS:	EMARKS:									

Exhibit P-20, Require	ments Study	X X X \	eas) Code/CC / BA 1 Ships			No.	Date: February 1999			
P-1 Line Item Nomeno	clature	10-,		dtime (after C		onths	Prod Lead	time: 9 month	ıs	
Diving and Salvage Ed	quipment (BLI 1130)			`	,					
	•	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY145 Cofferda	am System	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary		9								
Unit Cost		49.8								
Total Cost		448								
Asset Dynamics										
Beginning Asset Posit	ion	0	0	9)					
Deliveries from all pri			9	1						
Deliveries from FY 19	999 funding									
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subsec	quent years' funding									
Other Gains										
Combat Losses/Usage	;									
Training Losses/Usage	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements	s/Attritions/etc.									
End of Year Asset Po	osition	0	9	9						
Inventory Objective or	r Current Authorized Allowance	10	10	10)					
Inventory Objective	Actual Training Expenditures	Other than T	Γraining	Disposals		Vehicles E		Aircraft:		
10		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:	:	:		<u> </u> :		BY2 Repla		TAI		
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	es:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	7	
TOTAL:								Storage:		
REMARKS:	REMARKS:									

P-1 Shopping List Item No 31

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Exhibit P-20, Require	ments Study	** * ,	eas) Code/CC			No.	Date: Feb	ruary 1999	
D 1 I I I I	1	OP,N 1810	/ BA 1 Ships			.d	D 17 1	. 16	.1
P-1 Line Item Nomen			Admin Lead	ltime (after C	Oct 1): 4 m	onths	Prod Lead	time: 16 mon	ths
Diving and Salvage E	quipment (BLI 1130)				1				I
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HY146 Propelle	er Grooming Kit	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary		5	1						
Unit Cost		89.4	92						
Total Cost		447	92						
Asset Dynamics									
Beginning Asset Posit	tion	0	-		5				
Deliveries from all pri	ior year funding		5						
Deliveries from FY 19	999 funding			1					
Deliveries from FY 20									
Deliveries from FY 20	001 funding								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements									
End of Year Asset Po		0	5	6	j .				
Inventory Objective o	r Current Authorized Allowance	8	8	8	3				
Inventory Objective	Actual Training Expenditures	Other than 7	Γraining	Disposals		Vehicles E		Aircraft:	
8		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	
Combat Loads:	<u> </u>	:		:		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	s:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	1
TOTAL:								Storage:	
REMARKS:									

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Exhibit P-20, Require	ments Study	** * ,	,	C/BA/BSA/It		No.	Date: February 1999			
P-1 Line Item Nomen	clature			dtime (after (onths	Prod Lead	time: 24 mon	ths	
Diving and Salvage E	quipment (BLI 1130)			`	,					
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY147 ROV Te	elemetry System	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary		1								
Unit Cost		1152	,							
Total Cost		1152								
Asset Dynamics										
Beginning Asset Posit	ion	3	3	3	3					
Deliveries from all pri	or year funding			1						
Deliveries from FY 19	999 funding									
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage	,									
Training Losses/Usage	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po	osition	3	3	3 4	1					
Inventory Objective of	r Current Authorized Allowance	6	6	6	5					
Inventory Objective	Actual Training Expenditures	Other than 7	Γraining	Disposals		Vehicles E		Aircraft:		
6		Usage		(Vehicles/C	Other)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:	<u> </u>	:		:		BY2 Repla		TAI		
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	es:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	·:	
TOTAL:								Storage:		
REMARKS:										

Page No 31 Exhibit P-20 Requirements Study

Exhibit P-20, Require	ments Study	X X X	eas) Code/CC			No.	Date: Feb	ruary 1999	9	
P-1 Line Item Nomen	alatuma	OP,N 1810	BA 1 Ships	Support Equ ltime (after C		antha	Drad Land	time: 13 mont	h _o	
	quipment (BLI 1130)		Admin Lead	itilile (arter C)Ct 1): 4 III	onuis	Prod Lead	ume. 13 mom	118	
Diving and Sarvage E	quipilient (BLI 1150)		CVI	D. 7.7.1	DATA	DYIO 1	DY12 2	D1/2 2	D112 4	
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY151 Closed (Cycle Hull Cleaning System	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary			2							
Unit Cost			484.5							
Total Cost			969							
Asset Dynamics										
Beginning Asset Posit	tion	2	2	2						
Deliveries from all pri	ior year funding									
Deliveries from FY 19	999 funding			2						
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po	osition	2	2	4	-					
Inventory Objective o	r Current Authorized Allowance	8	8	8						
Inventory Objective	Actual Training Expenditures	Other than T	Training	Disposals		Vehicles El		Aircraft:		
8		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles El		PAA:		
Combat Loads:	:	:		:		BY2 Repla		TAI		
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	gment:	Attrition Re	s:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv		
TOTAL:								Storage:		
REMARKS:										

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Exhibit P-20, Require	ments Study	Y Y Y	eas) Code/CC			No.	Date: Feb	ruary 1999	
P-1 Line Item Nomen	alatuma	OP,N 1810	BA 1 Ships	Support Equ dtime (after C		antha	Drod Lood	time: 11 mont	h _o
	quipment (BLI 1130)		Admin Leac	itilie (artei C	JC(1). 4 III	Jiluis	Flou Leau	unie. 11 mon	115
Diving and Salvage E	quipment (BLI 1130)	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
11371 <i>5</i> 2 (D	4								
HY153 Tension	ieter	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary				7	1				
Unit Cost				25.7					
Total Cost				180)				
Asset Dynamics									
Beginning Asset Posit		0	0	0)				
Deliveries from all pr									
Deliveries from FY 19									
Deliveries from FY 20									
Deliveries from FY 20	2								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirement									
End of Year Asset Po	osition	0	0	0)				
Inventory Objective of	r Current Authorized Allowance	59	59	59)				
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E	ligible for	Aircraft:	
59		Usage		(Vehicles/O	ther)	BY1 Repla	cement:	TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E	ligible for	PAA:	_
Combat Loads:	:	:		:		BY2 Repla	cement:	TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	s:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	_
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	:
TOTAL:								Storage:	
REMARKS:			<u> </u>	<u> </u>					

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Exhibit P-20, Require	ments Study			C/BA/BSA/Ite Support Equ		No.	Date: February 1999		
P-1 Line Item Nomen	clature	100,000		ltime (after C		onths	Prod Lead	time: 15 mon	ths
Diving and Salvage E	quipment (BLI 1130)			`	,				
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HY155 15 KW	Generators	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary				10					
Unit Cost				21.7					
Total Cost				217					
Asset Dynamics									
Beginning Asset Posit	tion	0	0	0					
Deliveries from all pri	ior year funding								
Deliveries from FY 19	999 funding								
Deliveries from FY 20	000 funding								
Deliveries from FY 20	001 funding								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements									
End of Year Asset Po		0							
Inventory Objective o	r Current Authorized Allowance	53	53	53					
Inventory Objective	Actual Training Expenditures	Other than 7	L Fraining	Disposals		Vehicles E	ligible for	Aircraft:	+
53		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	1
Combat Loads:	:	:		:		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	es:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive In	v:
TOTAL:								Storage:	
REMARKS:									

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Exhibit P-20, Require	ments Study	X X X	eas) Code/CC			No.	Date: February 1999		
P-1 Line Item Nomen	alatura	OP,N 1810	BA 1 Ships	Support Equalitime (after C		41a	Duo d I ao d	time: 17 mon	ıL.o.
Diving and Salvage E			Admin Lead	itilile (arter C)Ct 1): 4 IIIC	onuis	Prou Leau	ume: 17 mon	IIIS
Diving and Sarvage E	quipilient (BLI 1130)	DV	CV	DXZ1	DYZ	DV/2 1	DY/O O	DV/2 2	DX/2 4
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HY156 Salvage	Vans	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary				7					
Unit Cost				27	'				
Total Cost				189					
Asset Dynamics									
Beginning Asset Posit		0	0	0)				
Deliveries from all pri									
Deliveries from FY 19									
Deliveries from FY 20									
Deliveries from FY 20	2								
Deliveries from subse	quent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements									
End of Year Asset Po		0		1					
Inventory Objective o	r Current Authorized Allowance	50	50	50)				
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E		Aircraft:	
50		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	
Combat Loads:	<u> :</u>	:		:		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	es:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	·
TOTAL:								Storage:	
REMARKS:									

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Exhibit P-20, Require	ments Study	* * * ,	,	C/BA/BSA/Ite Support Equ		No.	Date: February 1999		
P-1 Line Item Nomeno	clature			dtime (after C		onths	Prod Lead	time: 13 mon	ths
Diving and Salvage Ed	quipment (BLI 1130)								
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HY158 ROV Pr	opulsion Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary				1					
Unit Cost				370					
Total Cost				370					
Asset Dynamics									
Beginning Asset Posit	ion	0	0	0)				
Deliveries from all pri									
Deliveries from FY 19									
Deliveries from FY 20									
Deliveries from FY 20	C								
Deliveries from subsec	quent years' funding								
Other Gains									
Combat Losses/Usage	:								
Training Losses/Usage	e								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements									
End of Year Asset Po		0	0	0)				
Inventory Objective or	r Current Authorized Allowance	8	8	8	3				
Inventory Objective	Actual Training Expenditures	Other than T	Γraining	Disposals		Vehicles E		Aircraft:	
8		Usage	<u> </u>	(Vehicles/O	ther)	BY1 Repla		TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:	
Combat Loads:	<u> </u> :	:		:		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	es:
Pipeline:	PY-2:	PY-2:		PY-2:				BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	1
TOTAL:			<u> </u>	1				Storage:	
REMARKS:									

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Exhibit P-20, Require	ments Study	* * * .	(Treas) Code/CC/BA/BSA/Item Control No. D					Date: February 1999			
P-1 Line Item Nomen	alatura	OP,N 1810		s Support Equ dtime (after C		41 ₀	Duod Lood	times 10 mesm	11. a		
			Admin Lead	atime (after C	oct 1): 4 m	ontns	Prod Lead	Prod Leadtime: 10 months			
Diving and Salvage E	quipment (BLI 1130)	1	~~~	Ī		T		T			
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4		
HY159 Sonar D	ome Repair Kits	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		
Buy Summary				2	2						
Unit Cost				117							
Total Cost				234							
Asset Dynamics											
Beginning Asset Posit	tion	C	0	0)						
Deliveries from all pri											
Deliveries from FY 19											
Deliveries from FY 20				2							
Deliveries from FY 20	001 funding										
Deliveries from subse	quent years' funding										
Other Gains											
Combat Losses/Usage											
Training Losses/Usag	e										
Test Losses/Usage											
Other Losses/Usage											
Disposals/Retirements											
End of Year Asset Po		C	0) 2	,						
Inventory Objective o	r Current Authorized Allowance	4	4	4							
Inventory Objective	Actual Training Expenditures	Other than 7	Training	Disposals		Vehicles E		Aircraft:			
4		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:			
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:			
Combat Loads:	:	:		:		BY2 Repla		TAI			
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	es:		
Pipeline:	PY-2:	PY-2:		PY-2:				BAI			
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	7		
TOTAL:								Storage:			
REMARKS:											

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Exhibit P-20, Require	ments Study	X X X	Treas) Code/CC/BA/BSA/Item Control No. 10 / BA 1 Ships Support Equipment					Date: February 1999		
P-1 Line Item Nomen	alatura	OP,N 1810		Support Equ ltime (after C			Duo d I ao d	time: 13 mon	11. a	
Diving and Salvage E			Admin Lead	itime (arter C	oct 1): 4 m	ontns	Prod Lead	time: 13 mon	ins	
Diving and Salvage E	quipment (BLI 1130)	1	~~~			I				
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY160 Gas Fre	e Equipment	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary				3						
Unit Cost				53						
Total Cost				159						
Asset Dynamics										
Beginning Asset Posit	tion	0	0	0)					
Deliveries from all pri	ior year funding									
Deliveries from FY 19	999 funding									
Deliveries from FY 20				3						
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po		0	0	3						
Inventory Objective o	r Current Authorized Allowance	16	16	16	i					
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E		Aircraft:		
16		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:	<u> :</u>	:		:		BY2 Repla		TAI		
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	es:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	7	
TOTAL:								Storage:		
REMARKS:										

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Exhibit P-20, Require	ments Study	* * * .	Approp (Treas) Code/CC/BA/BSA/Item Control No. OP,N 1810 / BA 1 Ships Support Equipment					Date: February 1999			
		OP,N 1810									
P-1 Line Item Nomen			Admin Lead	dtime (after C	Oct 1): 4 mo	onths	Prod Lead	time: 11 mon	ths		
Diving and Salvage E		•									
HY161 Underw	ater Shaft & Bearing Repair	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4		
Equipment		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		
Buy Summary				1							
Unit Cost				326							
Total Cost				326							
Asset Dynamics											
Beginning Asset Posit	tion	0	0	0							
Deliveries from all pri	ior year funding										
Deliveries from FY 19	999 funding										
Deliveries from FY 20	000 funding			1							
Deliveries from FY 20	001 funding										
Deliveries from subse	quent years' funding										
Other Gains											
Combat Losses/Usage											
Training Losses/Usag	e										
Test Losses/Usage											
Other Losses/Usage											
Disposals/Retirements	s/Attritions/etc.										
End of Year Asset Po	osition	0	0	1							
Inventory Objective o	r Current Authorized Allowance	3	3	3							
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E		Aircraft:			
3		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:			
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles El		PAA:			
Combat Loads:	:	:		<u> </u> :		BY2 Repla		TAI			
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au	igment:	Attrition Re	s:		
Pipeline:	PY-2:	PY-2:		PY-2:				BAI			
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv			
TOTAL:								Storage:			
REMARKS:											

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Exhibit P-20, Require	ments Study	11 1	eas) Code/CC			No.	Date: Feb	ruary 1999	
P-1 Line Item Nomen	alatura	OP,N 1810	BA 1 Ships	Support Equ dtime (after C		onthe	Drod Lond	time: 13 mont	he
	quipment (BLI 1130)		Aumin Leac	itilie (artei C	JC(1). 4 III	onuis	Flou Leau	unie. 13 mon	115
Diving and Salvage E	quipment (BLI 1130)	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4
HY162 Trash P	umn Systems	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary	ump systems	1 1 1))0	1 1 1)))	1 1 2000	1 1 2001	1 1 2002	1 1 2003	1 1 2004	1 1 2003
Unit Cost									
Total Cost									
Asset Dynamics									
Beginning Asset Posi	tion	30	30	30					
Deliveries from all pr									
Deliveries from FY 19									
Deliveries from FY 20	000 funding								
Deliveries from FY 20	001 funding								
Deliveries from subse	equent years' funding								
Other Gains									
Combat Losses/Usage									
Training Losses/Usag	ge								
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirement									
End of Year Asset P		30		1					
Inventory Objective o	or Current Authorized Allowance	39	39	39					
Inventory Objective 39	Actual Training Expenditures	Other than T	Training I	Disposals (Vehicles/O	Other)	Vehicles E BY1 Repla		Aircraft: TOAI:	
Assets Rqd for	PY thru	PY thru		PY thru	, tile1)	Vehicles E		PAA:	
Combat Loads:				. unu		BY2 Repla		TAI	
WRM Rqmt:	PY-1:	PY-1:		PY-1:		Vehicle Au		Attrition Re	s·
Pipeline:	PY-2:	PY-2:		PY-2:		V CHICLE 7 K	511101111	BAI	
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	
TOTAL:		110.						Storage:	
REMARKS:	•		1		1			1	

P-1 Shopping List Item No 31

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Exhibit P-20, Require	ments Study	X X X \	eas) Code/CO / BA 1 Ships			No.	Date: February 1999			
P-1 Line Item Nomen	clature			dtime (after C		onths	Prod Lead	time: 6 month	ıs	
Diving and Salvage E	quipment (BLI 1130)									
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY165 Underw	ater Welding Equipment	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary										
Unit Cost										
Total Cost										
Asset Dynamics										
Beginning Asset Posit	ion	4	. 4	4	l.					
Deliveries from all pri	or year funding									
Deliveries from FY 19										
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usage	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po		4	. 4							
Inventory Objective or	r Current Authorized Allowance	12	12	12	2					
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E		Aircraft:		
12		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:				:	1	BY2 Repla		TAI		
WRM Rqmt:	PY-1:	PY-1:		PY-1:	1	Vehicle Au	igment:	Attrition Re	es:	
Pipeline:	PY-2:	PY-2:		PY-2:	1			BAI		
Other:	PY-3:	PY-3:		PY-3:	1			Inactive Inv	'	
TOTAL:								Storage:		
REMARKS:										

Page No 41 Exhibit P-20 Requirements Study

Exhibit P-20, Require	ments Study	* * * ,	,	C/BA/BSA/It		No.	Date: February 1999			
P-1 Line Item Nomen	-1-/	OP,N 1810		Support Equent Support Equent Support		41	D., 11 1	time: 13 mon	1	
			Admin Lea	atime (after C	Jct 1): 4 m	ontns	Prod Lead	time: 13 mon	ins	
Diving and Salvage E	equipment (BLI 1130)				1	1			1	
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY166 ROV To	ool Package	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary										
Unit Cost										
Total Cost										
Asset Dynamics										
Beginning Asset Posit	tion	0	() ()					
Deliveries from all pr	ior year funding									
Deliveries from FY 19	999 funding									
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subse	equent years' funding									
Other Gains										
Combat Losses/Usage	2									
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements	s/Attritions/etc.									
End of Year Asset Po	osition	0	() ()					
Inventory Objective o	r Current Authorized Allowance	8	8	3 8	3					
Inventory Objective	Actual Training Expenditures	Other than '	Training	Disposals		Vehicles E	ligible for	Aircraft:		
8		Usage		(Vehicles/C	ther)	BY1 Repla	cement:	TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E	ligible for	PAA:		
Combat Loads:				:		BY2 Repla	cement:	TAI		
WRM Rqmt:				PY-1:		Vehicle Au	igment:	Attrition Re	es:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	':	
TOTAL:	OTAL:							Storage:		
REMARKS:										

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Exhibit P-20, Require	ments Study			C/BA/BSA/It s Support Equ		No.	Date: February 1999			
P-1 Line Item Nomen	clature	01,111010		dtime (after (onths	Prod Lead	time: 8 montl	ns	
Diving and Salvage E				diriio (dirioi (300 1) 1110	51101 0	1100 2000			
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY167 Flyaway	Weld Van	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary		2	,							
Unit Cost		232								
Total Cost		464								
Asset Dynamics										
Beginning Asset Posit	tion	0	() 2	2					
Deliveries from all pri	ior year funding		2	2				_		
Deliveries from FY 19	999 funding									
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage	•									
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements	s/Attritions/etc.									
End of Year Asset Po	osition	0	2	2 2	2					
Inventory Objective o	r Current Authorized Allowance	3	3	3	3					
									T	
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E	ligible for	Aircraft:		
3		Usage	_	(Vehicles/C	Other)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E	ligible for	PAA:		
Combat Loads:	at Loads::			:		BY2 Repla	cement:	TAI		
WRM Rqmt:				PY-1:		Vehicle Au	igment:	Attrition Re	es:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	v:	
TOTAL:	OTAL:							Storage:		
REMARKS:					_					

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Exhibit P-20, Require	ments Study	* * * ·	,	C/BA/BSA/It		No.	Date: February 1999			
P-1 Line Item Nomen	alatura	OP,N 1810		Support Equation (after Country)		4l	Duod Lood	time: 10 mon	11. a	
Diving and Salvage E			Admin Lea	atime (after C	Jct 1): 4 m	ontns	Prod Lead	time: 10 mon	ins	
Diving and Salvage E	quipment (BLI 1130)	1	~~~			T /		T		
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY168 SHT Re	placement Kits	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary										
Unit Cost										
Total Cost										
Asset Dynamics										
Beginning Asset Posit	tion	C	() ()					
Deliveries from all pri	ior year funding									
Deliveries from FY 19	999 funding									
Deliveries from FY 20										
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po		C) () ()					
Inventory Objective o	r Current Authorized Allowance	5	5 5	5 5	5					
Inventory Objective	Actual Training Expenditures	Other than 7	Training	Disposals		Vehicles E		Aircraft:		
5		Usage		(Vehicles/C	Other)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:	<u> </u> :	: PY-1:		:		BY2 Repla		TAI		
WRM Rqmt:				PY-1:		Vehicle Au	igment:	Attrition Re	es:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	<u>'</u>	
TOTAL:								Storage:		
REMARKS:										

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Exhibit P-20, Require	ements Study	* * * ,	eas) Code/CO			No.	Date: February 1999			
D 1 I L N	1.	OP,N 1810	/ BA 1 Ships			.1	D 17 1	10	.1	
P-1 Line Item Nomen			Admin Lead	dtime (after C	Jct 1): 4 m	ontns	Prod Lead	time: 10 mon	ins	
	Equipment (BLI 1130)	1		1	1	1		-		
	ater Ship Husbandry	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
Power Tools		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary										
Unit Cost										
Total Cost										
Asset Dynamics										
Beginning Asset Posit	tion	0	0	0)					
Deliveries from all pr	ior year funding									
Deliveries from FY 19	999 funding									
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subse	equent years' funding									
Other Gains										
Combat Losses/Usage	e									
Training Losses/Usag	ge									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirement										
End of Year Asset Po		0								
Inventory Objective o	or Current Authorized Allowance	15	15	15	5					
	T									
Inventory Objective	Actual Training Expenditures	Other than 7	Fraining	Disposals		Vehicles E		Aircraft:		
15		Usage		(Vehicles/C	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:				:		BY2 Repla		TAI		
WRM Rqmt:				PY-1:	1	Vehicle Au	igment:	Attrition Re	es:	
Pipeline:	PY-2:	PY-2:		PY-2:	1			BAI		
Other:	PY-3:	PY-3:		PY-3:		-		Inactive Inv	1	
TOTAL: REMARKS:					1			Storage:		

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Exhibit P-20, Require	ments Study	X X X \	eas) Code/CC BA 1 Ships			No.	Date: February 1999			
P-1 Line Item Nomeno	clature			ltime (after C		onths	Prod Lead	time: 16 mon	hs	
Diving and Salvage Ed	quipment (BLI 1130)									
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY172 Lightwe	ight Beach Gear	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary				2						
Unit Cost				61.5						
Total Cost				123						
Asset Dynamics										
Beginning Asset Posit	ion	0	0	0						
Deliveries from all pri	or year funding									
Deliveries from FY 19	999 funding									
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subsec	quent years' funding									
Other Gains										
Combat Losses/Usage	;									
Training Losses/Usage	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po		0	0	0)					
Inventory Objective or	r Current Authorized Allowance	106	106	106						
I Obit of	A constant Transition Francisco	041	P	D:1-		V-1-1-1 E1	l' - '1-1C	Aircraft:		
Inventory Objective 106	Actual Training Expenditures	Other than T Usage	raining	Disposals (Vehicles/O	ther)	Vehicles El BY1 Repla		TOAI:		
Assets Rqd for	Rqd for PY thru			PY thru		Vehicles El	ligible for	PAA:		
Combat Loads:				:		BY2 Repla		TAI		
WRM Rqmt:	PY-1: PY-1:			PY-1:		Vehicle Au	gment:	Attrition Re	s:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv		
TOTAL:	TOTAL:							Storage:		
REMARKS:				·			<u>-</u>	- 		

P-1 Shopping List Item No 31

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Exhibit P-20, Require	ments Study	X X ,	eas) Code/CC			No.	Date: February 1999			
P-1 Line Item Nomen	alatura	JOP,N 1810	BA 1 Ships	Support Equ ltime (after C		onthe	Drod Local	time: 9 month	0	
Diving and Salvage E			Admin Lead	ume (arter C)Ct 1): 4 m	onuis	Prod Lead	ume: 9 monu	S	
Diving and Salvage E	quipment (BLI 1130)			I		T		T	<u></u>	
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY178 H.P. Air	Compressors	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary		3	3	1						
Unit Cost		77	86.7	108						
Total Cost		231	260	108						
Asset Dynamics										
Beginning Asset Posit	ion	0	4	7						
Deliveries from all pri	or year funding	4	3							
Deliveries from FY 19	999 funding			3						
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage	>									
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements	s/Attritions/etc.									
End of Year Asset Po	osition	4	7	10						
Inventory Objective o	r Current Authorized Allowance	12	12	12						
Inventory Objective	Actual Training Expenditures	Other than T	Training	Disposals		Vehicles E	ligible for	Aircraft:		
12		Usage		(Vehicles/O	ther)	BY1 Repla	cement:	TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E	ligible for	PAA:		
Combat Loads:	:	:		:		BY2 Repla	cement:	TAI		
WRM Rqmt:				PY-1:		Vehicle Au	igment:	Attrition Re	s:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv		
TOTAL:	OTAL:							Storage:		
REMARKS:										

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Exhibit P-20, Require	ments Study	* * * ,	eas) Code/CC			No.	Date: February 1999			
P-1 Line Item Nomen	alations	OP,N 1810	BA 1 Ships			a	Duod Lot 1	time: 10 mont	la o	
			Admin Lead	ltime (after C	JC(1): 4 m	onuns	Prod Lead	ume: 10 mont	IIS	
Diving and Salvage E	quipment (BLI 1130)			1	1				1	
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY180 Equipm	ent Storage System	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary			1							
Unit Cost			400							
Total Cost			400							
Asset Dynamics										
Beginning Asset Posit	tion	0	0	0)					
Deliveries from all pri	ior year funding									
Deliveries from FY 19	999 funding			1						
Deliveries from FY 20										
Deliveries from FY 20	001 funding									
Deliveries from subse	equent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usag	ge									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po		0	0	1						
Inventory Objective o	r Current Authorized Allowance	1	1	1						
Inventory Objective	Actual Training Expenditures	Other than 7	Гraining	Disposals		Vehicles E		Aircraft:		
1		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:				:		BY2 Repla		TAI		
WRM Rqmt:				PY-1:		Vehicle Au	igment:	Attrition Re	s:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv		
TOTAL:								Storage:		
REMARKS:										

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Exhibit P-20, Require	ments Study	X X X	eas) Code/CC			No.	Date: February 1999			
P-1 Line Item Nomen	alaturus	OP,N 1810	BA 1 Ships	Support Equ ltime (after C		a	Duo d I ao d	time: 13 mont	1 _{- 0}	
			Admin Leac	ume (anter C	JC(1): 4 III	onuis	Prod Lead	ume: 13 mon	IIS	
Diving and Salvage E	quipment (BLI 1130)			I	1				1	
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY181 MHC P	ropeller Replacement Kit	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary			1							
Unit Cost			400							
Total Cost			400							
Asset Dynamics										
Beginning Asset Posit	tion	0	0	0)					
Deliveries from all pri	ior year funding									
Deliveries from FY 19	999 funding			1						
Deliveries from FY 20	000 funding									
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po	osition	0	0	1						
Inventory Objective o	r Current Authorized Allowance	2	2	2	2					
Inventory Objective	Actual Training Expenditures	Other than 7	Γraining	Disposals		Vehicles E		Aircraft:		
2		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:				:		BY2 Repla		TAI		
WRM Rqmt:				PY-1:		Vehicle Au	igment:	Attrition Re	s:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv		
TOTAL:								Storage:		
REMARKS:										

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Exhibit P-20, Require	ments Study	Y Y Y	eas) Code/CC			No.	Date: February 1999			
P-1 Line Item Nomen	alatura	OP,N 1810	BA 1 Ships	Support Equ ltime (after C		ontha	Drad Land	time: 5 month		
Diving and Salvage E			Admin Leac	itilie (artei C	JC(1): 4 III	onuis	Prod Lead	ume. 3 monu	S	
Diving and Sarvage E	quipinent (BLI 1150)	T	~~~		Ī					
		PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
HY182 Propuls	ion Strut Repair Equipment	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary			1							
Unit Cost			78							
Total Cost			78							
Asset Dynamics										
Beginning Asset Posit	tion	0	0	1						
Deliveries from all pri	ior year funding									
Deliveries from FY 19			1							
Deliveries from FY 20										
Deliveries from FY 20	001 funding									
Deliveries from subse	quent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usag	e									
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements										
End of Year Asset Po		0	1	1						
Inventory Objective o	r Current Authorized Allowance	1	1	1						
					1					
Inventory Objective	Actual Training Expenditures	Other than T	Training	Disposals		Vehicles E		Aircraft:		
1		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:				:		BY2 Repla		TAI		
WRM Rqmt:				PY-1:		Vehicle Au	igment:	Attrition Re	s:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:	1			Inactive Inv	1	
TOTAL:								Storage:		
REMARKS:										

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Exhibit P-20, Requirer	nents Study			C/BA/BSA/Ite Support Equ		No.	Date: February 1999			
P-1 Line Item Nomeno	Clature	01,11 1010		dtime (after C		onths	Prod Lead	time: 8 month	ıs	
Diving and Salvage Ed			rannin zeuc	attitie (urter c)	51111 5	1100 Ecua	inne. o mond		
	ncy Evacuation Hyperbaric	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	
Stretcher		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary				3						
Unit Cost				40						
Total Cost				120						
Asset Dynamics										
Beginning Asset Positi	ion	0	0	0)					
Deliveries from all price	or year funding									
Deliveries from FY 19	99 funding									
Deliveries from FY 20	00 funding			3						
Deliveries from FY 20	01 funding									
Deliveries from subsec	quent years' funding									
Other Gains										
Combat Losses/Usage										
Training Losses/Usage										
Test Losses/Usage										
Other Losses/Usage										
Disposals/Retirements	/Attritions/etc.									
End of Year Asset Po	sition	0	0	3						
Inventory Objective or	Current Authorized Allowance	52	52	52						
Inventory Objective	Actual Training Expenditures	Other than 7	Γraining	Disposals		Vehicles E		Aircraft:		
52		Usage		(Vehicles/O	ther)	BY1 Repla		TOAI:		
Assets Rqd for	PY thru	PY thru		PY thru		Vehicles E		PAA:		
Combat Loads:				<u> </u> :		BY2 Repla		TAI		
WRM Rqmt:	PY-1: PY-1:			PY-1:		Vehicle Au	igment:	Attrition Re	es:	
Pipeline:	PY-2:	PY-2:		PY-2:				BAI		
Other:	PY-3:	PY-3:		PY-3:				Inactive Inv	,	
TOTAL:	OTAL:							Storage:		
REMARKS:										

Page No 51 Exhibit P-20 Requirements Study

CLASSIFICATION:

	В	UDGET	ITEM JUS	TIFICATION	SHEET				DATE:			
			P-4	40						February 199	9	
APPROPRIATION/BUI	DGET ACTIV	ITY					P-1 ITEM NO	MENCLATURE	LINE ITEM #			
OTHER PROCURE	EMENT, NA	VΥ					EOD UNDER	WATER EQUI	PMENT (1140)			
BA-1: SHIP SUPPO	ORT EQUIP	PMENT										
Program Element for	Code B Items	s:					OTHER RELA	ATED PROGR	AM ELEMENT	S		
	N/A											
	Prior	ID									То	
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total
QUANTITY			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST												
(In Millions)			\$8.7	\$8.1	\$0.3	\$0.4	\$0.7	\$0.3	\$0.4	\$0.5		\$19.3
SPARES COST												
(In Millions)												

PROGRAM DESCRIPTION/JUSTIFICATION:

Starting with the FY 2000 budget, this program was consolidated into Minesweeping Equipment - 0975.

There is additional funding as follows which transferred to BLI 0975/ Minesweeping Equipment. The database was locked before the error could be corrected.

FY 00 FY01 FY02 FY03 FY04 FY05 -292K -375K -664K -273K -370K -467K

P-1 SHOPPING LIST

ITEM NO. 32 PAGE NO. 1

CLASSIFICATION:

CLASSIFICATION:

UNCLASSIFIED

		BUI	DGET ITEM JUSTIFICA	DATE:										
			P-40				February 1999							
APPROPRIATION/BUD	GET ACTIV	/ITY		P-1 ITEM NO	MENCLATUR	E/LINE ITEM #	ŧ							
OTHER PROCURE	MENT, N	AVY		STANDARD BOATS/21H0 BLI: 1210										
BA-1: SHIPS SUPI	PORT EQ	UIPMEN	NT											
Program Element for C	Code B Item	ıs:					OTHER REL	ATED PROGR	AM ELEMENT	s				
	Prior	ID									То			
	Years	Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total		
QUANTITY		Α	3	9	17	11	13	21	22	24	0	120		
EQUIPMENT COST														
(In Millions)			\$6.0	\$1.4	\$3.1	\$2.5	\$3.3	\$3.9	\$5.4	\$5.5	\$0.0	\$31.1		
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.

H0005 7m (22ft) UTILITY BOAT - (Fiberglass) Used for general utility, supply and mail transport, at shore activities. Service life is 10 years.

H0016 12m (40ft) PERSONNEL BOAT - (Fiberglass) Used for officer/personnel transportation on carriers and shore activities. Service life is 20 years.

H0028 7m (24ft) RIGID INFLATABLE BOAT (RIB) - (Fiberglass) Used as ships' lifeboats, rescue boats and liberty boats, and for general transportation 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/minerecovery and Command and Control. Service life is 10 years.

Estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.

H0033 13m (42ft) PERSONNEL BOAT - (Fiberglass) Used for officer/personnel transportation on carriers and shore activities. 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.

P-1 SHOPPING LIST

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CLASSIFICATION:

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DD Form 2454, JUN 86

Exhibit P-40a, Budget	Item Jus	stification	for Aggre	gated Items	S	Date									
Other Procurement, N	avy B	A1: SHII	PS SUPPO	ORT EQUIP	PMENT	Feb-99									
Appropriation/Budget	Activity														
	ID	Prior	PY FY	CY FY	BY1	BY2 FY	BY2+1 FY	BY2+2 FY	BY2+2 FY	BY2+4 FY	To Comp	Total			
Procurement Items	Code	Years	1998	1999	BY2000	2001	2002	2003	2004	2005					
H0002 15m UB															
H0002 75H UB				(7) 756	(14) 1540										
H0016 12m PE			(3) 801	(1) 130	(14) 1340										
H0028 7m RIB			(0) 001												
H0030 22' EOD				(1) 127											
H0031 27' EOD				(1) 183											
H0033 13m PE					(3) 1179										
H0830 Prod Engr			364	198	217										
H0900 Con Serv			233	120	207										
H0XXX Drug Interdicti	on		4606												
TOTAL			6004	1384	3143										
								1							

P-1 Shopping List - Item No 33-2 of 33-2

Exhibit P-40a, Budget Item Justification for Aggregated Items

CLASSIFICATION:

UNCLASSIFIED

		BU	IDGET ITEM	JUSTIFICA	TION SHEE		DATE:									
				P-40				FEBRUARY 1999								
APPROPRIATION/BU	IDGET ACTIV	/ITY						P-1 ITEM NOMENCLATURE/LINE ITEM #								
OTHER PROCURI	EMENT, NA	AVY			OTHER SHIPS TRAINING EQUIPMENT LI:132000											
BA-1: OTHER SH	IIPS SUPPO	ORT EQ	UIPMENT			81	.H5									
Program Element for	Code B Item	s:			OTHER RELA	ATED PROGR	M ELEMENTS									
	Prior	ID										То				
	Years	Code	FY 1997	FY1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total			
QUANTITY													0			
EQUIPMENT COST																
(In Millions)	N/A		N/A	\$1.8	\$1.8	\$3.9	\$4.0	\$14.9	\$3.4	\$1.9	\$3.5	N/A	\$35.2			
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), support equipment, simulators/stimulators, and Diving and Salvage Training Center equipment identified by the Type Commander, Chief of Naval Education and Training (CNET) and the Submarine and Integrated Undersea Sonar 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.

(H5262) BFTT (GNSS)

Funds will procure and install Generic Navy Stimulators/Simulators (GNSS), as part of the AN/USQ-T46 A(V) Battle Force Tactical Training (BFTT) System, on CVN 74 and CVN 75. The GNSS set for each aircraft carrier provides stimulation for AN/SPS-49, AN/SPS-49, AN/SPS-67, IFF, MK23 TAS and NSSMS(3).

P-1 SHOPPING LIST

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CLASSIFICATION:

	WEAPONS	SYSTEN P-	I COST AN	ALYSIS				Weapon Sy	stem			DATE: Feb	ruary 1999				
Other	DPRIATION/BUDGET ACTIVITY Procurement, Navy OTHER SHIPS SUPPORT EQUIP		<u> </u>			ID Code	P-1 ITEM	P-1 ITEM NOMENCLATURE/SUBHEAD OTHER SHPS TRAINING EQUIPMENT LI: 132000 81H5									
			TOTAL CO	ST IN THO	USANDS O	FDOLLARS	3										
COST	ELEMENT OF COST	ID Code		FY 1998			FY 1999			FY 2000							
			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		11	71	774	9	74	665			527						
	SUBMARINE WARFARE (N87)																
H5276	Subsurface Sustainng TTE				989			1,170			1,139						
	AIR WARFARE (N88)																
H5262	BFTT (GNSS)								8	275	2,196						
	SUBTOTAL (N86) SUBTOTAL (N87)							665 1,170			527 1,139			0			
TOTAL	SUBTOTAL (N88)				1,763			1,835			2,196 3,862			0 0			

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 34 PAGE NO. 2

BUDGET PROCU	REMEN	NT HIST	ORY AND PLANI	NING EXHIB	IT (P-5A)	Weapon System		A. DATE				
								FEBRUARY 1999				
B. APPROPRIAT	ION/B	JDGET .	ACTIVITY		C. P-1 ITEI	M NOMENCLATURE		•	SUBHEAD			
Other Procureme	nt, Nav	'y				Other Ships Training	g Equipm	ent	81H5			
BA-1: OTHER SH	IPS SU	JPPORT	EQUIPMENT									
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		
H5265												
Surface Sustaining												
Training TTE FISCAL YEAR 97	1	63	NAVUNDSEADIV	N/A	FFP	NEWPORT RI	SEP 97	OCT 97	YES			
Training TTE	1	63	NAVUNDSEADIV	N/A	FFP	NEWPORT RI	SEP 97	NOV 97	YES			
Training TTE	1	63	NAVUNDSEADIV	N/A	FFP	NEWPORT 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)	11	71	NAVSEALOGCEN	N/A	FFP	UNIDYNE, NORFOLK, VA	SEP 98	JUL 99	YES			
Training TTE (FY99)	9	74	NAVSEALOGCEN	N/A	FFP	UNIDYNE, NORFOLK, VA	JUL 99	JAN 00	YES			
H5276 SUBSURFACE SUSTAINING TTE (98-00)			VARIOUS	N/A	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES			
H5262 BFTT (GNSS) FISCAL YEAR 00	8	275	NAVSEA ARLINGTON	MAY 97	CPFF	AAI, HUNT VALLEY, MD	MAR 98	APR 00	YES YES			

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 34 PAGE NO. 3

	PHASED REQUIREMENT SCHEDULE												B. P-1 ITEM NOMENCLATURE							C. DATE				1		
P-23						Oth	er Pr	ocur	emer	nt, Na	avy			AN/U	ISQ-T	46V(A) BFT	T (GN	1 SS)			F	ebrua	ry 19	99	
		_	FY 1997	,			FY 1998			1	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	8	0	0									
FY 01	(P)																	0	8	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	8	8	8	8	16	16	16	16	16	16	16	
QTY OVER (+) OR SHORT (-)	(3)	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	8	8	16	16	16	16	16	16	0	0
D. REMARKS			1	E.	1	RQMT (QTY)	I	16	I	TOTAL	RQMT	16	INSTALLI	16			0		& PRIOR		1	UNFUND	ED .	0)
				1.	APPN -						1					AS OF	9 /4/98		UNDE	LIVERED	0		+			1
				2.	APPN -											1			1							1
				3.	PROCUREMENT LEADTIME						ADMIN			INITIAL	ORDER			1		REORD	ER				1	
								D 4 OLIOPPINIO LIOT					1	OLA COLFICATION					┙							

DD for 2447, JUN 86

P-1 SHOPPING LIST
CLASSIFICATION:
ITEM NO. 34 PAGE NO. 4

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		BU	DGET ITEM JU	JSTIFICA	DATE:											
			i	P-40						F	EBRUARY 19	99				
APPROPRIATION/BUD	GET ACTIV	/ITY						P-1 ITEM NOMENCLATURE/LINE ITEM #								
OTHER PROCURE	MENT, NA	VY														
BA 1: SHIPS SUPF	ORT EQU	JIPMEN	Т		OPERATING FORCES IPE BLI:144500 SBHD: 81KN											
Program Element for (Code B Item	ıs:			OTHER RELA	ATED PROGR	AM ELEMENT	rs								
	Prior	ID										То				
	Years	Code	F	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Total			
QUANTITY																
EQUIPMENT COST																
(In Millions)				\$0.9	\$0.7	\$4.5	\$2.7	\$3.9	\$7.9	\$5.6	\$5.8	N/A	\$32.0			
SPARES COST																
(In Millions)																

PROGRAM DESCRIPTION/JUSTIFICATION:

THIS BUDGET CONTAINS THE FOLLOWING PROGRAMS AS A RESULT OF LINE ITEM CONSOLIDATION: OPERATING FORCES IPE, SURFACE IMA, AND MINI/MICROMINATURE ELECTRONIC TEST AND REPAIR EFFECTIVE FY 00 AND OUT.

<u>OPERATING FORCES IPE</u> - Under Operating Forces IPE, 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 - Under Operating Forces IPE, 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. Intermediate Maintenance Activity (IMA) Improvement Program:

Intermediate Maintenance 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) - Under Operating Forces IPE, 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 - IMA Upgrade 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 equipment is procured to satisfy realignment of capabilities at IMAs in support of new systems.

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 36

PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHE	ET DATE:
P-40 COI	NTINUATION FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #
OTHER PROCUREMENT, NAVY	
BA 1: SHIPS SUPPORT EQUIPMENT	OPERATING FORCES IPE BLI: 144500

PEARL HARBOR PILOT PROGRAM

This line item provides funding for the newly established consolidated Pearl Harbor Naval Shipyard/Intermediate Maintenance Facility. Funds will be used for the procurement and execution of Class 2 plant property projects, minor construction projects, and Class 3 & 4 industrial plant equipment projects to maintain, modernize, and improve the PHNSY/IMF infrastructure and industrial base. Funding will allow PHNSY/IMF to perform the mission of repairing, conversion, and modernization of fleet ships and submarines in the most economical, efficient, environmentally sound, and safe manner possible. As this is a pilot program having impact on other fleet depot maintenance activities, it is critical these projects be funded in order to most accurately determine the economic and operational success or failure of the program itself.

MINI/MICROMINIATURE ELECTRONIC TEST AND REPAIR:

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 i 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. 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 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 2M Programs (2M/ATE) together provide a complete electronics subassembly field level maintenance program, avoiding OPTAR costs 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 avoidance's. 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 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.

P-1 SHOPPING LIST

CLASSIFICATION:

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DD Form 2454, JUN 86

	WEAPONS	SYSTE	M COST AN	ALYSIS		Weapon System					DATE:							
		P-	·5			l ·	I= 			FEBRUARY 1999								
	OPRIATION/BUDGET ACTIVITY Procurement, Navy					ID Code	P-1 ITEM	NOMENCL	ATURE/SUE	BHEAD								
	SHIPS SUPPORT EQUIPMENT							OPFRATII	NG FORCE	S IPF BI	1:144500 9	SBHD: 81K	N					
			TOTAL CO	ST IN THO	USANDS C	F DOLLAR	S	OPERATING FORCES IPE BLI:144500 SBHD: 81KN										
COST	ELEMENT OF COST	ID		FY 1998			FY 1999		1	FY 2000								
CODE		Code																
			QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT	TOTAL COST	QTY	UNIT COST	TOTAL COST				
KN100	N43 LOGISTIC SUPPORT/IPE/BFMA																	
	IPE REPLACEMENT BFMA IPE UPGRADE				0 427			0 296			0 491							
KN100	N86 SURFACE SUPPORT																	
	IPE REPLACEMENT BFMA IPE UPGRADE				0 441			0 374			0 474							
	SUBTOTAL IPE/BFMA				868			670			965							
KN200	N43 LOGISTIC SUPPORT																	
	SURFPAC (MCON) IPE REPLACEMENT IMA UPGRADE				0 0 0			0 0 0			0 469 0							
	SUBTOTAL MCON/IPE/IMA				0			0			469							
KN300	PEARL HARBOR PILOT SUPPORT																	
	PEARL HARBOR PILOT				0			0			2,600							
	SUBTOTAL PEARL HARBOR PILOT				0			0			2,600							
KN400	MINI/MICROMINIATURE ELEC TEST & REPAIR																	
	DIAGNOSTIC AND REPAIR TOOLS				0			0			514							
	SUBTOTAL MINI/MICROMINATURE				0			0			514							
CDANE	TOTAL				868			670			4,548							

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

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