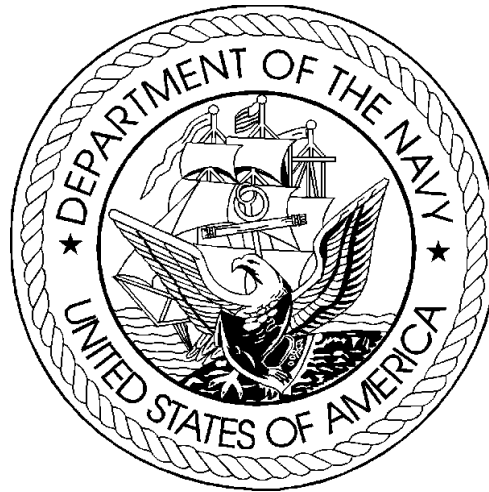


DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2000/2001 BIENNIAL BUDGET
ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 1999

OTHER PROCUREMENT, NAVY
BUDGET ACTIVITY 2

UNCLASSIFIED

Department of the Navy

FY 2000/2001 Procurement Program

Exhibit P-1

APPROPRIATION: 1810N Other Procurement, Navy

DATE: February 1999

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS)	TOA, \$ IN MILLIONS								S E C
			FY 2000 UNIT COST	-----FY 1998----- QUANTITY COST	-----FY 1999----- QUANTITY COST	-----FY 2000----- QUANTITY COST	-----FY 2001----- QUANTITY COST					
BUDGET ACTIVITY 02: Communications and Electronics Equipment												

Ship Radars												
38	2005 AN/SPS-40	A			.5		-		-		- U	
39	2010 AN/SPS-48	A			.2		-		-		- U	
40	2015 AN/SPS-49	A			12.8		1.0		2.2		- U	
41	2031 MK-23 Target Acquisition Syst	A			1.9		-		-		. * U	
42	2040 Radar Support	A			22.3		34.1		-		- U	
43	2043 TISS	A			13.3		11.7		1.8		- U	
Ship Sonars												
44	2130 Surface Sonar Support Equipme	A			1.3		-		-		- U	
45	2136 AN/SQQ-89 Surf ASW Combat Sys	A			17.6		23.3		31.9		27.3 U	
46	2147 SSN Acoustics	A			79.7		144.1		227.0		123.3 U	
47	2176 Undersea Warfare Support Equi	A			-		-		2.6		.8 U	
48	2180 Sonar Support Equipment	A			5.3		8.9		-		- U	
49	2181 Sonar Switches and Transducer	A			8.2		12.7		12.1		12.5 U	
ASW Electronic Equipment												
50	2210 Submarine Acoustic Warfare Sy	A			3.5		7.3		11.2		10.4 U	

* ITEMS UNDER \$50,000

UNCLASSIFIED

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Department of the Navy

FY 2000/2001 Procurement Program

Exhibit P-1

APPROPRIATION: 1810N Other Procurement, Navy

DATE: February 1999

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2000 UNIT COST	TOA, \$ IN MILLIONS								S E C
				-----FY 1998-----		-----FY 1999-----		-----FY 2000-----		-----FY 2001-----		
-----	-----	-----	-----	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	-----
51	2213 SSTD	A			.5		.8		-			- U
52	2215 Acoustic Communications	A			.4		.4		-			- U
53	2225 Fixed Surveillance System	A			13.5		9.5		16.7		34.4	U
54	2237 SURTASS	A			4.6		12.7		7.3		5.6	U
55	2246 ASW Operations Center	A			5.1		2.6		4.4		6.4	U
56	2247 Carrier ASW Module	A			11.6		.4		-		-	U
	Electronic Warfare Equipment											
57	2312 AN/SLQ-32	A			1.9		1.5		1.9			- U
58	2320 AN/WLR-1	A			-		1.8		-			- U
59	2340 Information Warfare Systems	A			3.7		4.3		4.1		4.3	U
60	2343 EW Support Equipment	A			4.1		-		-			- U
61	2346 C-3 Countermeasures	A			6.7		10.0		-			- U
	Reconnaissance Equipment											
62	2360 Shipboard IW Exploit	A			-		40.1		48.0		37.7	U
63	2419 Combat DF	A			5.4		-		-			- U
64	2430 OUTBOARD	A			11.1		-		-			- U
65	2434 Common High BANDWIDTH Data Li	A			42.2		65.1		40.1		23.4	U

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FY 2000/2001 Procurement Program

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DATE: February 1999

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2000 UNIT COST	TOA, \$ IN MILLIONS								S E C
				-----FY 1998-----		-----FY 1999-----		-----FY 2000-----		-----FY 2001-----		
----	-----	-----	-----	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	-----
Submarine Surveillance Equipment												
66	2516 AN/WLQ-4	A			1.4		2.8		-			- U
67	2560 Submarine Support Equipment P	A			6.8		3.9		35.2			27.8 U
Other Ship Electronic Equipment												
68	2605 Navy Tactical Data System	A			24.9		8.0		-			- U
69	2606 Cooperative Engagement Capabi	B			70.9		82.0		60.5			74.4 U
70	2608 GCCS-M Equipment Afloat	A			33.5		38.2		25.1			24.0 U
71	2611 Naval Tactical Command Suppor	A			83.5		73.0		48.2			52.8 U
72	2614 ATDLS	A			14.2		32.9		19.1			16.9 U
73	2622 Minesweeping System Replaceme	A			15.9		17.0		20.8			15.9 U
74	2624 SHALLOW WATER MCM	B			7.5		8.9		18.8			18.9 U
75	2657 NAVSTAR GPS Receivers (Space)	A			4.8		9.5		8.5			10.0 U
76	2666 Armed Forces Radio and TV	A			14.6		16.0		4.2			4.3 U
77	2676 Strategic Platform Support Eq	A			7.2		12.6		21.8			15.6 U
Training Equipment												
78	2760 Other SPAWAR Training Equipme	A			.9		1.0		1.0			1.4 U
79	2762 Other Training Equipment	A			24.5		27.1		44.2			23.2 U

* ITEMS UNDER \$50,000

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FY 2000/2001 Procurement Program

Exhibit P-1

APPROPRIATION: 1810N Other Procurement, Navy

DATE: February 1999

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2000 UNIT COST	TOA, \$ IN MILLIONS								S E C
				-----FY 1998-----		-----FY 1999-----		-----FY 2000-----		-----FY 2001-----		
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
Aviation Electronic Equipment												
80	2815 MATCAL5	A			4.8		12.6		12.4		12.0	U
81	2831 Shipboard Air Traffic Control	B			3.6		8.6		7.5		8.1	U
82	2832 Automatic Carrier Landing Sys	A			11.0		10.1		19.4		18.8	U
83	2840 National Air Space System	B			2.2		8.0		35.1		36.7	U
84	2845 Air Station Support Equipment	A			9.2		6.7		7.3		7.4	U
85	2846 Microwave Landing System	A			5.1		5.2		5.3		5.4	U
86	2847 FACSFAC	A			6.6		4.6		4.5		4.6	U
87	2851 ID Systems	A			6.0		19.0		13.4		18.1	U
88	2856 Surface Identification System	A			-		5.3		.6		-	U
89	2876 TAC A/C MISSION PLANNING SYS(A			15.3		23.5		20.8		15.5	U
Other Shore Electronic Equipment												
90	2804 GCCS-M Equipment Ashore	A			3.3		4.5		9.4		10.3	U
91	2805 OSIS Evolutionary Development	A			.8		.3		-		-	U
92	2900 TADIX-B	A			4.3		12.3		6.2		5.3	U
93	2901 Naval Space Surveillance Syst	A			-		-		6.6		3.2	U
94	2906 GCCS-M Equipment Tactical/Mob	A			36.7		23.9		7.1		6.1	U
95	2914 Common Imagery Ground Surface				-		65.6		41.3		47.8	U

* ITEMS UNDER \$50,000

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Department of the Navy

FY 2000/2001 Procurement Program

Exhibit P-1

APPROPRIATION: 1810N Other Procurement, Navy

DATE: February 1999

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2000 UNIT COST	TOA, \$ IN MILLIONS								S E
				-----FY 1998-----		-----FY 1999-----		-----FY 2000-----		-----FY 2001-----		
-----	-----	-----	-----	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	-----
96	2920 RADIAC	A			6.2		4.0		7.8		8.4	U
97	2940 GPETE	A			7.3		9.6		9.0		9.2	U
98	2960 Integ Combat System Test Faci	A			3.7		6.5		4.4		4.4	U
99	2962 Calibration Standards	A			2.0		1.9		-		-	U
100	2970 EMI Control Instrumentation	A			4.8		7.5		6.6		6.7	U
101	2975 SHORE ELEC ITEMS UNDER \$2 MIL	A			2.4		10.5		-		-	U
102	2980 Items less than \$5 Million				-		-		5.2		6.0	U
Shipboard Communications												
103	3010 Shipboard Tactical Communicat	A			14.3		37.2		21.5		29.3	U
104	3033 Portable Radios	A			1.3		10.9		-		-	U
105	3040 SINGGARS	A			7.1		27.8		-		-	U
106	3050 Ship Communications Automatio	A			28.1		90.3		220.7		173.3	U
107	3055 Ship Comm Items Under \$5 Mill	A			11.4		22.2		20.7		15.8	U
108	3056 Integrated Broadcast System				-		10.2		-		-	U
Submarine Communications												
109	3107 Shore LF/VLF Communications	A			7.5		13.0		36.4		32.0	U
110	3130 Submarine Communication Equip	A			41.5		60.3		85.4		68.0	U
111	3147 Advanced VLF Receiver	B			7.4		17.1		-		-	U

* ITEMS UNDER \$50,000

UNCLASSIFIED

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Department of the Navy

FY 2000/2001 Procurement Program

Exhibit P-1

APPROPRIATION: 1810N Other Procurement, Navy

DATE: February 1999

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2000 UNIT COST	TOA, \$ IN MILLIONS								S E C
				-----FY 1998-----		-----FY 1999-----		-----FY 2000-----		-----FY 2001-----		
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
Satellite Communications												
112	3210 SATCOM Ship Terminals (Space)	A			117.4		151.6		237.7		184.0	U
113	3220 SATCOM Shore Terminals (Space)	A			5.7		70.7		65.7		37.8	U
Shore Communications												
114	3302 JCS Communications Equipment	A			2.5		3.3		3.7		3.5	U
115	3306 NSIPS	A			20.0		7.7		5.0		2.7	U
116	3311 JEDMICS	A			4.9		7.0		-		-	U
117	3350 GCCS Equipment	A			1.8		2.9		-		-	U
118	3368 Naval Shore Communications	A			99.6		55.3		114.3		109.2	U
Cryptographic Equipment												
119	3415 Info Systems Security Program	A			25.5		45.8		64.1		52.3	U
Cryptologic Equipment												
120	3501 Cryptologic Communications Eq	A			6.8		21.1		21.1		17.9	U
Drug Interdiction Support												
121	3820 Other Drug Interdiction Suppo	A			16.0		-		-		-	U
TOTAL Communications and Electronics Equipment					1,141.8		1,629.9		1,845.2		1,531.1	

* ITEMS UNDER \$50,000

UNCLASSIFIED

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

Budget Plan (amounts for PROCUREMENT
actions programed)

Identification code	17-1810-0-1-051	1998 actual	1999 est.	2000 est.	2001 est.

Program by activities:					
Direct program:					
00.0101	Ships support equipment	727,750	954,401	858,709	703,509
00.0201	Communications and electronics equipment	1,095,702	1,629,901	1,845,227	1,531,094
00.0301	Aviation support equipment	204,148	243,679	216,237	215,043
00.0401	Ordnance support equipment	520,423	715,972	629,418	668,357
00.0501	Civil engineering support equipment	48,370	54,856	67,144	94,062
00.0601	Supply support equipment	54,583	89,537	139,628	180,239
00.0701	Personnel and command support equipment	136,986	74,063	67,598	67,570
00.0801	Spares and repair parts	219,654	246,506	276,130	180,279
00.9101 Total direct program		3,007,616	4,008,915	4,100,091	3,640,153
01.0101 Reimbursable program		49,428	42,000	42,000	42,000
10.0001 Total		3,057,044	4,050,915	4,142,091	3,682,153

Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-1,417	-42,000	-42,000	-42,000
14.0001	Non-Federal sources(-)	-48,011			
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	-7,700	-28,500		
21.4009	Reprogramming from/to prior year budget plans	-20,391			
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				
24.4003	Available to finance subsequent year budget plans	28,500			
25.0001	Unobligated balance expiring	9,214			
39.0001 Budget authority		3,028,416	3,980,415	4,100,091	3,640,153

Budget authority:					
40.0001	Appropriation	3,136,505	4,005,415	4,100,091	3,640,153
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		
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.

Program 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	612,449	611,088	664,897
00.0501	Civil engineering support equipment	46,899	46,682	62,833	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		3,003,107	3,554,547	3,955,024	3,727,582
01.0101 Reimbursable program		46,543	47,000	42,526	42,000
10.0001 Total		3,049,650	3,601,547	3,997,550	3,769,582

Financing:					
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	Reprogramming 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		3,028,416	3,980,415	4,100,091	3,640,153

Budget authority:					
40.0001	Appropriation	3,136,505	4,005,415	4,100,091	3,640,153
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		
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 FY 1999 Budget	Financing Per FY 2000 Budget	Increase (+) or 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. Program Requirements. 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. SHIP SUPPORT EQUIPMENT (+\$2,339) - Net increase reflecting (-\$8,300) FY 1998 Congressional rescissions and internal reprogrammings (+\$10,639) including (+\$4,606) for Counter Drug Interdiction.

Explanation by Budget Activity (Continued)

(\$ In Thousands)

2. COMMUNICATIONS & ELECTRONIC EQUIPMENT (-\$23,820) - Net decrease reflecting (-\$2,300) FY 1998 Congressional rescission, decrease for economic assumptions (-\$7295), offsets for higher priority Navy programs, (-\$7829), and internal reprogramming actions of (-\$6396).
3. AVIATION SUPPORT EQUIPMENT (+\$15,479) - Net increase reflecting (+\$17,779) Congressional adjustments, and FY 1998 rescissions (-\$2,300).
4. ORDNANCE SUPPORT EQUIPMENT (+\$2,514) - Net increase reflecting FY 1998 rescissions (-\$15,000), and Congressional adjustments (+\$18,514).
5. CIVIL ENGINEERING SUPPORT (+\$5,566) - Net increase reflecting Congressional adjustments (+\$4,500), and internal realignments (+\$1,566).
6. SUPPLY SUPPORT EQUIPMENT (+\$2,691) - Net increase reflecting Congressional adjustments (-\$1,279), internal realignments (-\$330), and adjustment for Automated Teller Machines at Sea (+\$4,300).
7. PERSONNEL & COMMAND SUPPORT (+\$11,104) - Net increase reflecting Congressional adjustments (+\$8,000), economic assumptions (-\$932), and increases for high priority Navy programs including paperless acquisition (+\$4,036).
8. SPARES & REPAIR PARTS (+\$3,679) - 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 FY 1999 Budget	Financing Per FY 2000 Budget	Increase (+) or 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. Program Requirements. 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 Requirements per FY 1999 Budget	Total Program Requirements per FY 2000 Budget	Increase (+) or 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. Communications and Electronics Equipment (+\$99,099) – 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. Aviation Support Equipment (-\$1,984) - Changes reflect FY 1998 Congressional reductions (-\$9,551), Congressional increases(+\$18,000), and DoN offsets for higher priority programs (-\$6,465).
4. Ordnance Support Equipment (+\$41,269) - Changes reflect FY 1998 Congressional reductions (-\$7,960), Congressional increases(+\$47,800), and DoN internal realignments (+\$1,429).
5. Civil Engineering Support Equipment (-\$15,046) - Changes reflect FY 1998 Congressional reductions (-\$7,260), and DoN offsets for higher priority programs (-\$7,786) .
6. Supply Support Equipment (-\$19,368) - Changes reflect FY 1998 Congressional reductions (-\$27,417), and DoN realignments for Automated Teller Machines at Sea (+\$8,049).
7. Personnel and Command Support (+\$8,043) - 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).

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2 COMMUNICATION & ELECT. EQ.							P-1 ITEM NOMENCLATURE/LINE ITEM # AN/SPS-40 / 200500					
Program Element for Code B Items:							OTHER RELATED PROGRAM 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	N/A	A									N/A	0
EQUIPMENT COST (In Millions)	N/A	A	\$0.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$0.5
SPARES COST (In Millions)	N/A	A	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$0.0
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>THE AN/SPS-40 IMPROVEMENT PROGRAM IS DESIGNED TO CORRECT PROBLEM AREAS AND THUS IMPROVE THE SAFETY AND RELIABILITY OF THE AN/SPS-40 SERIES RADARS.</p> <p>SOLID STATE TRANSMITTER (SSTx) - THE AN/SPS-40E RADAR SSTx UPGRADE REPLACES THE EXISTING AN/SPS-40B/C/D RADAR. THE REMAINING LPD CLASS SHIPS WILL BE OUTFITTED WITH THE LATEST FIELD CHANGES TO THE AN/SPS-40E RADAR. EXCESSIVE FLEET-REPORTED CASREPS AND INCREASED SUPPORT COSTS DEMANDED THAT THIS EFFORT BE INITIATED.</p> <p>EQUIPMENT INSTALLATION - FUNDING IS FOR THE INSTALLATION OF EQUIPMENT, INCLUDING FLEET MODERNIZATION PROGRAM INSTALLATIONS, INSTALLATION OF TRAINING EQUIPMENT AND INSTALLATION OF EQUIPMENT IN OTHER SHORE FACILITIES.</p>												

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2 COMMUNICATION & ELECT. EQ.							P-1 ITEM NOMENCLATURE/LINE ITEM # AN/SPS-48 / 201000					
Program Element for Code B Items:							OTHER RELATED PROGRAM 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	N/A	A									N/A	0
EQUIPMENT COST (In Millions)	N/A	A	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$0.2
SPARES COST (In Millions)	N/A	A	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$0.0
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>THE AN/SPS-48 RADAR IS A THREE-COORDINATE AIR SEARCH RADAR WHOSE PRIMARY FUNCTION IS TO PROVIDE TARGET POSITION DATA TO A WEAPON SYSTEM. COLLATERAL FUNCTIONS INCLUDE AIR TRAFFIC AND INTERCEPT CONTROL. DEVELOPED AS PART OF THE NEW THREAT UPGRADE (NTU) PROGRAM, IT WAS DESIGNED TO MAKE IT MORE DIFFICULT TO JAM, PROVIDE HIGHER ELEVATION ANGLE COVERAGE TO MORE ACCURATELY TRACK NEW THREAT MISSILES, PROVIDE FREQUENCY AND PATTERN FLEXIBILITY TO AVOID SPOT JAMMING WHILE DETECTING TARGETS THROUGH HEAVY CLUTTER, AND PROVIDE A SIGNIFICANT INCREASE IN OVERALL AVAILABILITY BY IMPROVING RELIABILITY AND MAINTAINABILITY.</p> <p>EQUIPMENT INSTALLATION - FUNDING IS FOR THE INSTALLATION OF EQUIPMENT, INCLUDING FLEET MODERNIZATION PROGRAM INSTALLATIONS, INSTALLATION OF TRAINING EQUIPMENT AND INSTALLATION OF EQUIPMENT IN OTHER SHORE FACILITIES.</p>												

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-2 COMMUNICATION & ELECT. EQ.							P-1 ITEM NOMENCLATURE/LINE ITEM # AN/SPS-49 / 201500					
Program Element for Code B Items:							OTHER RELATED PROGRAM 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	N/A	A	8	0	0	0	0	0	0	0	N/A	8
EQUIPMENT COST (In Millions)	N/A	A	\$12.8	\$1.0	\$2.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$16.0
SPARES COST (In Millions)	N/A	A	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$0.6
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>THE AN/SPS-49(V) IS A NARROW BEAM, VERY LONG RANGE, TWO DIMENSIONAL AIR SEARCH RADAR WHICH WAS DEVELOPED IN RESPONSE TO SOR-17-07 AND APPROVED FOR SERVICE USE IN JULY 1977. IT PROVIDES FREQUENCY DIVERSITY IN A PREVIOUSLY UNUSED FREQUENCY BAND, REDUCES ELECTRONIC INTERFERENCE BETWEEN SHIPS AND DIMINISHES THE EFFECTIVENESS OF JAMMERS BY FORCING THEM TO SPREAD THEIR JAMMING ENERGY OVER A WIDER RANGE OF FREQUENCIES.</p> <p>THE AN/SPS-49A(V)1 MEDIUM PRF UPGRADE (MPU) MODIFICATION KIT MODIFIES THE TRANSMIT WAVEFORM AND PROVIDES STATE-OF-THE-ART SIGNAL PROCESSING TO THE AN/SPS-49(V)5 RADARS. THE RESULT IS A SHARPLY IMPROVED CAPABILITY TO DETECT LOW ALTITUDE, LOW OBSERVABLE, HIGH SPEED TARGETS; A 50% OR BETTER REDUCTION IN THE TIME FROM INITIAL DETECTION TO FIRM TRACK AND A SIGNIFICANTLY IMPROVED CAPABILITY TO DETECT THOSE TARGETS IN HEAVY CLUTTER SUCH AS THAT IN THE PERSIAN GULF AND OTHER LITTORAL ENVIRONMENTS. THE AN/SPS-49(V) RADAR WITH MPU HAS BEEN INTEGRATED INTO THE DESIGN OF THE COOPERATIVE ENGAGEMENT CAPABILITY AND SHIP SELF DEFENSE SYSTEMS. IT IS PLANNED TO INSTALL THE AN/SPS-49A(V)1 VARIANT ON LHD, LSD AND FFG CLASS SHIPS AND CARRIERS (CV/CVN). THE TOTAL OBJECTIVE IS TO PROCURE 38 (INCLUDING 5 SCN) MPU MODIFICATION KITS (34 SHIPS, 2 TRAINERS, 1 PRODUCTION TEST BED AND 1 SDTS).</p>												

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY / BA 2: Communication & Electronics								P-1 ITEM NOMENCLATURE/LINE ITEM # MK 23 TARGET ACQUISITION SYSTEM (TAS) / 203100							
Program Element for Code B Items:								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	N/A										N/A	0			
EQUIPMENT COST (In Millions)	N/A		\$1.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	0.0			
SPARES COST (In Millions)	N/A		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	0.0			
PROGRAM DESCRIPTION/JUSTIFICATION:															
<p>MK 23 TAS RADAR: A rapid reaction, fully automatic Electronic Counter Counter Measure (ECCM) capable radar system developed as the Target Acquisition System for the Self Defense Surface Missile System (SDSMS) in response to the SQR-17-48. The MK23 TAS functions as combat direction system for CV/CVN, AOE, LHD, LHA and DD 963 Class ships missile battery for the NATO SEASPARROW or Rolling Air Frame Missile (RAM) Weapon System. The MK 23 TAS integrates NATO SEASPARROW and Weapon Systems with high-data-rate, medium-range air search radar and provides weapon system control for AAW self defense.</p> <p>The MK23 TAS is installed as follows:</p> <table border="0"> <tr> <td style="vertical-align: top;"> <p><u>NATO SEASPARROW (AN/SWY-1)</u> 30 - DD 963 Class Destroyer 12 - CV/CVN Aircraft Carriers 7 - LHD Amphibious Assault Ship 8 - AOE Fast Combat Support Ship 1 - EX Self Defense Test Ship</p> </td> <td style="vertical-align: top; padding-left: 40px;"> <p><u>RAM (AN/SWY-2)</u> 5 - LHA Amphibious Assault</p> </td> <td style="vertical-align: top; padding-left: 40px;"> <p><u>Other (Training)</u> 1- LBTS (AERP) 1- SWEF, NSWC/PHD 2- Training Fac, Dam Neck</p> </td> </tr> </table> <p>FY98 funding completed implementation of safety recommendations that require TAS Operational Computer Program (OCP) design changes. Funding for FY99 and out-years is included in the SSDS line (BA-4, P-1 #151).</p>													<p><u>NATO SEASPARROW (AN/SWY-1)</u> 30 - DD 963 Class Destroyer 12 - CV/CVN Aircraft Carriers 7 - LHD Amphibious Assault Ship 8 - AOE Fast Combat Support Ship 1 - EX Self Defense Test Ship</p>	<p><u>RAM (AN/SWY-2)</u> 5 - LHA Amphibious Assault</p>	<p><u>Other (Training)</u> 1- LBTS (AERP) 1- SWEF, NSWC/PHD 2- Training Fac, Dam Neck</p>
<p><u>NATO SEASPARROW (AN/SWY-1)</u> 30 - DD 963 Class Destroyer 12 - CV/CVN Aircraft Carriers 7 - LHD Amphibious Assault Ship 8 - AOE Fast Combat Support Ship 1 - EX Self Defense Test Ship</p>	<p><u>RAM (AN/SWY-2)</u> 5 - LHA Amphibious Assault</p>	<p><u>Other (Training)</u> 1- LBTS (AERP) 1- SWEF, NSWC/PHD 2- Training Fac, Dam Neck</p>													

P-1 SHOPPING LIST

CLASSIFICATION:

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 1999		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE/LINE ITEM # RADAR SUPPORT (2040)					
Program Element for Code B Items: N/A							OTHER RELATED PROGRAM 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			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST (In Millions)			\$22.3	\$34.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$56.4
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 - Line Item 24.												

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: FEB 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-2 COMMUNICATION & ELECT. EQ.								P-1 ITEM NOMENCLATURE/LINE ITEM # THERMAL IMAGING SENSOR SYSTEM (TISS) 2043					
Program Element for Code B Items:								OTHER RELATED PROGRAM 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)	*	A		\$13.3	\$11.7	\$1.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	27
SPARES COST (In Millions)	N/A	A		\$0.2	\$0.3	\$0.3	\$0.3	\$0.1	\$0.1	\$0.1	\$0.1	N/A	\$0.0
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>Description: The AN/SAY-1 Thermal Imaging Sensor System is a lightweight, state-of-the-art imaging/laser system manufactured by Boeing Company, formerly McDonnell Douglas Aircraft, Huntington Beach, California. The units of AN/SAY-1 TISS will be used as a rotatable asset and will be crossdecked from ship-to-ship. Three (3) will be installed at the Navy Training Center, Great Lakes, Ill, AEGIS Combat Systems Center, Wallops Island, Va., and the Surface Warfare Evaluation Facility, Port Hueneme, Calif.</p> <p>The AN/SAY-1 TISS systems will be installed by Tiger Teams prior to ship deployment. The AN/SAY-1 is a Non Developmental Item (NDI) procurement which was developed in FY 95 RDT&E,N Program Element 0604755N, Project U0665 Infrared Search and Track (IRST) at a contractual cost of \$3.0M. The date of limited approval for service use was approved in August 1996 and full rate production was approved 22 April 1997.</p> <p>UT001--The FY 1999 program consists of procurement of installation for ten (10) AN/SAY-1 TISS systems.</p> <p>Consulting Services: Provide expertise to Engineering Technical Support Services on equipment, including consultation and recommendation on production analysis of problems with equipment and interfaces. Perform technical reviews and suitability study of current systems.</p>													

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: FEB 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-2 COMMUNICATION & ELECT. EQ.						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAT THERMAL IMAGING SENSOR SYSTEM (TISS)--S.H.22UT							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
	N86 SPONSOR													
	EQUIPMENT													
UT001	Thermal Imaging Sensor System (TISS)	A	12	618	7410	10	620	6204						
UT007	Interactive CourseWare (ICW)	A			638									
UT830	In-house Production Support	A			1,728			1,593						
UT830	Contractor Production Support	A			727			1,404						
UT900	CSS Consulting Services	A			398			359						
	INSTALL													
UT5IN	Installation of Eqmt.-- FMP	A	12	200	2,395	12	179	2,148	7	175	1224			
UT6IN	Installation of Eqmt-- NON FMP	A							3	177	531			
TOTAL					13,296			11,708			1,755			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD	
Other Procurement, Navy/BA-2 COMMUNICATION & ELECT. EQ.					THERMAL IMAGING SENSOR SYSTEM (TISS) 2043				22UT	
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
<i>FISCAL YEAR (98)</i> UT001 TISS	12	617.5	NAVSEA	FEB 98	C/FP--OPTION	BOEING CO. HUNTINGTON BEACH, CA	DEC 97	DEC 98	YES	
<i>FISCAL YEAR (99)</i> UT001 TISS	10	620.4	NAVSEA	SEPT 98	C/FP- NEW AWARD	TBD	MAR 99	MAR-99	YES	
D. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: THERMAL IMAGING SENSOR SYSTEM (TISS) ; TYPE MODIFICATION: N/A MODIFICATION TITLE: N/A

DESCRIPTION/JUSTIFICATION:

The TISS is a lightweight, state-of-the-art imaging/laser system manufactured by the Boeing Company, formerly McDonnell Douglas Aerospace, Huntington Beach, California. TISS will be used as a rotatable asset and will be crossdecked from ship to ship. 3 units will be installed at two training sites and at the Surface Warfare Evaluation Facility, Port Hueneme, Calif.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>	1	6.0																					1	6.0	
<i>PROCUREMENT</i>																									
INSTALLATION KITS																							0	0.0	
INSTALLATION KITS NONRECURRING																							0	0.0	
EQUIPMENT	12	6.48	0	0.0	12	7.4	7	4.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	31	18.2
EQUIPMENT NONRECURRING																							0	0.0	
ENGINEERING CHANGE ORDERS																							0	0.0	
DATA																							0	0.0	
TRAINING EQUIPMENT							3	1.9															3	1.9	
SUPPORT EQUIPMENT																							0	0.0	
OTHER		8.5				3.50		3.4															0	15.4	
OTHER																							0	0.0	
OTHER																							0	0.0	
INTERIM CONTRACTOR SUPPORT																							0	0.0	
PROCUREMENT COST	12	15.0	0	0.0	12	10.9	10	9.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	34.0	35.4
INSTALL COST		0.9				2.4		2.1		1.8		0.0		0.0		0.0		0.0		0.0		0.0	0	7.2	
TOTAL PROGRAM COST	12	15.9	0	0.0	12	13.3	10	11.7	0	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	34.0	42.6	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: THERMAL IMAGING SENSOR SYSTEM (TISS) 2043 MODIFICATION TITLE: _____

INSTALLATION INFORMATION: ALTERATION INSTALLATION TEAM (AIT)

METHOD OF IMPLEMENTATION: _____

ADMINISTRATIVE LEADTIME: VAR Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: MAR 99

FY 2000: N/A

FY 2001: N/A

DELIVERY DATE: FY 1999: MAR 00

FY 2000: N/A

FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		Later		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS		0.85			12	2.4																	12	2.4
FY 1997 EQUIPMENT																								0.0
FY 1998 EQUIPMENT							12	2.1															12	2.1
FY 1999 EQUIPMENT *									10	1.8													10	1.8
FY 2000 EQUIPMENT											0	0.0											0	0.0
FY 2001 EQUIPMENT													0	0.0									0	0.0
FY 2002 EQUIPMENT															0	0.0							0	0.0
FY 2003 EQUIPMENT																	0	0.0					0	0.0
FY 2004 EQUIPMENT																			0	0.0			0	0.0
FY 2005 EQUIPMENT																					0	0.0	0	0.0
TO COMPLETE																					0	0.0	0	0.0

* includes three shore based units

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	12	1	3	4	4	0	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Out	12	1	3	4	4	0	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34

P-3A

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2, COMMUNICATIONS AND ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/LINE ITEM # SURFACE SONAR SUPPORT EQUIPMENT C2WA BUDGET LINE ITEM - 213000 & 213005					
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)			\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0		\$1.3
SPARES COST (In Millions)													0
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>1. AN/SQS-53A EC-16 is a leading edge effort which implements streamlined acquisition management and NDI/COTS digital technology in order to recover performance lost through degradation due to misalignment of the system's analog components. EC-16 improves critical system circuits stability; enhances system maintenance and Operational Availability (Ao); and incorporates shallow water/object avoidance, active interference monitor, improved doppler resolution, ship's acoustic velocimeter and integrated sonar supervisor subsystem. One pre-production system was installed on the USS SCOTT (DDG 995) for testing and validation. The test results exceeded the expectations of everyone involved and led to early approval for production. The original number of EC-16 installations was 14 (CG 47-55 (9), DDG 993 Class (4) and one Trainer). However, due to the recent cancellation of EC-16 installation on CG 47, and CG 49-53 and the decommissioning of the DDG 993 Kidd Class, the inventory objective has been changed to five systems. Four units are already in use, one on CG 48, one on DDG 995, one at NUWC Newport and one at the training center. One of the ten units bought with FY96 funding will be used for shock testing. The remaining 9 assets will be converted to EC-84s and installed using funds from the C2DB (AN/SQQ-89 Surface ASW Combat Systems) subhead. All procured systems are being utilized and both the 82WA and the C2DB budgets have been adjusted to accommodate this new plan. All savings in the outyears have been reprogrammed by the sponsor as part of PR99.</p> <p>2. PRODUCTION SUPPORT, (WA830-WA983). Provides essential system engineering, quality assurance, acceptance test and evaluation, technical data, technical documentation and integrated logistic management support for the AN/SQS-53A EC-16 program.</p> <p>3. INSTALLATION OF EQUIPMENT. FMP INSTALLATION (WA5IN) funding is for the installation of equipment by AIT (Alteration Installation Team) on CG 47-55. Installation began in FY 1995 and will complete in FY 98.</p> <p>- Installing Agents for all installations are AITs, teams of experts from various field activities, varying with each Engineering Change, and contingent on ship's homeport and availability.</p>													

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD SURFACE SONAR SUPPORT EQUIPMENT - C2WA BUDGET LINE ITEM - 213000 & 213005								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
WA031	AN/SQS-53A EC-16	A			0			0			0			
WA830	PRODUCTION ENGINEERING	A			314			0			0			
WA840	QUALITY ASSURANCE	A			111			0			0			
WA850	PRODUCT IMPROVEMENT	A			130			0			0			
WA860	ACCEPTANCE TEST & EVALUATION	A			262			0			0			
WA900	CONSULTING SERVICE	A			0			0			0			
WA920	TECHNICAL DATA	A			93			0			0			
WA925	TECHNICAL DOCUMENTATION	A			140			0			0			
WA970	INTEGRATED LOGISTICS SUPPORT	A			155			0			0			
WA983	CETS	A			133			0			0			
TOTAL							1,338			0			0	

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1999
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APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA: 02 Communications & Electronics Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # AN/SQQ-89(V) Surface ASW Combat System/213600/5
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Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS Surface Sonar Support Equipment/213000/5
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	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)	A		\$17.6	\$23.3	\$31.9	\$27.3	\$29.5	\$37.6	\$62.1	\$64.3	TBD	TBD
SPARES COST (In Millions)			\$4.7	\$6.0	\$4.7	\$4.2	\$6.0	\$5.0	\$4.7	\$3.9	TBD	TBD

PROGRAM DESCRIPTION/JUSTIFICATION:

The AN/SQQ-89 is a fully integrated surface ship ASW combat system with capability to detect, classify, localize and attack submarine targets. AN/SQQ-89(V) is the ASW Combat System for new construction DDG51 class ships and backfitted on CG47, DD963, and DDG51 class ships. The AN/SQQ-89(V) configuration will vary based upon ship class, system production configuration, and pre-backfit configuration of each ship. This budget supports modernization of existing AN/SQQ-89(V) systems.

The AN/SQQ-89(V)12 upgrade (EC-84) replaces the analog electronics of the SQS-53B Sonar with digital COTS processing and modern displays.

The Torpedo Alertment upgrade focuses on providing a commercially-based Open System Architecture into which we insert torpedo alertment (TRAFS - Torpedo Recognition and Alertment Functional Segment), integrated tactical picture capabilities (TDSS/CADRT - Tactical Decision Support Subsystem/Computer Aided Dead Reckoning Tracer), AN/UYQ-25B (SIMAS II performance prediction system), and System Level Recorder.

The Shallow Water (Block II) upgrade inserts a vastly improved shallow water active classification capability (ETC - Echo Tracker Classifier) and provides improved on-board training.

The Fire Control/TDSS EC's lines include the AEGIS Tactical Executive System (ATES) upgrade for CGs 65->72 and DDGs 51->53, and upgrade of previously procured TDSS systems to the CADRT configuration.

The SSAAC (Surface Ship Acoustic Analysis Center) upgrade improves ASW data analysis and display capabilities at the Norfolk, VA and San Diego, CA centers.

FMP Installation: Funding is for the installation of equipment by "K" ALTs through shipyards and/or Alteration Installation Teams (AIT).

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						AN/SQQ-89(V) Surface ASW Combat System/C2DB								
BA: 02 Communications & Electronics Equipment														
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
	<u>N863</u>													
DB100	AN/UYQ-25B	A							4	21	84			
DB100	Fire Control/TDSS EC's	A									1,600			
DB006	INSTALLATION FOR DB100				2,950			706			155			
	<u>N863</u>													
DB300	AN/SQQ-89(V)12	A			1,425			1,444			1,002			
DB300	AN/UYQ-25B	A	3	21	63	4	21	84	1	21	21			
DB300	System Level Recorder	A	1	285	285	2	285	570	2	285	570			
DB300	TRAFS	A				2	300	600	4	390	1,560			
DB300	TDSS/CADRT	A							6	310	1,860			
DB300	Fire Control/TDSS EC's	A						1,449			3,869			
DB006	INSTALLATION FOR DB300				5,370			2,654			4,222			
	<u>N863</u>													
DB400	AN/UYQ-25B	A				1	21	21	1	21	21			
DB400	System Level Recorder	A												
DB400	TRAFS	A				11	300	3,300	2	390	780			
DB400	TDSS/CADRT	A				4	310	1,240	2	310	620			
DB400	BLK II Upgrade (ETC)	A												
DB400	Fire Control/TDSS EC's	A						746			3,637			
DB006	INSTALLATION FOR DB400				803			1,478			3,621			
	<u>N863</u>													
DB600	TDSS/CADRT	A				1	310	310						
DB600	System Level Recorder	A							1	285	285			
DB600	Fire Control/TDSS EC's	A								291	291			
DB700	TDSS/CADRT	A				1	310	310						
DB700	TRAFS	A							1	390	390			
DB700	System Level Recorder	A												
DB700	SSAAC Upgrade	A						700			450			
DB830	Production Engineering				3,207			3,208			2,704			
	<u>N863</u>													
DB900	Consulting Services				2,477			2,308			2,071			
	<u>N863</u>													
DB984	Systems Technical Support				1,046			2,210			2,101			
TOTAL					17,626			23,338			31,914			

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P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA: 02 Communications & Electronics Equipment					C. P-1 ITEM NOMENCLATURE AN/SQQ-89(V) Surface ASW Combat System				February 1999 SUBHEAD C2DB		
									Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)
FISCAL YEAR (98)											
DB300/AN/UYQ-25B	3	21	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 98	Nov 98	Yes		
DB300/System Level Rcdr	1	285	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 98	Jan 99	Yes		
FISCAL YEAR (99)											
DB300/AN/UYQ-25B	4	21	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 99	Nov 99	Yes		
DB300/System Level Rcdr	2	285	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 99	Jan 00	Yes		
DB300/TRAFS	2	300	NUWC, NEWPORT	May-94	Option FP	Northrup Grumman, MD	Feb 99	Jan 00	Yes		
DB400/AN/UYQ-25B	1	21	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 99	Nov 99	Yes		
DB400/TRAFS	11	300	NUWC, NEWPORT	May-94	Option FP	Northrup Grumman, MD	Feb 99	Jan 00	Yes		
DB400/TDSS/CADRT	4	310	NAVSEA	Aug-95	FFP	Lockheed, Syracuse	Feb 99	Jan 00	Yes		
DB600/TDSS/CADRT	1	310	NAVSEA	Aug-95	FFP	Lockheed, Syracuse	Feb 99	Jan 00	Yes		
DB700/TDSS/CADRT	1	310	NAVSEA	Aug-95	FFP	Lockheed, Syracuse	Feb 99	Jan 00	Yes		
FISCAL YEAR (00)											
DB100/AN/UYQ-25B	4	21	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 00	Jan 01	Yes		
DB300/AN/UYQ-25B	1	21	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 00	Jan 01	Yes		
DB300/System Level Rcdr	2	285	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 00	Jan 01	Yes		
DB300/TRAFS	4	390	NAVSEA	TBD	FFP	TBD	Feb 00	Jan 01	Yes		
DB300/TDSS/CADRT	6	310	NAVSEA	Aug-95	FFP	Lockheed, Syracuse	Feb 00	Jan 01	Yes		
DB400/AN/UYQ-25B	1	21	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 00	Jan 01	Yes		
DB400/TRAFS	2	390	NAVSEA	TBD	FFP	TBD	Feb 00	Jan 01	Yes		
DB400/TDSS/CADRT	2	310	NAVSEA	Aug-95	FFP	Lockheed, Syracuse	Feb 00	Jan 01	Yes		
DB600/System Level Rcdr	1	285	NAVSEA	Aug-95	Option FP	Lockheed, Syracuse	Feb 00	Jan 01	Yes		
DB700/TRAFS	1	390	NAVSEA	TBD	FFP	TBD	Feb 00	Jan 01	Yes		
D. REMARKS											

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: DD 963 Class Ships TYPE MODIFICATION: _____ MODIFICATION TITLE: AN/SQQ-89 Surface ASW Combat Sys

DESCRIPTION/JUSTIFICATION:

Installation of AN/SQQ-89 ASW Combat System modifications of Analog to Digital components, and upgrades to provide improved torpedo alertment and shallow water performance on previously installed systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

FINANCIAL PLAN (IN MILLIONS)	FY 1998 & Prior		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	\$	
<u>RDT&E</u>																					0.0
<u>PROCUREMENT</u>																					
DD963 EQUIPMENT		30		231.8																30	231.8
AN/UYQ-25B		20		1.5		4		0.1												24	1.6
System Level Recorder		10		5.0																10	5.0
TRAFS		10		3.0																10	3.0
TDSS/CADRT		10		5.0																10	5.0
Fire Control/TDSS EC's							1.6			0.3		0.3									2.2
ENGINEERING SUPPORT			173.4			0.3		0.4		0.2		0.2		0.4		0.3		0.2			175.4
OTHER																				0	0.0
OTHER																				0	0.0
OTHER																				0	0.0
INTERIM CONTRACTOR SUPPORT																				0	0.0
INSTALL COST			99.2			0.7		0.2		1.3		1.0		0.3		0.2		0.0		0	102.9
TOTAL PROCUREMENT			518.9			1.0		2.3		1.5		1.5		1.0		0.5		0.2		0	526.9

P-1 SHOPPING LIST

CLASSIFICATION:

P3A (Continued)		INDIVIDUAL MODIFICATION (Continued)																			
MODELS OF SYSTEMS AFFECTED: <u>DD 963 Class Ships</u>				MODIFICATION TITLE: <u>AN/SQQ-89(V) Surface ASW Combat System Components</u>																	
INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION: <u>Shipyards Installations and AITs</u>																					
ADMINISTRATIVE LEADTIME: <u>6 Months</u>				PRODUCTION LEADTIME: <u>Various for block upgrade components</u>																	
CONTRACT DATES: FY 1999: _____		FY 2000: <u>Feb 00</u>		FY 2001: _____																	
DELIVERY DATE: FY 1999: _____		FY 2000: <u>Jan 01</u>		FY 2001: _____																	
(\$ in Millions)																					
Cost:	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
FY 98 & Prior																					
AN/SQQ-89(V)	30	92.8																		30	92.8
BLK I Upgrade	7	3.9																		7	3.9
AN/UYQ-25B	11	1.1	2	0.2																13	1.3
System Level Recorder	1	0.1	2	0.2																3	0.3
TRAFS			3	0.1																3	0.1
TDSS/CADRT			3	0.1																3	0.1
FLIR Mods	26	0.8																		26	0.8
FY99 Eqpt																					
FY00 Eqpt																					
AN/UYQ-25B							4	0.4												4	0.4
Fire Control/TDSS EC's								0.7													0.7
FY01 Eqpt																					
Fire Control/TDSS EC's										0.8											0.8
FY02 Eqpt																					
Fire Control/TDSS EC's												0.2									0.2
FY03 Eqpt																					
Fire Control/TDSS EC's														0.2							0.2
DSA		0.5		0.1		0.2		0.2		0.2		0.1		0.0		0.0					1.3
TO COMPLETE																					

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	30	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	30
Out	29	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CG 47 Class Ships TYPE MODIFICATION: _____ MODIFICATION TITLE: AN/SQQ-89 Surface ASW Combat Sys

DESCRIPTION/JUSTIFICATION:

Installation of AN/SQQ-89 ASW Combat System block upgrades and modifications of Analog to Digital components to provide improved torpedo alertment and shallow water performance on previously installed systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

	FY 1998 & Prior		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	\$
FINANCIAL PLAN (IN MILLIONS)																				
<i>RDT&E</i>																				
<i>PROCUREMENT</i>																				
CG 47 Equipment																				
	AN/SQQ-89(V)12 (EC-84)	13	14.6		1.4		1.0		0.3										13	17.3
	MK116 Mod 7 Upgrade	6	5.3																6	5.3
	AN/UYQ-25B	11	0.3	4	0.1	1	0.1												16	0.5
	System Level Recorder	2	0.6	2	0.6	2	0.6	3	0.9	4	1.2	2	0.6						15	4.5
	TRAFS			2	0.6	4	1.5	3	1.2	4	1.6	2	0.8						15	5.7
	TDSS/CADRT					6	1.8	3	0.9	4	1.2	2	0.6						15	4.5
	BLK II Upgrade (ETC)								4	3.0	2	1.5							6	4.5
	Fire Control/TDSS EC's				1.5		3.9		0.8		0.7								0	6.9
ENGINEERING SUPPORT																				
			19.3		4.8		2.6		2.5		1.6		1.6		1.0		0.0		0	33.4
OTHER																				
																			0	0.0
OTHER																				
																			0	0.0
OTHER																				
																			0	0.0
INTERIM CONTRACTOR SUPPORT																				
																			0	0.0
INSTALL COST																				
			9.8		2.7		4.2		5.0		1.7		2.2		0.5		0.0		0	26.1
TOTAL PROCUREMENT																				
			49.9		11.7		15.7		11.6		11.0		7.3		1.5		0.0		0	108.7

P-1 SHOPPING LIST

CLASSIFICATION:

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

MODELS OF SYSTEMS AFFECTED: CG 47 Class Ships MODIFICATION TITLE: AN/SQQ-89(V) Surface ASW Combat System Components

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: Shipyard Installations and AITs

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: Various for block upgrade components

CONTRACT DATES: FY 1999: Feb 99 FY 2000: Feb 00 FY 2001: _____

DELIVERY DATE: FY 1999: Jan 00 FY 2000: Jan 01 FY 2001: _____

(\$ in Millions)

Cost:	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
FY 98 & Prior																						
Sonar Audio Distrib.	4	0.3	1	0.1	1	0.1													6	0.5		
AN/SQQ-89(V)12 (EC-84)	7	7.3	2	1.7	2	2.0	2	2.4											13	13.4		
AN/UYQ-25B	7	0.9	4	0.2															11	1.1		
System Level Recorder					2	0.3													2	0.3		
FLIR Mods	21	0.9			6	0.1													27	1.0		
FY99 Eqpt																						
AN/UYQ-25B					2	0.1	2	0.2													4	0.3
System Level Recorder					1	0.1	1	0.1													2	0.2
TRAFS					2	0.2															2	0.2
Fire Control/TDSS EC's						0.4		0.2														0.6
FY00 Eqpt																						
TRAFS							4	0.5													4	0.5
AN/UYQ-25B							1	0.1													1	0.1
System Level Recorder							2	0.2													2	0.2
TDSS/CADRT							6	0.6													6	0.6
Fire Control/TDSS EC's								0.3														0.3
FY01 Eqpt																						
System Level Recorder									3	0.3											3	0.3
TRAFS									3	0.3											3	0.3
TDSS/CADRT									3	0.3											3	0.3
Fire Control/TDSS EC's										0.4												0.4
FY02 Eqpt																						
System Level Recorder											4	0.5									4	0.5
TRAFS											4	0.3									4	0.3
TDSS/CADRT											4	0.2									4	0.2
BLK II Upgrade (ETC)											4	0.7									4	0.7
Fire Control/TDSS EC's												0.3										0.3
FY03 Eqpt																						
System Level Recorder													2	0.1							2	0.1
TRAFS													2	0.1							2	0.1
TDSS/CADRT													2	0.1							2	0.1
BLK II Upgrade (ETC)													2	0.1							2	0.1
FY04 Eqpt																						
DSA		0.4		0.7		0.9		0.4		0.4		0.2		0.1								3.1
TO COMPLETE																						

	FY 1998 & Prior				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
In	5	0	2	2	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Out	4	1	2	2	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: DDG 51 Class Ships TYPE MODIFICATION: _____ MODIFICATION TITLE: AN/SQQ-89 Surface ASW Combat Sys

DESCRIPTION/JUSTIFICATION:

Installation of AN/SQQ-89 ASW Combat System block upgrades to provide improved torpedo alertment and shallow water performance on previously installed systems. The AN/SQQ-89(V)15A+MFTA backfit upgrade will capitalize on the AN/SQQ-89(V)15 forward fit investment and will integrate a new tactical towed array sensor (MFTA) to provide a COTS-based USW combat system which will provide the capability for medium-frequency bistatic and multi-static sonar operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

	FY 1998 & Prior		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	\$	
FINANCIAL PLAN (IN MILLIONS)																					
<i>RDT&E</i>																					
<i>PROCUREMENT</i>																					
DDG 51 Equipment																					
	AN/UYQ-25B	4	0.4	1	0.1	1	0.1													6	0.6
	System Level Recorder	5	2.5					1	0.3											6	2.8
	TRAFS	2	0.6	11	3.3	2	0.7	6	2.4											21	7.0
	TDSS/CADRT	10	4.8	4	1.2	2	0.6	5	1.5											21	8.1
	BLK II Upgrade (ETC)							1	0.8	9	6.8	6	4.5	4	3.0					20	15.1
	AN/SQQ-89(V)15A + MFTA											2	18.7	4	36.5	4	37.3			10	92.5
	Fire Control/TDSS EC's				0.7		3.6		2.4		2.0		0.4								9.1
	BLK I/II NRE for DDG 79-84													3.5		1.1					4.6
ENGINEERING SUPPORT																					
			5.2		2.3		3.7		4.0		3.2		3.7		5.2		7.4				34.7
OTHER																					
																				0	0.0
OTHER																					
																				0	0.0
OTHER																					
																				0	0.0
INTERIM CONTRACTOR SUPPORT																					
																				0	0.0
INSTALL COST																					
			1.5		1.5		3.6		2.1		2.7		1.6		1.6		7.8		30.0		52.4
TOTAL PROCUREMENT																					
			15.0		9.1		12.3		13.5		14.7		28.9		49.8		53.6		30.0		226.9

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

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

MODELS OF SYSTEMS AFFECTED: DDG 51 Class Ships MODIFICATION TITLE: AN/SQQ-89(V) Surface ASW Combat System Components

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: AITs
 ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: Various for block upgrade components
 CONTRACT DATES: FY 1999: Feb 99 FY 2000: Feb 00 FY 2001: _____
 DELIVERY DATE: FY 1999: Jan 00 FY 2000: Jan 01 FY 2001: _____

(\$ in Millions)

Cost:	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 98 & Prior																				
AN/UYQ-25B	2	0.2	1	0.1	1	0.1													4	0.4
System Level Recorder	1	0.1	2	0.2	2	0.2													5	0.5
TRAFS			2	0.2															2	0.2
TDSS/CADRT	2	0.2	4	0.2	4	0.5													10	0.9
FLIR Mods	18	0.4	15	0.2															33	0.6
FY 99 Eqpt																				
AN/UYQ-25B					1	0.1													1	0.1
TRAFS					11	1.0													11	1.0
TDSS/CADRT					4	0.5													4	0.5
Fire Control/TDSS EC's						0.7														0.7
FY00 Eqpt																				
TRAFS							2	0.3											2	0.3
TDSS/CADRT							2	0.3											2	0.3
Fire Control/TDSS EC's								1.0												1.0
AN/UYQ-25B									1	0.1									1	0.1
FY01 Eqpt																				
System Level Recorder									1	0.1									1	0.1
TRAFS									6	0.7									6	0.7
TDSS/CADRT									5	0.6									5	0.6
BLK II Upgrade (ETC)									1	0.2									1	0.2
Fire Control/TDSS EC's										0.7										0.7
FY02 Eqpt																				
BLK II Upgrade (ETC)											9	1.0							9	1.0
Fire Control/TDSS EC's												0.4								0.4
FY03 Eqpt																				
BLK II Upgrade (ETC)													6	0.5					6	0.5
Fire Control/TDSS EC's															2	0.1				0.1
AN/SQQ-89(V)15A +MFTA															2	6.6			2	6.6
FY04 Eqpt																				
BLK II Upgrade (ETC)															4	0.6			4	0.6
AN/SQQ-89(V)15A +MFTA																	8	30.0	8	30.0
DSA		0.6		0.6		0.5		0.5		0.3		0.2		1.1		0.5				4.3
TO COMPLETE																				

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005	TC	TOTAL			
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1			2	3	4
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	8	10
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	1	1	8	10

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Trainers & Shore Sites TYPE MODIFICATION: _____ MODIFICATION TITLE: AN/SQQ-89 Surface ASW Combat Sys

DESCRIPTION/JUSTIFICATION:

Installation of AN/SQQ-89 ASW Combat System modifications to provide improved performance on previously installed systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

FINANCIAL PLAN (IN MILLIONS)	FY 1998 & Prior		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	\$	
<i>RDT&E</i>																				0	0.0
<i>PROCUREMENT</i>																					
TRAINING EQUIPMENT		Var 16.7		Var 0.3		Var 0.6				Var 1.3				1 9.1						Var 28.0	
SUPPORT EQUIPMENT		Var 38.4		Var 1.0		Var 0.8		Var 0.5		Var 0.5						1 9.3				Var 50.5	
ENGINEERING SUPPORT		39.1		0.2		0.2		0.2		0.3		0.3		1.2		1.2				0 42.7	
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		94.2		1.5		1.6		0.7		2.1		0.3		10.3		10.5				0 121.2	

P-1 SHOPPING LIST

CLASSIFICATION:

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE/LINE ITEM # <p style="text-align: center;"><i>SSN ACOUSTICS 214700</i></p>					
Program Element for Code B Items:							OTHER RELATED PROGRAM 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	N/A	B										0
EQUIPMENT COST (In Millions)			\$79.7	\$144.1	\$227.0	\$123.3	\$129.4	\$227.5	\$165.9	\$168.2		1096.9
SPARES COST (In Millions)			\$14.0	\$4.5	\$2.0	\$1.8	\$4.0	\$7.4	\$2.6	\$2.6		36.3
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>This program procures submarine systems and equipment to maintain clear acoustic, tactical, and operational superiority over the entire spectrum of submarine and surface combatant threats.</p> <p>Procurements provide upgrades/support to 688 Class, 688I Flight and SEAWOLF Class SSN's.</p> <p>POM 98 incorporated all future Acoustic Upgrades into the Acoustic-Rapid COTS Insertion (A-RCI) program. A-RCI is a multi-phased, evolutionary effort geared toward addressing Acoustic Superiority through the rapid introduction of interim development products applicable to SSN 688, 688I and SSBN 726 Class Submarines. A-RCI includes the AN/BSY-1 ECP 1000 Acoustic Upgrade, Medium Frequency Active Improvement (MFAI), and the AN/BSY-1 HF Upgrade programs. A-RCI Phase I provides interim AN/BSY-1 (ECP 1000) capability of TB-29 Spatial Vernier (SV) Processing and Full Spectrum Processing. A-RCI Phase II provides full TB-29 SV Processing. Phase III completes system integration and is the baseline for SSN 688, 688I and SSBN 726 Class Submarines. Phase III provides Spherical Array (SA) Processing. Phase IV provides AN/BSY-1 High Frequency Active Upgrades. A-RCI received MSII approval on 05/96, including the decision to procure the first two (2) A RCI TA Upgrade Kits for 688 and 688I. The RDT&E program element is PE 0604503N/F0219. DEV TEST & EVAL (DT&E) completed 1Q/FY98. Initial OPER TEST & EVAL (IOT&E) is planned for 1Q/FY99 and OPER TEST & EVAL (OT&E) is planned for 2Q/FY00. The availability date of the Tech Data Package is planned for 2Q/FY00. The estimated date of approval for service use is 1Q/FY01.</p>												
SA101 AN/BQQ-5 UPGRADES:												
Procures A-RCI TA, SA, SV and TA to SA Upgrade Kits; supports the refurbishment and installation of the upgrades.												
SA102 TOWED SYSTEMS:												
Towed Array refurbishment material required to support reliability improvements and upgrades to TB-16, TB-23, TB-29 Arrays and Towed Array Handling Systems procured through this line. Handling system reliability improvements include: improved cables in the outboard systems, new slip rings, EMI improvements, roller boxes, and additional hydraulic filtering. The Towed Array improvements include: improved internal connectors, tank and pendant cables, and hydrophones. There is also a block upgrade program planned to add heading sensors and a wideband hydrophone to increase performance to the arrays. These upgrades significantly increase the reliability and service life of the arrays resulting in fewer failures and an increase in inventory available for fleet use. This line also procures TB-29 () Arrays and OA-9070 () Handling Systems.												

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION		DATE: February 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # SSN ACOUSTICS 214700	
<p><u>SA103 AN/BSY-1 UPGRADES:</u></p> <p>Funding procures A-RCI TA, SA, TA to SA Upgrade Kits and HF Kits. Precision Bottom Mapping Kits procured through this line.</p> <p><u>SA201 BLOCK CHANGES:</u></p> <p>Minor ECP's and hardware changes affecting the SSN688 Class and 688I Flight submarines are procured through this line.</p> <p><u>SA202 PRODUCTION/ENGINEERING/LOGISTIC SUPPORT:</u></p> <p>Funding supports the procurement of equipment of AN/BSY-1, AN/BQQ-5 and Towed System hardware.</p> <p><u>SA203 UNIQUE TEST EQUIPMENT:</u></p> <p>Funding procures various towed array and towed array handling system/stowage tube inspection test equipment.</p> <p><u>SA301 MSRA/SMF:</u></p> <p>Funding procures test equipment and piece part hardware to support the AN/BSY-1 and AN/BQQ-5 Module Screen and Repair Activity (MSRA). The MSRA, equipped with analog and digital automatic test equipment (ATE) and test programs sets (TPS), provides an enhanced capability to screen and repair Standard Electronic Modules (SEM) at the Intermediate Maintenance Activity.</p> <p><u>SA302 OP TRAINER UPGRADES:</u></p> <p>Funding procures Hardware upgrades and production engineering for AN/BSY-1 and AN/BQQ-5 operational trainer sites.</p>		

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION		DATE: February 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE/LINE ITEM # SSN ACOUSTICS 214700
<p><u>SA303 ORGANIC REPAIR DEPOT/DMSMS:</u> Procures equipment to support AN/BSY-1 and AN/BQQ-5 organic repairs for items beyond the repair capabilities of MSRA. The depot will be equipped with analog and digital ATE and TPS's necessary to screen and repair SEM modules.</p> <p><u>SA401 INITIAL TRAINING:</u> Provides for initial training curriculum development, training management materials, exercise control group development, pilot services and services to the Fleet.</p> <p><u>SA500 AN/BQG-5 WAA:</u> Funding supports Wide Aperature Array outboard spares/refurbishment requirements, engineering changes and upgrades, Initial Spares, engineering and interim support for the AN/BQG-5A (V)1 and End of Life Parts (EOL) program.</p> <p><u>SA501 AN/BSY-2:</u> Funding supports engineering changes and upgrades, EOL parts program and the AN/BSY-2 Submarine Technology Insertion Program'(STIP).</p> <p><u>SA502 COMBAT SYSTEMS COMMONALITY</u> Funding supports combat systems commonality efforts and incorporates increased funding provided by PBD 752. Procures upgrade changes to CCS MK2 Block 1C to support interface commonalitywith A-RCI in FY00 and FY01. Funds also provided in FY 00 for procurement and installation of improved processor cards and disc drives for Signal Data Convertor Stores which supports the fleet release of SFMPL 6.1 which provides complete range dependent search planning capability. Additional funds FY00 provide Design Services in support of Trident Rev 7.0 on SSBN 726 Class Submarines.</p> <p><u>SA5IN EQUIPMENT INSTALLATION:</u> Funds actual hardware installation during shipyard and pierside availabilities.</p> <p><u>SA900 CONSULTING SERVICES:</u> Includes specification validation, contract deliverable monitoring, prime contractor monitoring for cost, schedule and performance slips, ILS planning and coordination of GFI. Additional support will assess the impact of Diminishing Manufacturing Sources/Material Shortages (DMSMS) as Original Equipment Manufacturers discontinue their production lines. Life-of-type procurements will be accomplished where necessary based on these analyses. Also, consulting services will review and support analysis associated with the procurement of ATE and TPS's for the AN/BSY-1 and AN/BQQ-5 Organic Repair Depot and MSRA.</p>		

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT						ID Code B	P-1 ITEM NOMENCLATURE/SUBHEAD SSN ACOUSTICS/H2SA							
COST CODE	ELEMENT OF COST	ID Code	FY 1998			FY 1999			FY 2000			FY2001		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
			<u>SPONSOR: N87</u>											
SA101	<u>AN/BQQ-5 UPGRADES</u>				\$10,391			\$63,450			\$33,867			
	INSTALL SUPPORT				357			550			550			
	REFURBISHMENT MATERIAL				513			750			3,812			
	A-RCI SA KITS					2	8,281	16,561	1	9,267	9,267			
	A-RCI TA RCI KITS	B	2	2,601	5,202	17	2,682	45,589						
	A-RCI TA TO SA UPGRADES KITS	B	1	4,319	4,319				3	6,746	20,238			
SA5IN	<u>INSTALLATION</u>				479			1,467			14,151			
<u>SPONSOR: N87</u>														
SA102	<u>TOWED SYSTEMS</u>				\$23,323			\$22,412			\$32,391			
	TB-23 ARRAY ECP-320	A	20	330	6,608	11	337	3,707						
	TB-23 ARRAY ECP-320	A	20	337	6,741									
	TOWED ARRAY REFURBISHMENT & UPGRADE	A			6,267			4,989			17,982			
	TOWED ARRAY HANDLING SYSTEM REFURBISHMENT & UPGRADE	A			1,887			6,590			6,063			
	TB-29 ()	B							3	2,127	6,381			
	OA-9070 () ENGINEERING CHANGE	A			1,820			5,203						
	OA-9070 () UPGRADES	A				3	641	1,923	3	655	1,965			
SA5IN	<u>INSTALLATION</u>										\$2,898			
<u>SPONSOR : N87</u>														
SA103	<u>AN/BSY-1 UPGRADES</u>				\$28,193			\$18,468			\$82,900			
	A-RCI TA RCI KITS	B	9	2,744	24,698	2	2,791	5,582						
	A-RCI SA KITS	B				1	7,346	7,346	5	7,471	37,355			
	A-RCI HF KITS	B				2	2,770	5,540	9	2,817	25,353			
	A-RCI TA TO SA UPGRADES KITS	B	1	3,495	3,495				4	5,048	20,192			
SA5IN	<u>INSTALLATION</u>				565			6,966			4,537			

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT1						ID Code B	P-1 ITEM NOMENCLATURE/SUBHEAD SSN ACOUSTICS/H2SA							
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
			SA201	BLOCK CHANGES AN/BQQ-5/AN/BSY-1 SSEP DESK TOP CALCULATOR TB-16 TOWED ARRAYS TB-23 TOWED ARRAYS TB-29 TOWED ARRAYS TOWED ARRAY HANDLING EQUIP				\$2,494 600 200 328 328 457 581			\$3,354 1,170 118 337 337 337 1,055			\$4,678 854 2,000 200 347 347 347 583
SA202	PROD/ENG'G/LOGISTIC SUPPT AN/BQQ-5/AN/BSY-1 TOWED ARRAYS/HANDLING EQUIP			\$1,465 465 1,000			\$4,364 1,480 2,884			\$6,037 2,861 3,176				
SA203	UNIQUE TEST EQUIPMENT			\$1,516			\$1,329			\$2,906				
SA301	MSRA/SMF MODULE SCREEN & REPAIR ACTIVITY SOFTWARE MAINTENANCE FACILITY			\$693 393 300			\$800 0 800			\$1,037 0 1,037				
SA302	OP TRAINER UPGRADES ENGINEERING CHANGES			\$800 800			\$1,259 1,259			\$1,000 1,000				
SA303	ORGANIC REP DEPOT/DMSMS ORGANIC REPAIR DEPOT COTS TECH INSERTION COTS TECH REFRESH			\$2,116 665 1,451			\$4,188 1,325 2,863			\$6,949 1,250 4,806 893				
SA401	INITIAL TRAINING ACOUSTICS TOWED ARRAY/HANDLING EQUIPMENT			\$330 200 130			\$693 471 222			\$2,926 2,697 229				

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System			DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT							ID Code B	P-1 ITEM NOMENCLATURE/SUBHEAD SSN ACOUSTICS/H2SA						
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
SA500	<u>AN/BQG-5 WAA</u> REFURB/PROCUREMENT EOL PARTS ENGINEERING CHANGES WAA OUTBD SPARES I&C REPLENISHMENT INITIAL SPARES AN/BQG-5A LOGISTICS UPDATES INTERIM SUPPORT AN/BQG-5A ENGINEERING SUPPORT				\$901			\$2,989			\$101			
SA501	<u>AN/BSY-2</u> EOL PARTS ENGINEERING CHANGE/UPGRADES LOGISTICS UPDATES CSF UPGRADES B2-CI PHASE 1 KIT SEAWOLF B2-CI PHASE 1 KIT CSF B2-CI PHASE 2 KIT SEAWOLF INSTALLATION AND TEST SUPPORT ENGINEERING CHANGES				\$3,068			\$9,244			\$5,563			
					300			1,385			886			
					2,768			3,570			1,800			
								874			937			
								274			257			
							1	2,888			2,888			
									1	1,487	1,487			
											253			196
SA51N	<u>EQUIPMENT INSTALLATION</u>				245						7,154			
SA900	<u>CONSULTING SERVICES</u>				3,157			3,073			2,901			
SA502	<u>COMBAT SYSTEMS COMMONALITY</u> MK-2 BLK 1C SDCS TRIDENT REV 7 DSA										\$15,046			
											8,000			
									63	63	4,000			
											3,046			
	FY00 installation includes \$6.9M to install previously procured equipment													
GRAND TOTAL														
					79,736			144,056			227,042			

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE:				
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-2					C. P-1 ITEM NOMENCLATURE SSN ACOUSTICS			SUBHEAD			
								February 1999			
								H2SA			
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	
<i>FY 1998</i>											
SA101 -A-RCI TA KITS	2	\$2,601	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	4/98	3/99	YES		
SA101 -A-RCI TA TO SA UPGRADE	1	\$4,319	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	4/98	9/99	YES		
SA102 -TB-23 ECP-320	20	\$330	NAVSEA		SS/FP/Opt	ALLIED SIGNAL, CA	2/98	2/99	YES		
SA102 -TB-23 ECP-320*	20	\$337	NAVSEA		SS/FP/Opt	ALLIED SIGNAL, CA	4/98	4/99	YES		
SA103 - A-RCI TA KITS	9	\$2,744	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	4/98	3/99	YES		
SA103 - A-RCI TA TO SA UPGRADE	1	\$3,495	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	4/98	6/99	YES		
<i>FY 1999</i>											
SA101 - A-RCI TA KITS	17	\$2,682	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES		
SA101 - A-RCI SA KITS	2	\$8,281	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES		
SA102 - TB-23 ECP-320	11	\$337	NAVSEA		SS/FP/Opt	ALLIED SIGNAL, CA	3/99	3/00	YES		
SA102 - OA-9070 () Upgrade kits	3	\$641	NAVSEA		C/FP/Opt	Lockheed Martin, MD	3/99	3/00	YES		
SA103 - A-RCI HF KITS	2	\$2,770	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES		
SA103 - A-RCI SA KITS	1	\$7,346	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES		
SA103 - A-RCI TA KITS	2	\$2,791	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES		
SA501 - B2CI- PHASE 1 KIT	1	\$2,888	NAVSEA		SS/FP/Opt	Lockheed Martin, NY	3/99	9/99	YES		
<i>FY 2000</i>											
SA101 - A-RCI SA KITS	1	\$9,267	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	2/00	2/01	YES		
SA101 - A-RCI TA - SA KITS	3	\$6,746	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	2/00	2/01	YES		
SA102 - TB-29 () ARRAYS	3	\$2,127	NAVSEA		C/FP/Opt	Lockheed Martin, MD	7/00	7/02	YES		
SA102 - OA-9070 () Upgrade kits	3	\$655	NAVSEA		C/FP/Opt	Lockheed Martin, MD	4/00	10/00	YES		
SA103 - A-RCI SA KITS	5	\$7,471	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	2/00	2/01	YES		
SA103 - A-RCI HF KITS	9	\$2,817	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	2/00	2/01	YES		
SA103 - A-RCI TA-SA KITS	4	\$5,048	NAVSEA		SS/FP/Opt	Lockheed Martin, VA					
SA501 - B2CI- PHASE 1 KIT	1	\$1,487	NAVSEA		SS/FP/Opt	Lockheed Martin, NY	3/00	9/00	YES		
D. REMARKS											
TB-23 ECP 320 unit cost reflects actual negotiated contract option prices. FY99 option awarded early using FY98 Congressional increase in funding.											

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SSN ACOUSTICS/H2SA
 MODELS OF SYSTEM AFFECTED: AN/BQQ-5 A-RCI TA/SV KITS TYPE MODIFICATION: _____ MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:
 PROVIDES TB-29 CAPABILITY AND IMPROVED DETECTION

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II 05/96

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																										0	0.0
<i>PROCUREMENT</i>																											
INSTALLATION KITS	1	2.046	1	0.342	2	5.202	15	40.225																		19	47.815
INSTALLATION KITS NONRECURRING																											0.0
EQUIPMENT																											
EQUIPMENT NONRECURRING																											0.0
ENGINEERING CHANGE ORDERS																											0.0
DATA																											0.0
TRAINING EQUIPMENT							2	5.364																		2	5.364
SUPPORT EQUIPMENT																											0.0
OTHER																											0.0
OTHER																											0.0
OTHER																											0.0
INTERIM CONTRACTOR SUPPORT																											0.0
INSTALL COST					1	0.479	3	1.467	15	9.401																19	11.347
TOTAL PROCUREMENT		2.046		0.342		5.681		47.056		9.401																	64.526

P-1 SHOPPING LIST

CLASSIFICATION:

* FY97 PROCUREMENT IS FOR 1 SPATIAL VERNIER KIT

UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

SSN ACOUSTICS/H2SA

MODELS OF SYSTEMS AFFECTED: AN/BQQ-5 A-RCI TA/SV KITS

MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARD

ADMINISTRATIVE LEADTIME: _____

PRODUCTION LEADTIME: 12-15 months

CONTRACT DATES: FY 1998: APR-98

FY 1999: MAR-99

FY 2000: N/A

FY 2001: N/A

DELIVERY DATE: FY 1998: APR-99

FY 1999: MAR-00

FY 2000: N/A

FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS					1	0.479																	1	0.479
FY 1997 EQUIPMENT							1	0.198															1	0.198
FY 1998 EQUIPMENT							2	1.269															2	1.269
FY 1999 EQUIPMENT									15	9.401													15	9.401
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
FY 2005 EQUIPMENT																								0.000
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1	0	0	3	0	0	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19		
Out	1	0	0	0	3	0	0	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19			

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

SSN ACOUSTICS/H2SA

MODELS OF SYSTEM AFFECTED: AN/BQQ-5 TA TO SA KITS UPGRADE KITS TYPE MODIFICATION: _____ MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES SPHERICAL ARRAY PROCESSING

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II 05/96

FINANCIAL PLAN (IN MILLIONS)	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		IC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS					1	4.319			3	20.238													4	24.557	
INSTALLATION KITS NONRECURRING																									0.0
EQUIPMENT																									0.0
EQUIPMENT NONRECURRING																									0.0
ENGINEERING CHANGE ORDERS																									0.0
DATA																									0.0
TRAINING EQUIPMENT																									0.0
SUPPORT EQUIPMENT																									0.0
OTHER																									0.0
OTHER																									0.0
OTHER																									0.0
INTERIM CONTRACTOR SUPPORT																									0.0
INSTALL COST									1	1.325														1	1.325
TOTAL PROCUREMENT						4.319				21.563		0.000		0.000										5	25.882

P-1 SHOPPING LIST

CLASSIFICATION:

* 1ST UNIT HAS AN 18 MONTH LEAD TIME

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

SSN ACOUSTICS/H2SA

MODELS OF SYSTEMS AFFECTED: AN/BQQ-5 TA TO SA KITS UGRADE KITS MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARD

ADMINISTRATIVE LEADTIME: 12 MONTHS

PRODUCTION LEADTIME: 18 MONTHS

CONTRACT DATES: FY 1998: Mar-98

FY 1999: N/A

FY 2000: Mar-00

FY 2001: Mar-01

DELIVERY DATE: FY 1998: Sept-99

FY 1999: N/A

FY 2000: Mar-01

FY 2001: Mar-02

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT									1	1.325														1	1.325
FY 1999 EQUIPMENT																									
FY 2000 EQUIPMENT																									
FY 2001 EQUIPMENT																									
FY 2002 EQUIPMENT																									
FY 2003 EQUIPMENT																									
FY 2004 EQUIPMENT																									
FY 2005 EQUIPMENT																									
TO COMPLETE																									

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Out	0	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	0	0	0	0	0	0	0	0	1

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SSN ACOUSTICS/H2SA
 MODELS OF SYSTEM AFFECTED: AN/BQQ-5 A-RCI SA KITS TYPE MODIFICATION: _____ MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:
 PROVIDES SPHERICAL ARRAY PROCESSING

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II 05/96

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																								0	0.0
<i>PROCUREMENT</i>																									
INSTALLATION KITS							2	16.561	1	9.267														3	25.828
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									2	3.425														2	3.425
TOTAL PROCUREMENT								16.561		12.692		0.000					0.000		0.000						29.253

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

SSN ACOUSTICS/H2SA

MODELS OF SYSTEMS AFFECTED: AN/BQQ-5 A-RCI SA KITS

MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARD

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME: 12-15 MONTHS

CONTRACT DATES:

FY 1998: N/A

FY 1999: Mar-99

FY 2000: Mar-00

FY 2001: N/A

DELIVERY DATE:

FY 1998: N/A

FY 1999: Mar-00

FY 2000: Mar-01

FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT																									
FY 1999 EQUIPMENT									2	3.425													2	3.425	
FY 2000 EQUIPMENT																							0	0.000	
FY 2001 EQUIPMENT																									
FY 2002 EQUIPMENT																									
FY 2003 EQUIPMENT																									
FY 2004 EQUIPMENT																							0	0.000	
FY 2005 EQUIPMENT																							0	0.000	
TO COMPLETE																									

*COMPETITIVE AWARD IN FY01 DELAYS ONE SHIPSET FOR FIRST ARTICLE TESTS

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
Out	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SSN ACOUSTICS/H2SA
 MODELS OF SYSTEM AFFECTED: AN/BSY-1 A-RCI TA KIT TYPE MODIFICATION: _____ MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES TB-29 CAPABILITY AND IMPROVED DETECTION

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II 05/96

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																								0	0.0
<i>PROCUREMENT</i>																									
INSTALLATION KITS	1	2.214			9	24.698	2	5.582																12	32.494
INSTALLATION KITS NONRECURRING																									
EQUIPMENT																									
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT																									
SUPPORT EQUIPMENT																									
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST					1	0.565	9	6.966	2	1.534														12	9.065
TOTAL PROCUREMENT		2.214		0.000		25.263		12.548		1.534															41.559

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

SSN ACOUSTICS/H2SA

MODELS OF SYSTEMS AFFECTED: AN/BSY-1 A-RCI TA KIT

MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARD

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME: 12-15 MONTHS

CONTRACT DATES: FY 1998: Mar-98

FY 1999: Mar-99

FY 2000: Mar-00

FY 2001: N/A

DELIVERY DATE: FY 1998: Mar-99

FY 1999: Mar-00

FY 2000: Mar-01

FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS					1	0.565																	1	0.565
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT							9	6.966															9	6.966
FY 1999 EQUIPMENT									2	1.534													2	1.534
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
FY 2005 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1	0	3	3	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Out	1	0	0	3	3	3	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SSN ACOUSTICS/H2SA
 MODELS OF SYSTEM AFFECTED: AN/BSY-1 A-RCI TA TO SA AND HF KITS TYPE MODIFICATION: _____ MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:
 PROVIDES SPHERICAL ARRAY PROCESSING- TA to SA Kits and High Frequency Kits are installed at the same time to provide previously upgraded TA Kits with Phase IV High Frequency Capability.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II 05/96

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																							0	0.0
<i>PROCUREMENT</i>																								
INSTALLATION KITS/TA to SA Kits					1	3.495			4	20.192													5	23.687
INSTALLATION KITS/High Frequency							1	2.770	4	11.268													5	14.038
INSTALLATION KITS NONRECURRING																								
EQUIPMENT																								
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST									1	1.086													1	1.086
TOTAL PROCUREMENT				0.000		3.495		2.770		32.546		0.000		0.000		0.000		0.000		0.000		0.000		38.811

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

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

SSN ACOUSTICS/H2SA

MODELS OF SYSTEMS AFFECTED: AN/BSY-1 A-RCI TA to SA Upgrade Kits/ & HF Kits MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARD

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME: 12-18 MONTHS

CONTRACT DATES: FY 1998: Mar-98

FY 1999: Mar-99

FY 2000: N/A

FY 2001: Mar-01

DELIVERY DATE: FY 1998: Jun-99

FY 1999: Mar-00

FY 2000: N/A

FY 2001: Mar-02

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT									1	1.086													1	1.086	
FY 1999 EQUIPMENT									1	0.00														0	
FY 2000 EQUIPMENT																							0	0.000	
FY 2001 EQUIPMENT																								0	
FY 2002 EQUIPMENT																							0	0	
FY 2003 EQUIPMENT																							0	0.000	
FY 2004 EQUIPMENT																									
FY 2005 EQUIPMENT																							0	0	
TO COMPLETE																									

*FY 00 INSTALLATION INSTALLS BOTH FY 98 PROCURED TA TO SA KITS AND FY 99 PROCURED HF KITS

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Out	0	0	0	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	0	0	1

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SSN ACOUSTICS/H2SA
 MODELS OF SYSTEM AFFECTED: AN/BSY-1 A-RCI SA KITS & HF Kits TYPE MODIFICATION: _____ MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES SPHERICAL ARRAY PROCESSING- Spherical Kits and HF Kits are installed at the same time to provide BSY-1 ships Phase IV HF capability.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II 05/96

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																								0	0.0
<i>PROCUREMENT</i>																								0	0.000
INSTALLATION KITS/ SA KITS	0	0.0	0				1	7.346	5	37.354													6	44.700	
INSTALLATION KITS/ HF KITS							1	2.770	5	14.085													6	16.855	
EQUIPMENT	0	0.0	0																						0.0
EQUIPMENT NONRECURRING																									0.0
ENGINEERING CHANGE ORDERS																									0.0
DATA																									0.0
TRAINING EQUIPMENT/ SA KIT																								0	0.000
TRAINING EQUIPMENT/ HF KITS																								0	0.000
OTHER																									0.0
OTHER																									0.0
OTHER																									0.0
INTERIM CONTRACTOR SUPPORT																									0.0
INSTALL COST									1	1.917														1	1.917
TOTAL PROCUREMENT								10.116		53.356		0.000		0.000		0.000		0.000		0.000		0.000		0.000	63.472

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

SSN ACOUSTICS/H2SA

MODELS OF SYSTEMS AFFECTED: AN/BSY-1 A-RCI SA KITS & HF KITS MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARD

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME: 12-15 MONTHS

CONTRACT DATES: FY 1998: N/A

FY 1999: Mar-99

FY 2000: Mar-00

FY 2001: Mar-01

DELIVERY DATE: FY 1998: N/A

FY 1999: Mar-00

FY 2000: Mar-01

FY 2001: Mar-02

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT																									
FY 1999 EQUIPMENT									1	1.917														1	1.917
FY 2000 EQUIPMENT																								0	0.000
FY 2001 EQUIPMENT																									
FY 2002 EQUIPMENT																								0	0
FY 2003 EQUIPMENT																								0	0.000
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																									

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SSN ACOUSTICS/H2SA
 MODELS OF SYSTEM AFFECTED: OA-9070 () UPGRADE TYPE MODIFICATION: _____ MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:
 PROVIDES NECESSARY TECHNICAL CONVERSION TO ACCOMODATE THE TB-29 (A) ARRAYS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **MS II 05/96**

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																								
<i>PROCUREMENT</i>																								
INSTALLATION KITS	0	0.000					2	1.282	3	1.965													5	3.247
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT																								0.0
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT							1	0.641															1	0.641
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST									2	2.898														2.898
TOTAL PROCUREMENT								1.923		4.863		0.000		0.000		0.000		0.000		0.000				6.786

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

SSN ACOUSTICS/H2SA

MODELS OF SYSTEMS AFFECTED: OA-9070 UPGRADE

MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARD

ADMINISTRATIVE LEADTIME: _____

PRODUCTION LEADTIME: 12 MONTHS

CONTRACT DATES: FY 1998: N/A

FY 1999: Mar-99

FY 2000: Mar 00

FY 2001: Mar 01

DELIVERY DATE: FY 1998: N/A

FY 1999: Mar-00

FY 2000: Mar 01

FY 2001: Mar 02

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	0	0.000																							
FY 1997 EQUIPMENT																									0.000
FY 1998 EQUIPMENT																									0.000
FY 1999 EQUIPMENT									2	2.898															2.898
FY 2000 EQUIPMENT																									0.000
FY 2001 EQUIPMENT																									0.000
FY 2002 EQUIPMENT																									0.000
FY 2003 EQUIPMENT																									0.000
FY 2004 EQUIPMENT																									0.000
FY 2005 EQUIPMENT																									
TO COMPLETE																									

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Out	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SSN ACOUSTICS/H2SA
 MODELS OF SYSTEM AFFECTED: AN/BQG-5 WIDE APERTURE ARRAY TYPE MODIFICATION: _____ MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:
 PROVIDES FULL SEARCH CAPABILITY.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NONE

FINANCIAL PLAN (IN 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	\$	QTY	\$	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RD&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS	3	41.3																						3	41.3
INSTALLATION KITS NONRECURRING																									0.0
EQUIPMENT																									0.0
EQUIPMENT NONRECURRING																									0.0
ENGINEERING CHANGE ORDERS																									0.0
DATA																									0.0
TRAINING EQUIPMENT																									0.0
SUPPORT EQUIPMENT																									0.0
OTHER																									0.0
OTHER																									0.0
OTHER																									0.0
INTERIM CONTRACTOR SUPPORT																									0.0
INSTALL COST	1	11.100			AP	0.395																	2.0	24.00	13.495
TOTAL PROCUREMENT	3	52.400				0.395																			52.795

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

SSN ACOUSTICS/H2SA

MODELS OF SYSTEMS AFFECTED: AN/BQG-5 WIDE APERTURE ARRAY MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARD

ADMINISTRATIVE LEADTIME: _____

PRODUCTION LEADTIME: 15 MONTHS

CONTRACT DATES: FY 1998: N/A

FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

DELIVERY DATE: FY 1998: N/A

FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	1	11.1																				2	24.000	3	35.100
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 SCHEDULE: SHIP AVAILABILITIES

In Out	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SSN ACOUSTICS/H2SA
 MODELS OF SYSTEM AFFECTED: B2-CI PHASE I AND PHASE II KITS TYPE MODIFICATION: _____ MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:
 REPLACES OBSOLETE EQUIPMENT AND WILL ACHIEVE COMMONALITY

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NONE

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RD&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS - PHASE I KITS							1	2.888	0	0.0										0	0.0		1	2.888	
INSTALLATION KITS - PHASE II KITS																							0	0.000	
EQUIPMENT																									
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT - PHASE I									1	1.487															1.487
TRAINING EQUIPMENT - PHASE II																									0.000
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST									AP	0.200														0.200	
TOTAL PROCUREMENT							2.888		1.687		0.000		0.000		0.000		0.000		0.000		0.000			4.575	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1999
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APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT - ASW	P-1 ITEM NOMENCLATURE/LINE ITEM # Undersea Warfare Support Equipment Budget Line Item: 217600,217605,217606
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Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS
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	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	0	0	0	0	0	0	0			0
EQUIPMENT COST (In Millions)					\$2.6	\$0.8	\$4.3	\$3.9	\$7.0	\$6.6			\$25.3
SPARES COST (In Millions)													0

PROGRAM DESCRIPTION/JUSTIFICATION:

This P-1 consolidates BLIs 221300/221305 SSTD, 217800 Surface Sonar Windows and Domes, 221500 Acoustic Communications, and 224700/224705/224706 Carrier ASW Module for FY 2000 through 2005.

Surface Ship Torpedo Defense
 The Surface Ship Torpedo Defense (SSTD) System consists of the AN/SLQ-25A towed torpedo countermeasure, the Multi-Sensor Torpedo Recognition Processor (MSTRAP), and Launched Expendable Acoustic Devices (LEAD). The SSTD system enhances ship survival capability against advanced acoustic and non-acoustic homing torpedoes. The AN/SLQ-25A is in the Countermeasure Passive Subsystem of the SSTD System. The AN/SLQ-25A projects decoy signals into the water via a towed body deployed astern of the ship. The projected signals are generated by a transmitter located on the ship which is controlled by an operator. The Launched Expendable Acoustic Device (LEAD) Program provides the capability for launching acoustic countermeasures from surface ships. LEAD was developed under RDT&E PE 0603506N Surface Ship Torpedo Defense. The LEAD Initial Development Test and Evaluation occurred in October 1995 and Initial Operational Test and Evaluation occurred in October 1996. As a cost avoidance measure, initial procurement of LEAD components was approved 31 October 1996. Operational Test and Evaluation was completed in April 1997. Approval for limited production was granted in July 1997. Approval for full production was granted in May 1998.

Surface Sonar Windows and Domes
 AN/SQS-26/53 Sonar Dome Rubber Windows are installed in CG47, DDG51, and DDG993 class ships. This program provides emergency replacement wire-reinforced, pressurized rubber acoustic windows which experience failure due to corrosion, fatigue, and impact in the splice region. The SDRW significantly improves the surface ship sonar performance by reducing flow-induced self-noise, and by providing increased source level receiving and sensitivity resulting from reduced attenuation. AN/SQS-56 SRD provides emergency replacement Sonar Rubber Domes for FFG-7 Class AN/SQS-56 active/passive duct sonar systems. Production Engineering support provides technical evaluation, failure analyses, implementation of the inwater one-side backscatter xray program, manufacturer GFE refurbishments, engineering and field service has been suspended indefinitely.

Acoustic Communications
 Acoustic Communications provides two-way and one-way acoustic communications equipment for submarines and surface ships. The equipment consists of : (1) AN/WQC-2/2A, a stand alone, single side band, general purpose, voice, continuous wave, multiple tone communication for surface ships, submarines, and some shore activities; (2) AN/WQC-6 which provides long range coded signaling from surface ASW ships to attack submarines when interfaced with the AN/SQS-26/53 AND AN/BQQ-5; (3) AN/BQC-1(), a stand alone emergency voice and signal beacon for submarines, and (4) technical improvements (Engineering Changes) to acoustic communication equipment. The FY 98 - FY 01 funding will provide for continued procurement of both Probe Alert (AN/WQC-6) improvements and AN/WQC-2A Engineering Changes plus associated production engineering support and Consulting Services. This FY 98 - FY 01 funding procures the aforementioned improvements and changes for the SSN 21, SSN 637, SSN 688, SSBN 726, DD963, DDG 51, CG 47, MHC 51, MCM 1, CVN 65, ARS 50, FFG 7, and CVN 68 class ships and submarines.

BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: February 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT - ASW		P-1 ITEM NOMENCLATURE/LINE ITEM # Undersea Warfare Support Equipment Budget Line Item: 217600,217605,217606
Program Element for Code B Items:		OTHER RELATED PROGRAM ELEMENTS
PROGRAM DESCRIPTION/JUSTIFICATION: Cont'd Aircraft Carrier Tactical Support Center The CV-TSC of the Carrier Combat Direction System (CDS) is the focal point of supply for force ASW/SUW functions. The system supports the multi-mission, tactical employment of embarked airborne weapon systems (S-3B and SH-60 Helicopters) by providing mission planning, in-flight support and post mission assessment/intelligence collection. CV-TSC provides real time and post mission analysis of relayed or taped acoustic and non-acoustic signals to support CV/CVN USW Self Defense. The system consist of digital computers, commercial workstation displays, mass memories, plotters, acoustic analysis equipment and interface devices. The CV-TSC furnishes timely evaluated USW and SUW information to the Officer in Tactical Command as inputs to the decision making process. Procurement of AN/SQQ-34A(V) CV-TSC baseline systems completed during FY98. Procurement of non-developmental engineering changes to maintain system IT-21 supportability and interoperability with embarked aircraft, airborne sensors, and shipboard interfaces will continue beginning in FY98. Naval Undersea Warfare Center (NUWC), Division Keyport has been designated as the Alteration Installation Team (AIT) for all items. Installations will be accomplished at NUWC, the CV-TSC training site at Fleet Combat Training Center Atlantic (FCTCL) Dam Neck, VA, CV-TSC Ashore NAS/JAX, FL, and on board CV-63 through CVN-75. FY 1998 provides for procurement of six (6) AN/UQX-5(V)10 Fast Time Analyzer Systems, (6) CV-TSC Module On-Board Trainers, one (1) AN/SQQ-34B(V) CV-TSC upgrade and one (1) Real Time Sensor Data Link (RTSDL). FY1998 also includes production support and installation funds as required. FY1999 provides for procurement, integration and installation of three (3) CV-TSC Engineering Change One (EC-1) supportability and IT-21 interoperability updates and one (1) RTSDL. FY 2000 provides for procurement, integration and installation of five (5) CV-TSC Engineering Change One (EC-1) supportability and IT-21 interoperability updates and three (3) RTSDL.		

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: Communications and Electronic Equipment					C. P-1 ITEM NOMENCLATURE Undersea Warfare Support Equipment				SUBHEAD	
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										
CV-ASWM EC-1	5	45	NUWC	12/99	WR	NUWC, KEYPORT, WA	2/00	8/00	YES	N/A
RT SENS DATA LINK	3	151	NUWC	12/99	WR/RCP	NUWC, KEYPORT, WA	2/00	9/00	YES	N/A
D. REMARKS										

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: FEB-99				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE/LINE ITEM # <i>SONAR SUPPORT EQUIPMENT(2180)</i>					
Program Element for Code B Items: N/A							OTHER RELATED PROGRAM 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			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST (In Millions)			\$5.3	\$8.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$14.2
SPARES COST (In Millions)												
PROGRAM DESCRIPTION/JUSTIFICATION:												
Starting with the FY 2000 budget, this program was consolidated into the Submarine Support Equipment line - 256000.												

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: FEBRUARY 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS & ELECTRONICS EQUIPMENT							P-1 ITEM NOMENCLATURE/LINE ITEM # <i>SONAR SWITCHES AND TRANSDUCERS 218100</i>					
Program Element for Code B Items: PE# 0101221N							OTHER RELATED PROGRAM 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			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST (In Millions)			\$8.2	\$12.7	\$12.1	\$12.5	\$12.4	\$17.2	\$15.5	\$15.9		\$106.5
SPARES COST (In Millions)			\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	+	\$0.4		\$2.8
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>This program procures hydrophones, transducers, cables, and acoustic windows for In Service Under Sea Warfare Sonars on all classes of submarines. The components are required to support units in the fleet on a replacement basis, at regularly scheduled ship overhauls, and at interim availabilities when units are defective, and for upgrades.</p> <p><u>PU100 SONAR SWITCHES AND TRANSDUCERS</u></p> <p>Included in this line are procurements of transducers, hydrophones, windows, cables and domes and their support equipment and materials for the following Under Sea Warfare Sonars: BSY-1, BSY-2, BQQ-5, BQQ-6, BQS-15, BQS-14A, WQC-2, WLR-9/12, BQN-17, BQA-8, and BQH-1.</p> <p><u>PU200 ENGINEERING CHANGES</u></p> <p>Funds minor ECP's and hardware changes affecting the SSN 688, 688I, and TRIDENT Class submarines.</p> <p><u>PU300 PROGRAM SUPPORT</u></p> <p>Supports the procurement of equipment of sonar hydrophones, transducers, cables, and acoustic windows for In Service Under Sea Warfare Sonars.</p>												

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: FEBRUARY 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: COMMUNICATIONS & ELECTRONICS EQUIPMENT					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAC SONAR SWITCHES AND TRANSDUCERS (82PU)								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
PU100	SONAR SWITCHES & TRANSDUCERS	A												
	TR-317	A												
	TR-353A	A	90	16.3	1,463	374	3.5	1,307	725	2.7	1,954			
	CW-1147	A				30	16.2	486	30	7.5	226			
	CW-1181C	A				26	45.5	1,184	25	19.1	478			
	MX-10624	A							23	12.7	293			
	MX-11474	A				6	145.5	873						
	DT-574	A	1,000	0.273	273									
	DT-511B	A	50	13.2	659	24	14.6	350						
	DT-513C(250)	A	60	1.1	67									
	DT-513 ()	A				130	2.3	304	150	0.7	109			
	DT-592	A	30	12.6	379	47	13.5	633						
	TR-232() (MK-700)	A				50	45.1	2,255	25	37.0	926			
	TR-233B	A							33	20.3	670			
	TR-302B & CBL	A	19	22.6	430	17	25.3	431	20	26.6	533			
	TR-302(WINDOW)	A	10	0.5	5	10	0.6	6	10	0.6	6			
	TR-321()	A				28	18.6	521	56	10.0	558			
	TR-338A & CBL	A	30	10.3	310	30	10.9	326						
	TR-339	A	18	11.6	209	15	19.8	296	22	37.5	825			
	TR-340	A	18	11.6	209	15	19.8	296	22	37.5	825			
	DT-633	A							73	11.5	839			
	NCC CONNECTORS	A	413	0.611	252	193	0.624	120	570.0	0.637	363			
	TOTAL PU100				4,256			9,388			8,604			
PU200	ENGINEERING CHANGES	A			448			295			269			
PU300	PROGRAM SUPPORT	A			3,478			3,049			3,222			
TOTAL					8,182			12,732			12,095			

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System		A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE			SUBHEAD		
Other Procurement, Navy						SONAR SWITCHES AND TRANSDUCERS			82PU		
BA-2: COMMUNICATIONS & ELECTRONICS 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	
PU100											
FY 1998											
DT-511B (AN/WLR-9)	50	13.178	NUWC		OPTION	ITC	3/98	3/99	YES		
TR-353A (AN/BSY-2)*	90	16.258	NUWC	10/97	C/FP	HAZELTINE-MASSA	5/98	7/99	YES		
DT-574 (AN/BQQ-6;BSY-2)	1000	0.273	NUWC		OPTION	ITC	12/97	9/99	YES		
DT-513C (250' CABLE)(AN/BQA-8)	60	1.119	NUWC		OPTION	HARRIS	3/98	12/99	YES		
DT-592 (AN/WLR-9)	30	12.620	NUWC		OPTION	ITC	3/98	3/99	YES		
TR-338A (AN/BSY-1;2)	30	10.342	NUWC		OPTION	EDO	3/98	3/99	YES		
TR-302B CABLE (AN/BQN-17)	19	22.614	NUWC	1/98	SS/FP	EDO	5/98	5/99	YES		
TR-302 WINDOW (AN/BQN-17)	10	0.547	NUWC		WR	NUWC	1/98	5/99	YES		
TR-339 (AN/BSY-1;2)	18	11.596	NUWC		OPTION	SEABEAM	3/98	6/99	YES		
TR-340 (AN/BSY-1;2)	18	11.596	NUWC		OPTION	SEABEAM	3/98	6/99	YES		
NCC CONNECTORS (All con. cables)	413	0.611	NUWC		OPTION	UNKNOWN	4/98	4/99	YES		
FY 1999											
CW-1147 (AN/WLR-9)*	30	16.191	NUWC	7/98	C/FP	UNKNOWN	3/99	5/00	YES		
CW-1181C (AN/WLR-9)*	26	45.549	NUWC	7/98	C/FP	UNKNOWN	3/99	5/00	YES		
MX-11474 (AN/BSY-2)*	6	145.480	NUWC	7/98	C/FP	UNKNOWN	3/99	5/00	YES		
DT-511B (AN/WLR-9)	24	14.602	NUWC		OPTION	ITC	3/99	3/00	YES		
TR-353A (AN/BSY-2)	374	3.494	NUWC		OPTION	HAZELTINE-MASSA	3/99	4/00	YES		
DT-513() (AN/BQA-8)*	130	2.342	NUWC	7/98	C/FP	UNKNOWN	3/99	5/00	YES		
DT-592 (AN/WLR-9)	47	13.474	NUWC		OPTION	ITC	3/99	3/00	YES		
TR-338A (AN/BSY-1;2)	30	10.854	NUWC		OPTION	EDO	3/99	3/00	YES		
TR-302B CABLE (AN/BQN-17)	17	25.326	NUWC		OPTION	EDO	5/99	5/00	YES		
TR-302 WINDOW (AN/BQN-17)	10	0.552	NUWC		WR	NUWC	3/99	8/99	YES		
TR-339 (AN/BSY-1;2)	15	19.764	NUWC		OPTION	SEABEAM	4/99	4/00	YES		
TR-340 (AN/BSY-1;2)	15	19.764	NUWC		OPTION	SEABEAM	4/99	4/00	YES		
NCC CONNECTORS (All con. cables)	193	0.624	NUWC		OPTION	UNKNOWN	4/99	4/00	YES		
TR-232(J)MK-700 (AN/WQC-2)*	50	45.100	NUWC	7/98	C/FP	UNKNOWN	3/99	12/00	YES		
TR-321A() (AN/BQH-1C)*	28	18.591	NUWC	10/98	C/FP	UNKNOWN	1/99	10/00	YES		
D. REMARKS											
* INCLUDES FIRST ARTICLE COSTS											

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE		
								FEBRUARY 1999		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD	
Other Procurement, Navy					SONAR SWITCHES AND TRANSDUCERS				82PU	
BA-2: COMMUNICATIONS & ELECTRONICS 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
PU100										
FY 2000										
TR-353A	725	2.695	NUWC		OPTION	HAZELTINE-MASSA	4/00	4/01	YES	
CW-1147	30	7.540	NUWC		OPTION	UNKNOWN	3/00	5/01	YES	
CW-1181	25	19.119	NUWC		OPTION	UNKNOWN	3/00	5/01	YES	
MX-10624*	23	12.721	NUWC		WR	NUWC	3/00	3/01	YES	
DT-513()	150	0.727	NUWC		OPTION	UNKNOWN	3/00	3/01	YES	
TR-232 ()(MK-700)	25	37.049	NUWC		OPTION	UNKNOWN	3/00	3/01	YES	
TR-233B*	33	20.288	NUWC	10/99	C/FP	UNKNOWN	3/00	3/01	YES	
TR-302() & CBL	20	26.641	NUWC		OPTION	UNKNOWN	3/00	3/01	YES	
TR-302(WINDOW)	10	0.569	NUWC		WR	NUWC	1/00	3/01	YES	
TR-321()	56	9.964	NUWC		OPTION	UNKNOWN	3/00	3/01	YES	
TR-339*	22	37.494	NUWC	10/99	C/FP	UNKNOWN	3/00	5/01	YES	
TR-340*	22	37.494	NUWC	10/99	C/FP	UNKNOWN	3/00	5/01	YES	
DT-633*	73	11.497	NUWC	10/99	C/FP	UNKNOWN	3/00	5/01	YES	
NCC CONNECTORS	570	0.637	NUWC		OPTION	UNKNOWN	4/00	4/01	YES	
D. REMARKS										
* INCLUDES FIRST ARTICLE COSTS										

DD Form 2446-1, JUL 87

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 49

PAGE NO. 4

UNCLASSIFIED

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature GRE CONNECTORS		Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 12 months			
Project Unit/Item NCC CONNECTORS	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004
Buy Summary QTY		413	193	570				
Unit Cost		\$ 611	\$ 624	\$ 637				
Total Cost	\$ -	\$ 252,343	\$ 120,432	\$ 363,090				
Asset Dynamics								
Beginning Asset Position	68	351	51	164				
Deliveries from all prior year funding	583	0	0	0				
Deliveries from FY 1998 funding			413					
Deliveries from FY 1999 funding				193				
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-300	-300	-300	-325				
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	351	51	164	32				
Inventory Objective/Current Authorized Allowance	600	600	600	650				
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94	PY thru FY94					
PY-1: 725	PY-1: 0	PY-1: 363	PY-1: 0					
PY-2: 734	PY-2: 0	PY-2: 367	PY-2: 0					
PY-3: 865	PY-3: 0	PY-3:433	PY-3: 0					
REMARKS: PROCUREMENT OF GRE CONNTECTORS REPLACE HIGH FAILURE RATE METAL CONNECTORS								

Exhibit P-20, Requirements Study		Approp Code/BA 21810			Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature CW-1147				Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 36 months		
Project Unit/Item CW-1147		PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004
Buy Summary QTY				30	30				
Unit Cost				\$ 16,191	\$ 7,540				
Total Cost		\$ -	\$ -	\$ 485,730	\$ 226,200				
Asset Dynamics									
Beginning Asset Position		13	4	15	10				
Deliveries from all prior year funding		0	12	0	0				
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from FY 2000 funding									
Deliveries from subsequent years' funding									
Other Gains			8	4					
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage		-9	-9	-9	-10				
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position		4	15	10	0				
Inventory Objective/Current Authorized Allowance		27	27	27	30				
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94		PY thru FY94					
PY-1: 51	PY-1: 0	PY-1: 17		PY-1: 0					
PY-2: 24	PY-2: 0	PY-2: 8		PY-2: 0					
PY-3: 24	PY-3: 0	PY-3: 8		PY-3: 0					
REMARKS: PREVIOUS CONTRACT PRODUCTION LEAD TIME WAS 45 MONTHS.									

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature MK-700			Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 36 months		
Project Unit/Item MK-700	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004
Buy Summary QTY			50	25				
Unit Cost			\$ 45,100	\$ 37,049				
Total Cost	\$ -	\$ -	\$ 2,255,000	\$ 926,225				
Asset Dynamics								
Beginning Asset Position	17	15	70	55				
Deliveries from all prior year funding	0	0	0	0				
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains	20	77	5	0				
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-22	-22	-20	-19				
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	15	70	55	36				
Inventory Objective/Current Authorized Allowance	55	55	50	48				
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94	PY thru FY94					
PY-1: 105	PY-1: 0	PY-1: 35	PY-1: 0					
PY-2: 84	PY-2: 0	PY-2: 28	PY-2: 0					
PY-3: 66	PY-3: 0	PY-3: 22	PY-3: 0					
REMARKS: REPLACES TR-232B. NO CARCASSES AVAIL FOR RESTORATION STARTING FY00.								

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature TR-321()		Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 30 months			
Project Unit/Item TR-321()	PY FY 1997	CY FY 1998	BY1 FY 1999	BY2 FY 2000	BY3 FY 2001	BY4 FY 2002	BY5 FY 2003	BY6 FY2004
Buy Summary QTY			28	56				
Unit Cost			\$ 18,591	\$ 9,964				
Total Cost	\$ -	\$ -	\$ 520,548	\$ 557,984				
Asset Dynamics								
Beginning Asset Position	375	340	294	234				
Deliveries from all prior year funding	0	0	0	0				
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains	54	54	40	30				
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-89	-100	-100	-98				
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	340	294	234	166				
Inventory Objective/Current Authorized Allowance	223	250	250	245				
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94	PY thru FY94					
PY-1: 180	PY-1: 0	PY-1: 72	PY-1: 0					
PY-2: 223	PY-2: 0	PY-2: 89	PY-2: 0					
PY-3: 270	PY-3: 0	PY-3: 108	PY-3: 0					
REMARKS: REPLACES TR-321A/B/C UNITS STARTING IN FY02.								

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature TR-353		Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 36 months			
Project Unit/Item TR-353	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004
Buy Summary QTY		90	374	725				
Unit Cost		\$ 16,258	\$ 3,494	\$ 2,695				
Total Cost	\$ -	\$ 1,463,220	\$ 1,306,756	\$ 1,953,875				
Asset Dynamics								
Beginning Asset Position		0	0	0				
Deliveries from all prior year funding	0	0	0	0				
Deliveries from FY 1998 funding					90			
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains				10				
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	0	100				
Inventory Objective/Current Authorized Allowance	0	0	735	555				
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94	PY thru FY94					
PY-1: 0	PY-1: 0	PY-1: 0	PY-1: 0					
PY-2: 0	PY-2: 0	PY-2: 0	PY-2: 0					
PY-3: 0	PY-3: 0	PY-3: 0	PY-3: 0					
REMARKS: FY 99 AND 00 USAGE WILL BE SUPPORTED THROUGH AN/BSY-2 I&C SPARES. I/O = THREE YRS USAGE PLUS ONE FULL ARRAY.								

Exhibit P-20, Requirements Study		Approp Code/BA 21810			Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature TR-233			Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 30 months			
Project Unit/Item TR-233	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BV2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004	
Buy Summary QTY				33					
Unit Cost				\$ 20,288					
Total Cost	\$ -	\$ -	\$ -	\$ 669,504					
Asset Dynamics									
Beginning Asset Position	109	104	79	60					
Deliveries from all prior year funding	0	0	0	0					
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from FY 2000 funding									
Deliveries from subsequent years' funding									
Other Gains	50	25	30	30					
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage	-55	-50	-49	-48					
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position	104	79	60	42					
Inventory Objective/Current Authorized Allowance	138	125	123	120					
Inventory Objective	Actual Training Expenditures		Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94		PY thru FY94					
PY-1: 185	PY-1: 0	PY-1: 74		PY-1: 0					
PY-2: 175	PY-2: 0	PY-2: 70		PY-2: 0					
PY-3:140	PY-3: 0	PY-3:56		PY-3: 0					
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature TR-302 WINDOW		Admin Leadtime (after Oct 1): 12 months			Prod Lead Time:12 months			
Project Unit/Item TR-302 WINDOW	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004
Buy Summary QTY		10	10	10				
Unit Cost		\$ 547	\$ 552	\$ 569				
Total Cost	\$ -	\$ 5,470	\$ 5,520	\$ 5,690				
Asset Dynamics								
Beginning Asset Position	6	1	4	6				
Deliveries from all prior year funding	0	0	0	0				
Deliveries from FY 1998 funding		10						
Deliveries from FY 1999 funding			10					
Deliveries from FY 2000 funding				10				
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-5	-7	-8	-8				
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	1	4	6	8				
Inventory Objective/Current Authorized Allowance	5	7	8	8				
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)				
PY thru FY 94:	PY thru FY 94:	PY thru FY94		PY thru FY94				
PY-1: 5	PY-1: 0	PY-1: 5		PY-1: 0				
PY-2: 5	PY-2: 0	PY-2: 5		PY-2: 0				
PY-3: 5	PY-3: 0	PY-3: 5		PY-3: 0				
REMARKS:								

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature TR-302 + CABLE		Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 30 months			
Project Unit/Item TR-302 + CABLE	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2	BY3	BY4	BY5
Buy Summary QTY		19	17	20				
Unit Cost		\$ 22,614	\$ 25,326	\$ 26,641				
Total Cost	\$ -	\$ 429,666	\$ 430,542	\$ 532,820				
Asset Dynamics								
Beginning Asset Position	110	135	115	104				
Deliveries from all prior year funding	20	0	0	0				
Deliveries from FY 1998 funding			19					
Deliveries from FY 1999 funding				17				
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains	20	20	10	0				
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-15	-40	-40	-25				
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	135	115	104	96				
Inventory Objective/Current Authorized Allowance	38	100	100	63				
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94	PY thru FY94					
PY-1: 115	PY-1: 0	PY-1:46	PY-1: 0					
PY-2: 118	PY-2: 0	PY-2: 47	PY-2: 0					
PY-3: 108	PY-3: 0	PY-3: 43	PY-3: 0					
REMARKS:								

Exhibit P-20, Requirements Study TR-340		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature			Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 36 months		
Project Unit/Item TR-340	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004
Buy Summary QTY		18	15	22				
Unit Cost		\$ 11,596	\$ 19,764	\$ 37,494				
Total Cost	\$ -	\$ 208,728	\$ 296,460	\$ 824,868				
Asset Dynamics								
Beginning Asset Position	6	3	16	26				
Deliveries from all prior year funding	0	20	20	0				
Deliveries from FY 1998 funding				18				
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains	2	1	0	0				
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-5	-8	-10	-10				
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	3	16	26	34				
Inventory Objective/Current Authorized Allowance	15	24	30	30				
Inventory Objective	Actual Training Expenditures		Other than Training Usage	Disposals (Vehicles/Other)				
PY thru FY 94:	PY thru FY 94:		PY thru FY94	PY thru FY94				
PY-1: 21	PY-1: 0		PY-1: 7	PY-1: 0				
PY-2: 3	PY-2: 0		PY-2: 1	PY-2: 0				
PY-3:18	PY-3: 0		PY-3: 6	PY-3: 0				
REMARKS:								

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature DT-513()			Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 30 months		
Project Unit/Item DT-513()	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004
Buy Summary QTY			130	150				
Unit Cost			\$ 2,342	\$ 727				
Total Cost	\$ -	\$ -	\$ 304,460	\$ 109,050				
Asset Dynamics								
Beginning Asset Position	617	457	301	291				
Deliveries from all prior year funding	0	0	131	0				
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-160	-156	-141	-141				
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	457	301	291	150				
Inventory Objective/Current Authorized Allowance	400	390	353	353				
Inventory Objective	Actual Training Expenditures		Other than Training Usage	Disposals (Vehicles/Other)				
PY thru FY 94:	PY thru FY 94:		PY thru FY94		PY thru FY94			
PY-1: 425	PY-1: 0		PY-1: 170		PY-1: 0			
PY-2: 450	PY-2: 0		PY-2: 180		PY-2: 0			
PY-3:465	PY-3: 0		PY-3:190		PY-3: 0			
REMARKS: Replaces DT-513B w/150' Cable and DT-513B w/250' cable.								

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature TR-339		Admin Leadtime (after Oct 1): 12 months				Prod Lead Time: 36 months		
Project Unit/Item TR-339	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004
Buy Summary QTY		18	15	22				
Unit Cost		\$ 11,596	\$ 19,764	\$ 37,494				
Total Cost	\$ -	\$ 208,728	\$ 296,460	\$ 824,868				
Asset Dynamics								
Beginning Asset Position	5	3	14	21				
Deliveries from all prior year funding		18	17	0				
Deliveries from FY 1998 funding				18				
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains	3	1	0	0				
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-5	-8	-10	-10				
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	3	14	21	29				
Inventory Objective/Current Authorized Allowance	15	24	30	30				
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94	PY thru FY94					
PY-1: 12	PY-1: 0	PY-1: 4	PY-1: 0					
PY-2: 9	PY-2: 0	PY-2: 3	PY-2: 0					
PY-3:15	PY-3: 0	PY-3: 5	PY-3: 0					
REMARKS:								

Exhibit P-20, Requirements Study		Approp Code/BA 21810			Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature MX-10624/A				Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 30 months		
Project Unit/Item MX-10624/A	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004	
Buy Summary QTY				23					
Unit Cost				\$ 12,721					
Total Cost	\$ -	\$ -	\$ -	\$ 292,583					
Asset Dynamics									
Beginning Asset Position	50	42	34	26					
Deliveries from all prior year funding	0	0	0	0					
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from FY 2000 funding									
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage	-8	-8	-8	-8					
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position	42	34	26	18					
Inventory Objective/Current Authorized Allowance	20	20	20	20					
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94		PY thru FY94					
PY-1:20	PY-1: 0	PY-1: 8		PY-1: 0					
PY-2: 22	PY-2: 0	PY-2: 9		PY-2: 0					
PY-3:22	PY-3: 0	PY-3:9		PY-3: 0					
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature DT-633		Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 36 months			
Project Unit/Item DT-633	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2	BY3	BY4	BY5
Buy Summary QTY				73				
Unit Cost				\$ 11,497				
Total Cost	\$ -	\$ -	\$ -	\$ 839,281				
Asset Dynamics								
Beginning Asset Position	110	99	76	136				
Deliveries from all prior year funding	0	16	96	138				
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains			50	20				
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-11	-39	-86	-80				
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	99	76	136	214				
Inventory Objective/Current Authorized Allowance	33	117	258	240				
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94	PY thru FY94					
PY-1: 60	PY-1: 0	PY-1: 20	PY-1: 0					
PY-2: 24	PY-2: 0	PY-2: 8	PY-2: 0					
PY-3: 72	PY-3: 0	PY-3: 24	PY-3: 0					
REMARKS:								

Exhibit P-20, Requirements Study		Approp Code/BA 21810			Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature CW-1181B/C				Admin Leadtime (after Oct 1): 12 months			Prod Lead Time: 30 months		
Project Unit/Item CW-1181B/C	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004	
Buy Summary QTY			26	25					
Unit Cost			\$ 45,549	\$ 19,119					
Total Cost	\$ -	\$ -	\$ 1,184,274	\$ 477,975					
Asset Dynamics									
Beginning Asset Position	22	15	8	1					
Deliveries from all prior year funding	0	0	0	0					
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding				13					
Deliveries from FY 2000 funding									
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage				-3					
Other Losses/Usage	-7	-7	-7	-8					
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position	15	8	1	3					
Inventory Objective/Current Authorized Allowance	18	18	18	20					
Inventory Objective	Actual Training Expenditures		Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94		PY thru FY94					
PY-1: 18	PY-1: 0	PY-1: 7		PY-1: 0					
PY-2: 18	PY-2: 0	PY-2: 7		PY-2: 0					
PY-3: 18	PY-3: 0	PY-3: 7		PY-3: 0					
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA 21810		Subhead 82PU		Date: FEBRUARY 1999		
P-1 Line Item Nomenclature DT-592		Admin Leadtime (after Oct 1): 12 months				Prod Lead Time: 30 months		
Project Unit/Item DT-592	PY FY 1997	PY FY 1998	CY FY 1999	BY1 FY 2000	BY2 FY 2001	BY3 FY 2002	BY4 FY 2003	BY5 FY2004
Buy Summary QTY	52	30	47					
Unit Cost	\$ 15,676	\$ 12,620	\$ 13,474					
Total Cost	\$ 815,152	\$ 378,600	\$ 633,278	\$ -				
Asset Dynamics								
Beginning Asset Position	40	50	44	44				
Deliveries from all prior year funding				52				
Deliveries from FY 1998 funding								
Deliveries from FY 1999 funding								
Deliveries from FY 2000 funding								
Deliveries from subsequent years' funding								
Other Gains	40	39	42	15				
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage					-2			
Other Losses/Usage	-30	-45	-42	-40				
Disposals/Retirements/Attritions/etc.	-2							
End of Year Asset Position	50	44	44	69				
Inventory Objective/Current Authorized Allowance	75	113	105	100				
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
PY thru FY 94:	PY thru FY 94:	PY thru FY94	PY thru FY94	PY thru FY94				
PY-1: 145	PY-1: 0	PY-1: 58	PY-1: 0	PY-1: 0				
PY-2: 128	PY-2: 0	PY-2: 51	PY-2: 0	PY-2: 0				
PY-3: 128	PY-3: 0	PY-3: 51	PY-3: 0	PY-3: 0				
REMARKS:								

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET							DATE: February 1999					
P-40												
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							P-1 ITEM NOMENCLATURE/LINE ITEM # SUBMARINE ACOUSTIC WARFARE SYSTEM (SAWS)/C2WM					
Program Element for Code B Items: 0101226N							OTHER RELATED PROGRAM ELEMENTS BLI: 221000					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY	NA	NA										0
EQUIPMENT COST (In Millions)	NA	B	\$3.5	\$7.3	\$11.2	\$10.4	\$13.7	\$21.2	\$30.5	\$33.3		\$131.2
SPARES COST (In Millions)	NA	NA										\$0.0
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>The Submarine Acoustic Warfare System (SAWS) provides submarines with an enhanced capability against guided and unguided torpedoes and the means to reduce the effectiveness of enemy sensors. This program provides ongoing production of countermeasure devices needed to sustain fleet inventories, production of preplanned improvements to enhance the readiness and effectiveness of acoustic intercept receivers and processors, and production of countermeasure devices and associated countermeasure launcher systems.</p> <p>The FY98 funds were used for the AN/WLR-9 Engineering Changes, Gas Generator MK 77 Engineering Change and associated production support.</p> <p>The FY99 funds are required to procure the ADC MK 3 (and associated launch tubes), ADC MK 2, AN/WLR-9 Engineering Changes, GG MK 77 for 6" Countermeasures, GG MK 77 Engineering Change, and associated production support.</p> <p>The FY00 funds are required to procure 6" Countermeasures(ADC MK 3 and ADC MK 4 with associated launch tubes), ADC MK2, CSA MK 2 Mod 1 Countermeasure Launchers, AN/WLY-1, GG MK 77 for 6" Countermeasures and GG MK 77 Engineering Changes, and associated production support.</p> <p>This budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY98 and out.</p> <p>:</p>												

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WEAPONS SYSTEM COST ANALYSIS P-5								Weapon System			DATE: February 1999			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-(2): Communication and Electronic Equipment - ASW						ID Code B	P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE ACOUSTIC WARFARE SYSTEM (SAWS)/C2WM							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
WM014	6" COUNTERMEASURE DEVICES ADC MK 3 MOD 0 (TORPEDO)	A				79	\$25.730	\$2,033	141	\$26.143	\$3,686			
	ADC MK 4 (SONAR)					79	\$25.730	\$2,033	82	\$26.143	\$2,144			
WM014	6" COUNTERMEASURE NON RECURRING							\$618	59	\$26.143	\$1,542			
											\$627			
WM014	6" COUNTERMEASURE LAUNCH TUBES	A				79	\$2.977	\$235	141	\$3.025	\$427			
WM015	ADC MK 2 MOD 1	A				175	\$4.242	\$742	150	4.310	\$647			
WM017	AN/WLR-9 ENGINEERING CHANGE	A	11	\$115.343	\$1,269	10	\$117.072	\$1,171						
WM019	CSA MK 2 MOD 1 (SSN 688 CLASS)	A							2	\$302.117	\$604			
WM021	AN/WLY-1 HARDWARE	B							2	\$1,291.225	\$2,582			
WM021	AN/WLY-1 NON RECURRING													
WM5IN	AN/WLY-1 INSTALLATION													
WM022	GAS GENERATOR MK 77	A				79	\$2.962	\$234	140	\$3.010	\$421			
WM022	GAS GENERATOR MK 77 ECP				\$300			\$375			\$200			
WM830	PRODUCTION ENGINEERING				\$1,353			\$1,193			\$1,308			
WM900	CONSULTING SERVICES				\$617			\$695			\$700			
NOTE: NON RECURRING WM014 FIRST ARTICLE COST. WM020 COMBINED WITH WM014 FOR 6" COUNTERMEASURE PROCUREMENT.														
TOTAL					3,539			7,296			11,202			0

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P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 50

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UNCLASSIFIED

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy					C. P-1 ITEM NOMENCLATURE SUBMARINE ACOUSTIC WARFARE SYSTEM					February 1999	
										SUBHEAD	
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 AN/WLR-9(B) EC - WM017	11	115.343	NUWC DIVNPT		WR	NUWC, NEWPORT, RI	1/98	1/99	YES	N/A	
FY99 6" COUNTERMEASURES - WM014	79	25.730	NAVSEA	7/98	CM4/FFP	UNKNOWN	6/99	6/00	NO	3/99	
LAUNCH TUBES - WM014	79	2.977	NSWC/C		WX	NRAD, SAN DIEGO, CA	1/99	7/99	YES	N/A	
ADC MK 2 MOD 1 - WM015	175	4.242	NAVSEA	9/98	CM4/FFP	UNKNOWN	6/99	6/00	NO	3/99	
AN/WLR-9(B) EC - WM017	10	117.072	NUWC DIVNPT		WX	NUWC, NEWPORT, RI	1/99	1/00	YES	N/A	
GG MK 77 - WM022	79	2.962	NSWC/C	1/99	CM4/FFP	UNKNOWN	6/99	6/00	YES	N/A	
FY00 6" COUNTERMEASURES - WM014	141	26.143	NAVSEA		OPTION	UNKNOWN	1/00	1/01	NO	3/99	
LAUNCH TUBES - WM014	141	3.025	NSWC/C		WX	NRAD, SAN DIEGO, CA	1/00	7/00	YES	N/A	
ADC MK 2 MOD 1 - WM015	150	4.310	NAVSEA		OPTION	UNKNOWN	1/00	1/01	NO	3/99	
CSA MK 2 MOD 1 - WM019	2	302.117	NAVSEA	7/99	CM4/FFP	UNKNOWN	6/00	6/01	NO	7/99	
AN/WLY-1 - WM021	2	1,291.225	NAVSEA		OPTION	NORDEN, MELVILLE, NY	1/00	1/01	YES	N/A	
GG MK 77 - WM022	140	3.010	NSWC/C		WX	UNKNOWN	1/00	1/01	YES	N/A	
										7/98	
										N/A	
										7/98	
										7/99	
										7/00	
										N/A	
D. REMARKS											

CLASSIFICATION:

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P3A INDIVIDUAL MODIFICATION																																	
MODELS OF SYSTEM AFFECTED: <u>CSA MK 2 SYSTEM</u>				TYPE MODIFICATION: <u>AIT</u>								MODIFICATION TYPE:																					
DESCRIPTION/JUSTIFICATION:																																	
Installation of the CSA MK 2.																																	
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: IN DEVELOPMENT																																	
	FY 1998 & Prior		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	\$	\$														
<u>FINANCIAL PLAN (IN MILLIONS)</u>																																	
<u>RDT&E</u>																			0.0														
<u>PROCUREMENT</u>																			0.0														
INSTALLATION KITS																			0.0														
INSTALLATION KITS NONRECURRING																			0.0														
EQUIPMENT																			2	0.6	2	0.6	3	0.9	4	1.3	9	2.9	10	3.3	0	0	9.6
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																			2	0.15	2	0.15	3	0.23	3	0.23	7	0.53	8	0.60	1.9		
TOTAL PROCUREMENT																			0.0	0.0	0.6	0.75	1.05	1.53	3.13	3.83	0.60	11.5					

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P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CSA MK 2 SYSTEM MODIFICATION TITLE: AIT

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: _____

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: _____

FY 1998: _____

FY 1999: _____

DELIVERY DATE: FY 1997: _____

FY 1998: _____

FY 1999: _____

(\$ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	\$	
PRIOR YEARS																						0.0
FY 1999 EQUIPMENT																						0.0
FY 2000 EQUIPMENT									2	0.15												0.15
FY 2001 EQUIPMENT											2	0.15										0.15
FY 2002 EQUIPMENT													3	0.23								0.23
FY 2003 EQUIPMENT															3	0.23						0.23
FY 2004 EQUIPMENT																	7	0.53				0.53
FY 2005 EQUIPMENT																					8	0.60
TO COMPLETE																						0.60

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1999 & Prior	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	1	1	1	0	1	0	1	1	0	1	1	1	1	0	2	2	2	1	8	25
Out	0	0	0	0	0	0	0	1	1	1	0	1	0	1	1	0	1	1	1	1	0	2	2	2	1	8	25

NOTE: 5 Systems are procured as Landbased units and DO NOT require installation.
CSA MK 2 OPN MARKET is 30 UNITS.

CLASSIFICATION:

UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/WLY-1 SYSTEM TYPE MODIFICATION: AIT MODIFICATION TYPE: _____

DESCRIPTION/JUSTIFICATION:

Installation of the AN/WLY-1 Acoustic Threat Intercept System including Multi-Function Controller (MFC).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: IN DEVELOPMENT

FINANCIAL PLAN (IN MILLIONS)	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC	TOTAL	TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	\$	\$	\$	
<u>RDT&E</u>																				0.0
<u>PROCUREMENT</u>																				0.0
INSTALLATION KITS																				0.0
INSTALLATION KITS NONRECURRING																				0.0
EQUIPMENT					2	2.6	2	2.6	3	4.0	4	5.4	10	13.8	10	14.2	0	0.0	31	42.6
EQUIPMENT NONRECURRING								0.7												0.7
ENGINEERING CHANGE ORDERS																				0.0
DATA																				0.0
TRAINING EQUIPMENT																				0.0
SUPPORT EQUIPMENT																				0.0
OTHER																				0.0
OTHER																				0.0
OTHER																				0.0
INTERIM CONTRACTOR SUPPORT																				0.0
INSTALL COST							2	0.73	2	0.74	3	1.10	3	1.10	8	3.1	8	3.1		9.9
TOTAL PROCUREMENT		0.0		0.0		2.6		4.0		4.7		6.5		14.9		17.3		3.1	26	53.2

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UNCLASSIFIED

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

MODELS OF SYSTEMS AFFECTED: ANWLY-1 SYSTEM MODIFICATION TITLE: AIT

INSTALLATION INFORMATION: _____
 METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: _____ PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: _____ FY 1998: _____ FY 1999: _____
 DELIVERY DATE: FY 1997: _____ FY 1998: _____ FY 1999: _____

(\$ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	\$	
PRIOR YEARS																						0.0
FY 1999 EQUIPMENT																						0.0
FY 2000 EQUIPMENT									2	0.73												0.7
FY 2001 EQUIPMENT											2	0.74										0.0
FY 2002 EQUIPMENT													3	1.1								0.0
FY 2003 EQUIPMENT															3	1.1						1.1
FY 2004 EQUIPMENT																	8	3.1				3.1
FY 2005 EQUIPMENT																				8	3.1	3.1
TO COMPLETE																						8.0

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1999 & Prior	FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	1	1	1	0	1	0	1	1	0	1	1	1	1	0	2	2	2	2	8	26
Out	0	0	0	0	0	0	0	1	1	1	0	1	0	1	1	0	1	1	1	1	0	2	2	2	2	8	26

NOTE: 5 Systems are procured as Landbase units and do not require installation.

CLASSIFICATION:

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FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-2'					DATE		February 1999			
APPROPRIATION/BUDGET ACTIVITY					Weapon System		P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY							SUBMARINE ACOUSTIC WARFARE SYSTEM/C2WM			
Item	Manufacturer's Name and Location	Production Rate			Procurement Leadtimes				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		
6" COUNTERMEASURES	UNKNOWN	10	200	200						
LAUNCH TUBES	NSWC,CRANE,INDIANA	50	400	400						
ADC MK 2	UNKNOWN	10								
GG MK 77	UNKNOWN	10								

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 1998												FISCAL YEAR 1999												B A L
						1997						CALENDAR YEAR 1998						CALENDAR YEAR 1999												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
6" COUNTERMEASURE DEVICES																														
UNKNOWN	99		79	0	79																							79		
UNKNOWN	00		141	0	141																							141		
UNKNOWN	01		90	0	90																							90		
LAUNCH TUBES/NSWC CRANE																														
NRAD, SAN DIEGO, CA	99		79	0	79																							0		
NRAD, SAN DIEGO, CA	00		141	0	141																							141		
NRAD, SAN DIEGO, CA	01		90	0	90																							90		
ADC MK 2 MOD 1																														
UNKNOWN	99		175	0	175																							175		
UNKNOWN	00		150	0	150																							150		
UNKNOWN	01		150	0	150																							150		
GG MK77																														
UNKNOWN	99		79	0	79																							79		
UNKNOWN	00		140	0	140																							140		
UNKNOWN	01		90	0	90																							90		

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2000												FISCAL YEAR 2001												B A L
						1999						CALENDAR YEAR 2000						CALENDAR YEAR 2001												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
6" COUNTERMEASURE DEVICES																														
UNKNOWN	99		79	0	79																							0		
UNKNOWN	00		141	0	141																							31		
UNKNOWN	01		90	0	90																							90		
LAUNCH TUBES/NSWC CRANE																														
NRAD, SAN DIEGO, CA	99		79	79	0																							0		
NRAD, SAN DIEGO, CA	00		141	0	141																							0		
NRAD, SAN DIEGO, CA	01		90	0	90																							0		
ADC MK 2 MOD 1																														
UNKNOWN	99		175	0	175																							0		
UNKNOWN	00		150	0	150																							30		
UNKNOWN	01		150	0	150																							150		
GG MK77																														
UNKNOWN	99		79	0	79																							0		
UNKNOWN	00		140	0	140																							30		
UNKNOWN	01		90	0	90																							90		

Remarks:

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE/LINE ITEM # <i>SSTD (2213)</i>					
Program Element for Code B Items: N/A							OTHER RELATED PROGRAM 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			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST (In Millions)			\$0.5	\$0.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3
SPARES COST (In Millions)												
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>Starting with the FY 2000 budget, this program was consolidated into the Undersea Warfare Support Equipment line - 217600.</p>												

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE/LINE ITEM # <i>Acoustic Communications - 221500</i>					
Program Element for Code B Items: N/A							OTHER RELATED PROGRAM 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			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST (In Millions)			\$0.4	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.8
SPARES COST (In Millions)												
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>Starting with the FY 2000 budget, this program was consolidated into the Undersea Warfare Support Equipment line - 217600.</p>												

										DATE	
										February 1999	
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE BLI 2225			SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							FIXED SURVEILLANCE SYSTEMS (FSS)			52WQ	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$13.5	\$9.5	\$16.7	\$34.4	\$35.5	\$64.5	\$54.1	\$52.0	Continuing	Continuing

The Fixed Surveillance System (FSS) program is a major portion of the Integrated Undersea Surveillance System (IUSS). FSS consists of fixed deep water arrays connected to shore processing sites, called Naval Ocean Processing Facilities, by over 30,000 nautical miles of undersea cable. The system supports Fleet Commands and tactical forces by detecting, tracking, and reporting information on submarines, surface ships and aircraft over the oceans. In addition to this primary mission the system is also used for other surveillance and research efforts such as: long term oceanographic studies, undersea geological observation, mammal research, fishery regulation, environmental research and drug interdiction. The objectives of the current program are:

- a. To reduce system operations and maintenance costs by upgrading the current shore processing with improved NDI electronics at all active sites.
- b. To retain the capability to both maintain and install undersea surveillance systems.
- c. To improve tactical communications with the Fleet. Improved communications using standard Navy equipment will decrease reporting time and reduce the maintenance requirements.

The program includes the following major elements:

- a. Ship Improvement: Procurement of mission equipment to improve operational readiness for IUSS cable ship.
- b. Cable Upgrade/Engineering: FY97 through FY99 continued procurement of fiber optic cable and associated engineering and loading to upgrade current systems in operational status.
- c. Shore Electronics: ASWC4I procurements to provide upgraded capabilities and interoperability.
- d. Special Projects: Hardware procurements in accordance with international agreements.
- e. Shore Processing: Procurement of improved shore processing equipment.
- f. Procurement of FDSC and FDS extension hardware.

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	FIXED SURVEILLANCE SYSTEMS (FSS)	52WQ
<p>The FY99 through FY05 program procures upgraded ship electronics, handling, tracking and repair equipment and procures Communications and ASWC4I systems to support IUSS requirements to ensure current operational and tactical information availability and to maintain communications connectivity. FSS maintains cooperative agreements with foreign countries. The FDS-C and FDS-1 Extension are two such projects. The details of these special projects agreements are of a higher classification. FSS is starting development of an IUSS Processor intended to be the single Shore Processing Segment (SPS) for legacy and future Underwater Systems (UWS). Procurement funds in FY05 will begin upgrade of IUSS sites.</p> <p>JUSTIFICATION OF BUDGET YEAR: NDCP #78 of Jan 80, CNO ltr Ser 242/2S587554 of 4 Jan 92, CNO ltr Ser 02B/2S587552 of 9 Jun 92 and CNO msg 281420Z Dec 93.</p> <p>INSTALLING AGENTS: General Dynamics, Greensboro, NC; Lockheed/Martin, Manassas,VA; SSC Charleston, Charleston,SC and MSC, Washington, D.C.</p>		

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COST ANALYSIS														DATE February 1999		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE FIXED SURVEILLANCE SYSTEMS (FSS)							SUBHEAD 52WQ		
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			PY		FY97			FY 1998			FY 1999			FY 2000		
			QTY	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
WQ002	SHIP EQUIPMENT / CABLE UPGRADE							VAR	N/A	1,933	VAR	N/A	5,781	VAR	N/A	5,750
WQ004	SHORE ELECTRONICS							VAR	N/A	197	VAR	N/A	871	VAR	N/A	300
WQ006	SPECIAL PROJECTS															
WQ009	SHORE PROCESSING SYSTEM							VAR	N/A	1,892	VAR	N/A	2,201			
WQ010	FIXED DISTRIBUTED SYSTEM													VAR	N/A	10,280
WQ776	INSTALLATION OF EQUIPMENT							VAR	N/A	9,518	VAR	N/A	660	VAR	N/A	344
	TOTAL CONTROL									13,540			9,513			16,674

Remarks:
1) Quantities under WQ002 reflect procurement of cable by lots. 2) Unit cost differentials are due to procurement of various types of equipment to upgrade IUSS sites and USNS ZEUS.

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						FIXED SURVEILLANCE SYSTEMS (FSS)					52WQ	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
WQ002	SHIP EQUIPMENT / CABLE UPGRADE	99	ALCATEL	OPTION	SPAWAR - SD	N/A	Nov-98	Dec-99	2	1,516	YES	
WQ002	SHIP EQUIPMENT / CABLE UPGRADE	99	MSC MIDLANT	WX	WASH. DC	N/A	Mar-99	Dec-99	1	1,899	YES	
		00	MSC MIDLANT	WX	WASH. DC	N/A	Mar-00	Dec-01	1	5,750	NO	Jul-99
WQ004	SHORE ELECTRONICS	99	SSC CHARS	WX	CHARLS SC	N/A	Mar-99	Jun-99	3	290	YES	
		00	SSC CHARS	WX	CHARLS SC	N/A	Mar-00	Jun-00	3	100	NO	Jul-99

D. REMARKS

Note 1: WQ006 funds "shared cost" special projects under restricted access International Agreements. Costs reflect U.S. portion.

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
B. APPROPRIATION/BUDGET ACTIVITY											SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE				52WQ		
						FIXED SURVEILLANCE SYSTEMS (FSS)						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
WQ009	SHORE PROCESSING SYSTEM	99	SSC CHARS	WX	CHARLS SC	N/A	Jan-99	Jul-99	3	734	YES	
WQ010	FIXED DISTRIBUTED SYSTEM	00	TBD	OPTION	SPAWAR SD	N/A	Oct-99	Oct-00	1	10,558	NO	Feb-99
D. REMARKS												
NOTE: WQ010: FDS-C is a cooperative shared cost program with a foreign country. FDS-C is currently in Phase I (RDT&E). A FFP contract will be awarded as Phase II to one of the two competitors of Phase I. The planned award date of Phase II is Mar 1999. Costs reflect U.S. portion.												

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P-1 SHOPPING LIST

Exhibit P-5A

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MODIFICATION TITLE: SHIP EQUIPMENT / CABLE UPGRADE
 COST CODE: WQ002
 MODELS OF SYSTEMS AFFECTED: FIXED SURVEILLANCE SYSTEMS
 DESCRIPTION/JUSTIFICATION: MISSION EQUIPMENT CONSISTS OF CABLE, CABLE MACHINERY, ACOUSTIC SOURCE ELECTRONICS, BATHYMETRIC SYSTEM, TRANSMISSIONS TEST SETS AND SLICING EQUIPMENT TO IMPROVE OPERATIONAL READINESS FOR THE IUSS PROJECT SHIP.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	6	3.9	0	0.0	1	1.0	1	1.9	1	5.8	1	2.1	1	5.3	1	4.4	0	0.0	0	0.0			12	24.4
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	4	1.2	2	1.6	0	0.0	1	0.5	1	0.3	0	0.0	3	1.7	0	0.0	1	0.7	0	0.0	0	0.0	12	6.0
PRIOR YR EQUIP	4	1.2	1	1.3																			5	2.5
FY 95 EQUIP																							0	0.0
FY 96 EQUIP																							0	0.0
FY 97 EQUIP			1	0.3																			1	0.3
FY 98 EQUIP							1	0.5															1	0.5
FY 99 EQUIP									1	0.3													1	0.3
FY 00 EQUIP													1	0.7									1	0.7
FY 01 EQUIP													1	0.4									1	0.4
FY 02 EQUIP													1	0.6									1	0.6
FY 03 EQUIP																	1	0.7					1	0.7
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		1.2		1.6		0.0		0.5		0.3		0.0		1.7		0.0		0.7		0.0		0.0		6.0
TOTAL PROCUREMENT COST		5.1		1.6		1.0		2.4		6.1		2.1		7.0		4.4		0.7		0.0		0.0		30.4

ADMINISTRATIVE LEADTIME: 6 PROCUREMENT LEADTIME: 9

CONTRACT DATES: FY 1998: Jun-98 FY 1999: Mar-99 FY 2000: Mar-00

DELIVERY DATES: FY 1998: Dec-98 FY 1999: Dec-99 FY 2000: Dec-00

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

INPUT 6 1 1

OUTPUT 6 1 1

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

INPUT 3 1 12

OUTPUT 3 1 12

Notes/Comments

MODIFICATION TITLE: SHORE ELECTRONICS
 COST CODE: WQ004
 MODELS OF SYSTEMS AFFECTED: FIXED SURVEILLANCE SYSTEMS
 DESCRIPTION/JUSTIFICATION: PROCURE COMMUNICATIONS AND ASWC4I SYSTEMS TO SUPPORT IUSS REQUIREMENTS TO ENSURE CURRENT OPERATIONAL AND TACTICAL INFORMATION AVAILABILITY AND TO MAINTAIN COMMUNICATIONS CONNECTIVITY.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	1	0.3	3	0.2	0	0.0	3	0.2	6	0.4	6	0.6	6	0.6	6	1.0	6	1.0	37	4.3	
PRIOR YR EQUIP																							0	0.0	
FY 95 EQUIP																							0	0.0	
FY 96 EQUIP																							0	0.0	
FY 97 EQUIP					1	0.3																	1	0.3	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP							3	0.2															3	0.2	
FY 00 EQUIP											3	0.2											3	0.2	
FY 01 EQUIP													6	0.4									6	0.4	
FY 02 EQUIP															6	0.6							6	0.6	
FY 03 EQUIP																	6	0.6					6	0.6	
FY TC EQUIP																			6	1.0			6	1.0	
TOTAL INSTALLATION COST		0.0		0.0		0.3		0.2		0.0		0.2		0.4		0.6		0.6		1.0		1.0		4.3	
TOTAL PROCUREMENT COST		0.0		2.9		0.3		1.1		0.3		2.6		4.1		3.5		4.7		4.1		1.0		24.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 6 PROCUREMENT LEADTIME: 3

CONTRACT DATES: FY 1998: N/A FY 1999: Mar-99 FY 2000: Mar-00

DELIVERY DATES: FY 1998: N/A FY 1999: Jun-99 FY 2000: Jun-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	1			3							3																				
OUTPUT	1				3						3																				
INPUT		3	3			3	3			3			3			3			3				3			6		37			
OUTPUT		3	3			3	3			3			3			3			3				3			6		37			

Notes/Comments
 Note 1: WQ004 funds "shared cost" special projects under restricted access International Agreements. Costs reflect U.S. portion.

MODIFICATION TITLE: SPECIAL PROJECTS
 COST CODE: WQ006
 MODELS OF SYSTEMS AFFECTED: FIXED SURVEILLANCE SYSTEM
 DESCRIPTION/JUSTIFICATION: FIXED SURVEILLANCE SYSTEMS MAINTAINS COOPERATIVE AGREEMENTS WITH FOREIGN COUNTRIES. THESE AGREEMENTS ARE OF A HIGHER CLASSIFICATION.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	3	22.0																					3	22.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	2	8.5	1	2.1	1	1.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	12.2	
PRIOR YR EQUIP	2	8.5																					2	8.5	
FY 95 EQUIP																							0	0.0	
FY 96 EQUIP			1	2.1																			1	2.1	
FY 97 EQUIP					1	1.6																	1	1.6	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		8.5		2.1		1.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		12.2	
TOTAL PROCUREMENT COST		30.5		2.1		1.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		34.2	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES: FY 1998: N/A FY 1999: N/A FY 2000: N/A

DELIVERY DATES: FY 1998: N/A FY 1999: N/A FY 2000: N/A

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 99 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4

INPUT 3

OUTPUT 4

INSTALLATION SCHEDULE: 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 FY 04 1 2 3 4 FY 05 1 2 3 4 TC TOTAL

INPUT 3

OUTPUT 4

Notes/Comments
 GW006 FUNDS "SHARED COSTS" SPECIAL PROJECTS UNDER RESTRICTED ACCESS INTERNATIONAL AGREEMENTS.
 FY97: HOST COUNTRY FUNDED PROCUREMENT OF EQUIPMENT, U.S. FUNDED INSTALLATION.

MODIFICATION TITLE: SHORE PROCESSING SYSTEMS
 COST CODE: WQ009
 MODELS OF SYSTEMS AFFECTED: FIXED SURVEILLANCE SYSTEMS
 DESCRIPTION/JUSTIFICATION: PROCURE SHORE PROCESSING SEGMENT (SPS) FOR LEGACY AND FUTURE UNDERWATER SYSTEMS (UWS).

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	6	12.8	5	2.3															3	28.1			14	43.2	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	4	6.8	6	4.0	1	7.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.0	0	0.0	14	18.4	
PRIOR YR EQUIP	4	6.8																					4	6.8	
FY 95 EQUIP																							0	0.0	
FY 96 EQUIP			2	3.6																			2	3.6	
FY 97 EQUIP			4	0.4	1	7.6																	5	8.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY TC EQUIP																				3	0.0		3	0.0	
TOTAL INSTALLATION COST		6.8		4.0		7.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		18.4	
TOTAL PROCUREMENT COST		19.6		6.3		7.6		0.0		0.0		0.0		0.0		0.0		0.0		28.1		0.0		61.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 PROCUREMENT LEADTIME: 6

CONTRACT DATES: FY 1998: N/A FY 1999: Jan-99 FY 2000: N/A

DELIVERY DATES: FY 1998: N/A FY 1999: Jul-99 FY 2000: N/A

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	11												
OUTPUT	10			1									

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT															3			
OUTPUT																	3	

Notes/Comments

Procurement of hardware in FY 05 for the IUSS Processor will be procured as turnkey. Hardware procurement and installation will be awarded on same contract.

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February 99

MODIFICATION TITLE: FIXED DISTRIBUTED SYSTEMS
COST CODE: WQ010
MODELS OF SYSTEMS AFFECTED: FIXED SURVEILLANCE SYSTEMS
DESCRIPTION/JUSTIFICATION: PROCURES NEW FDS-C SYSTEM. PROVIDES NEW LOW COST COTS/NDI VARIANT OF FDS. FUNDING IN FY 00, 01 AND 02 IS A SHARED COST PROJECT WITH A FOREIGN COUNTRY.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

Table with columns for years FY 97-05, TC, and Total. Rows include RDT&E, PROCUREMENT (Kit Quantity, Installation Kits, Equipment, etc.), and TOTAL INSTALLATION/PROCUREMENT COST.

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: PROCUREMENT LEADTIME:

CONTRACT DATES: FY 1998: N/A, FY 1999: N/A, FY 2000: Oct-00

DELIVERY DATES: FY 1998: N/A, FY 1999: N/A, FY 2000: Oct-01

INSTALLATION SCHEDULE table for FY 99, FY 00, and FY 01 with columns 1-4.

INPUT 0
OUTPUT 0

INSTALLATION SCHEDULE table for FY 02, FY 03, FY 04, FY 05, TC, and TOTAL with columns 1-4.

INPUT 1 3
OUTPUT 1 3

Notes/Comments
FUNDS IN FY 00, FY 01 AND FY 02
PROCURES SUBSYSTEMS FOR THE FDS-C
PROJECT WHICH IS COST SHARED
WITH A HOST COUNTRY. THE HOST
COUNTRY WILL FUND THE
INSTALLATION COST ASSOCIATED
WITH THE U.S. PROCUREMENTS. THE
U.S. INSTALLATION FUNDS WILL

FUNDS IN FY 02 AND FY 03 PROCURES
THE FDS-1 PROJECT WHICH IS BEING
PROCURED AS TWO (FY 02/FY 03)
SUBSYSTEMS. INSTALLATION FUNDS IN
FY 03 WILL INSTALL BOTH SUBSYSTEMS.

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COST CODE		ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	PRODUCTION SCHEDULE																																				DATE	
					(DOD EXHIBIT P-21A)																																				February 1999	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE																		SUBHEAD NO.																			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					FIXED SURVEILLANCE SYSTEMS (FSS)																		52WQ																			
		FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03												L A T E R				
		CY00			CALENDAR YEAR 01									CALENDAR YEAR 02									CALENDAR YEAR 03																			
		O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S					
		C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E					
		T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P					
WQ002	CABLE / ALCATEL	99		0																																	0					
WQ002	SHIP EQUIPMENT / MSC MIDLANT	98		0																																	0					
	SHIP EQUIPMENT / MSC MIDLANT	99		0																																	0					
	SHIP EQUIPMENT / MSC MIDLANT	00	1		1																																0					
WQ004	FRONT END / GENERAL DYNAMICS	97		0																																	0					
		98		0																																	0					
	COMMS/ASWC41 EQUIPMENT	99		0																																	0					
	COMMS/ASWC41 EQUIPMENT	00		0																																	0					
WQ006	FRONT END / GENERAL DYNAMICS	97	#VALUE!																																		###					
			0																																		0					
																																					0					
																																					0					
																																					0					

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

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PRODUCTION SCHEDULE				DATE																																				
				February 1999																																				
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE		SUBHEAD NO.																																				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		FIXED SURVEILLANCE SYSTEMS (FSS)		52WQ																																				
COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03												L A T E R
				CALENDAR YEAR 01												CALENDAR YEAR 02												CALENDAR YEAR 03												
				O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
WQ009	SHORE PROCESSING / LOCKHEED	97	0																																			0		
	SHORE PROCESSING / GSA	99	0																																		0			
WQ010	FIXED DISTRIBUTED SYSTEM / TBD	00	1																																		1			
																																					0			
																																					0			
																																					0			
																																					0			
																																					0			
																																					0			
																																					0			
																																					0			
																																					0			
																																					0			

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE BLI 2237 Surveillance Towed Array Sensor (SURTASS)			SUBHEAD 52VG	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$4.6	\$12.7	\$7.3	\$5.6	\$17.5	\$9.6	\$19.7	\$24.7	Continuing	Continuing
<p>PROGRAM COVERAGE: Surveillance Towed Array Sensor System (SURTASS) is a mobile, tactical arm of the Navy's undersea surveillance capability that provides long-range acoustic detection and cueing for tactical weapons platforms against both diesel and nuclear submarines. Dedicated T-AGOS ships towing long acoustic arrays relay acoustic data via satellite to shore facilities for processing. There are three configurations of T-AGOS ships with differing capabilities as follows: (1). T-AGOS monohull ships, SCN funded FY79 to FY87, are currently equipped with long passive receiving arrays or twinline receiving arrays with the SURTASS processing and display suite. Of the original eighteen monohulls, three are in active service. (2). Four "small" T-AGOS Small Waterplane Area Twin Hull (SWATH) ships were SCN funded FY87 through FY89. This ship incorporates the improved detection and classification capabilities and onboard analysis developed by the SURTASS Block Upgrade program including the Reduced Diameter Array (RDA). The RDA is a vast improvement in passive capability and will allow those ships equipped with it to operate in a bi-static mode with T-AGOS ships equipped with Low Frequency Active (LFA) systems. These four small SWATH ships are equipped with standard Desktop Computer (DTC II) processing and display configuration and have recently been upgraded with an improved tactical communications suite. (3) The first "large" SWATH ship, T-AGOS 23, will be delivered in FY00. It includes the Block Upgrade architecture SPARC high speed computers and large data storage devices and is the first T-AGOS ship equipped with Low Frequency Active (LFA) capability. This active capability will provide greatly improved detection against diesel submarines as well as the quiet nuclear threat. In addition to the eight T-AGOS ships above, three shore sites are configured with SURTASS Block Upgrade processing and display suites to receive the T-AGOS acoustic data via SHF satellite communication links, analyze it and correlate it with the IUSS fixed shore site arrays, and provide the resulting contact information to the tactical commanders. A cost sharing agreement with Japan also provides a shore site and two Japanese SWATH ships with a similar capability to the TAGOS SWATH ships for the Western Pacific region. The Japanese Auxiliary Ocean Surveillance Ship (JAOS) SWATH ships are upgraded to the DTC II Block Upgrade processing and display suite and utilize the original Production Baseline Arrays. Under the cost sharing agreement they are being upgraded to the next evolution computer processing and display equipment and to the newer A180R or twinline passive receiving arrays.</p> <p>OPN funded procurements include: VG006 (procurement and upgrade of twinline arrays, common two cables and common TB 29 arrays, procurement of LFA trainers, and communications upgrades (ADNS, and DMR)); VG007 (changes resulting from in service improvements of communications equipment, arrays, processing and display equipment's); VG010 (shore and ship electronics upgrade); and VG776 (installation of equipment).</p> <p>FY98: Funds provided for the following: VG006 Block Upgrade (JAOS) provided for upgrade of JAOS ship mission equipment to Block Upgrade configuration. VG007 Field Changes/Modifications provided for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupported equipment. VG776 Installation of equipment.</p>											

BUDGET ITEM JUSTIFICATION SHEET		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
<p>OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT</p> <p>FY99: Funds are required for the following: VG006 Block Upgrade (JAOS) provides for upgrade of JAOS ship mission equipment to Block Upgrade configuration. Twinline array provides for array receiver improvements for littoral areas. VG007 Field Changes/Modifications provide for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupportable equipment. VG010 Next Evolution processing and display upgrades provide ship processing suite for twinline arrays. VG776 Installation of equipment.</p> <p>FY00: Funds are required for the following: VG006 Block Upgrade (JAOS) provides for A180R passive array for JAOS ship. Low Frequency Active (LFA) trainer provides for initial and refresher trainer of MILDET personnel assigned to LFA ships. LFA Mitigation Sonar provides for detection of marine mammals in the vicinity of the LFA source array to prevent harassment or injury. TRU/Common Tow Cable provides improvement and redundant array processing. VG007 Field Changes /Modifications provide for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupportable equipment. VG776 Installation of equipment.</p>	<p>Surveillance Towed Array Sensor (SURTASS)</p>	<p>52VG</p>

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COST ANALYSIS											DATE February 1999					
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT											SUBHEAD 52VG					
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			QTY	PY	FY 1998			FY 1999			FY 2000			FY 2001		
				TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
VG006	UPGRADE PROCUREMENT Block Upgrade (JAOS)	A			1	2,618.0	2,618									
	Twinline Arrays	A						1	4,296.0	4,296						
	TRU/Common Tow Cable	A									1	450.0	450			
	Twinline SWATH Mod	A									4	112.5	450			
	LFA Trainer IOSC/Dam Neck	A									1	1,264.0	1,264			
	Communications Upgrade	A														
	Communications Terminal Mod	A														
	LFA Mitigation Sonar	A									1	1,100.0	1,100			
VG007	FIELD CHANGES/MODIFICATIONS	A					1,263						612			1,341
VG010	ELECTRONICS UPGRADE Ship Electronics	A							2	2,050.0	4,100					
VG776	INSTALLATION OF EQUIPMENT (NON FMP)						690						791			638
	TOTAL CONTROL						4,571						12,659			7,267

Remarks: VG006 JAOS Ship Mission Equipment is funded in FY98-99.
JAOS Arrays are funded in FY00-01.

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PROCUREMENT HISTORY AND PLANNING											A. DATE		
											February 1999		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				SUBHEAD			
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						Surveillance Towed Array Sensor (SURTASS)				52VG			
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
VG006	UPGRADE PROCUREMENT Block Upgrade (JAOS)	98	Raytheon, Fullerton, CA	SS/CPFF/OP	SPAWAR	May-96	Oct-97	Aug-98	1	2,618	Yes	N/A	
		99	Raytheon, Fullerton, CA	SS/CPFF/OP	SPAWAR	May-96	Oct-98	Jul-99	1	2,860	Yes	N/A	
		00	Raytheon, Fullerton, CA	SS/CPFF	SPAWAR	Nov-98	Oct-99	Apr-01	1	2,024	Yes	N/A	
		Twinline Arrays	99	Raytheon, Fullerton, CA	SS/CPFF	SPAWAR	Nov-97	Oct-98	Apr-00	1	4,296	Yes	N/A
		TRU/Common Tow Cable	00	Raytheon, Fullerton, CA	SS/CPFF/OP	SPAWAR	Jun-98	Oct-99	Jul-00	1	450	Yes	N/A
		Twinline SWATH Modification	00	IOSC, Little Creek, VA	WR	SPAWAR	Jul-99	Oct-99	Jul-00	4	113	Yes	N/A
		LFA Trainer-IOSC/Dam Neck Va	00	Raytheon, Fullerton, CA	SS/CPFF/OP	SPAWAR	Jun-98	Oct-99	Jul-00	1	1,264	Yes	N/A
	LFA Mitigation Sonar	00	Arlington UT, Austin, Texas	CPFF/OP	NAVSEA	Jul-99	Oct-99	Jul-00	1	1,100	Yes	N/A	
VG010	ELECTRONICS UPGRADE Ship Electronics	99	Raytheon, Fullerton, CA	SS/CPFF	SPAWAR	Jun-98	Nov-98	Sep-99	2	2,050	Yes	N/A	
D. REMARKS: VG006 JAOS Ship Mission Equipment is funded in FY98-99. JAOS Arrays are funded in FY00-01.													

MODIFICATION TITLE: Block Upgrade (JAOS)
 COST CODE
 MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships and Shore Facilities
 DESCRIPTION/JUSTIFICATION: Block Upgrade (JAOS) provides Next Evolution Processing and Display suite for JAOS ship and shore sites and A180R array for two JAOS ships (one in FY00 and one in FY01). There is a 50% cost share agreement Japan and United State

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

	PY		FY97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment					1	2.7	1	2.86	1	2.02	1	2.05												4	9.63
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Inter Contractor Support																									
Installation of Hardware*							2	0.29			1	0.14	1	0.13										4	0.56
FY97 EQUIP																								0	0.00
FY98 EQUIP																								0	0.00
FY99 EQUIP																								0	0.00
FY00 EQUIP							2	0.29			1	0.14												2	0.29
FY01 EQUIP																								1	0.14
FY 02 EQUIP													1	0.13										1	0.13
FY 03 EQUIP																								0	0.00
FY 04 EQUIP																								0	0.00
FY 05 EQUIP																								0	0.00
FY TC EQUIP																								0	0.00
TOTAL INSTALLATION COST	0.0		0.0		0.0		0.29		0.00		0.14		0.13		0.00		0.00		0.00		0.00		0.00	4	0.56
TOTAL PROCUREMENT COST	0.0		0.0		2.7		3.15		2.02		2.19		0.13		0.00		0.00		0.00		0.00		0.00	4	10.19

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: Shore/Ship- 3 Months PROCUREMENT LEADTIME: Ship Electronics- 13 Months Ship Arrays-20 Months

CONTRACT DATES: FY 1999: Oct 98 FY2000: Oct 99 FY2001: Oct-00 FY2002
 DELIVERY DATES: FY1999: July 99 FY2000: Apr 01 FY2001: Apr-02 FY2002

INSTALLATION SCHEDULE:	PY	FY99				FY00				FY01															
		1	2	3	4	1	2	3	4	1	2	3	4												
INPUT			1		1							1													
OUTPUT			1		1							1													

INSTALLATION SCHEDULE:	FY02				FY03				FY04				FY05				TC	TOTAL							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT				1																					4
OUTPUT				1																					4

MODIFICATION TITLE: Twinline Array
 COST CODE:
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

SURTASS T-AGOS Ships and Shore Facilities
 The Twinline array is a shallow water variant of the long line A180R array. The array consists of two short array lengths and is designed for increased surveillance in high surface, shallow water environments. The Twin-line inventory objective is two arrays. (One was funded in FY96 and one will be funded in FY99.) The two Twinline arrays procured in FY96 & FY99 are preproduction arrays. The inventory objective for the TB-29 Common Array is eight arrays, with procurement beginning in FY02. The last two TB-29 arrays are planned for procurement in FY06.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	1	4.2					1	4.29					2	8.49			2	9.80	2	10.97	2	11.5	10	49.25	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*					1	0.0			1	0.09					2	0.20			2	0.38	4	0.80	10	1.47	
FY97 EQUIP																							0	0.00	
FY98 EQUIP																							0	0.00	
FY99 EQUIP					1	0.0			1	0.09													2	0.09	
FY00 EQUIP																							0	0.00	
FY01 EQUIP																							0	0.00	
FY 02 EQUIP															2	0.20							2	0.20	
FY03 EQUIP																							0	0.00	
FY04 EQUIP																				2	0.38			2	0.38
FY05 EQUIP																					2	0.40	2	0.40	
FY TC EQUIP																							0	0.00	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.00		0.09		0.00		0.00		0.20		0.00		0.38		0.80		1.47	
TOTAL PROCUREMENT COST		4.2		0.0		0.0		4.29		0.09		0.00		8.49		0.20		9.80		11.35		12.30		50.72	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PROCUREMENT LEADTIME: 20 Months

CONTRACT DATES: FY 1999: Oct-98 FY2000: FY2001: FY2002: Oct-01
 DELIVERY DATES: FY1999: Apr-00 FY2000: FY2001: FY2002: Apr-03

INSTALLATION SCHEDULE:	PY	FY99				FY00				FY01				FY02				FY03				FY04				FY05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	1								1																						
OUTPUT	1								1																						
INPUT									2																					2	8
OUTPUT									2																					2	8

MODIFICATION/TITLE: Telemetry Receive Unit (TRU)/ Common Tow Cable
 COST CODE:
 MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships and Shore Facilities
 DESCRIPTION/JUSTIFICATION: TRU/Common Tow Cable provides capability on SWATH ships with RDA arrays to be configured with a coax tow cable in the event a failure of the fiber optic tow cable occurs.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits Nonrecurring Equipment									1	0.45	1	0.45											2	0.90	
Equipment Nonrecurring Engineering Change Orders Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support									1	0.04	1	0.04											2	0.08	
Installation of Hardware*																							0	0.00	
FY97 EQUIP																							0	0.00	
FY98 EQUIP																							0	0.00	
FY99 EQUIP																							0	0.00	
FY00 EQUIP									1	0.04													1	0.04	
FY01 EQUIP											1	0.04											1	0.04	
FY 02 EQUIP																							0	0.00	
FY03 EQUIP																							0	0.00	
FY04 EQUIP																							0	0.00	
FY05 EQUIP																							0	0.00	
FY TC EQUIP																							0	0.00	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.00		0.04		0.04		0.00		0.00		0.00		0.00		0.00		0.08	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.00		0.49		0.49		0.00		0.00		0.00		0.00		0.00		0.98	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PROCUREMENT LEADTIME: 13 Months

CONTRACT DATES: FY 1999 FY2000: Oct-99 FY2001: Oct-00 FY2002
 DELIVERY DATES: FY1999: FY2000 Jul-00 FY2001: Jul-01 FY2002

INSTALLATION SCHEDULE: PY 1 2 3 4 FY99 1 2 3 4 FY00 1 2 3 4 FY01 1 2 3 4

INPUT 1 1
 OUTPUT 1 1

INSTALLATION SCHEDULE: 1 2 3 4 FY02 1 2 3 4 FY03 1 2 3 4 FY04 1 2 3 4 FY05 1 2 3 4 TC TOTAL

INPUT 2
 OUTPUT 2

MODIFICATION/TITLE: Twinline SWATH Modification
 COST CODE:
 MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships and Shore Facilities
 DESCRIPTION/JUSTIFICATION: The Twinline installation on a SWATH platform requires a machinery upgrade/winch in order to allow the array to clear the aft propellers

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									4	0.45													4	0.45	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support									4	0.04													4	0.04	
Installation of Hardware*																							0	0.00	
FY97 EQUIP																							0	0.00	
FY98 EQUIP																							0	0.00	
FY99 EQUIP																							0	0.00	
FY00 EQUIP									4	0.04													4	0.04	
FY01 EQUIP																							0	0.00	
FY 02 EQUIP																							0	0.00	
FY03 EQUIP																							0	0.00	
FY04 EQUIP																							0	0.00	
FY05 EQUIP																							0	0.00	
FY TC EQUIP																							0	0.00	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.00		0.04		0.00		0.00		0.00		0.00		0.00		0.00		0.04	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.00		0.49		0.00		0.00		0.00		0.00		0.00		0.00		0.49	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PROCUREMENT LEADTIME: 13 Months

CONTRACT DATES: FY 1999 FY 2000 : Oct 99 FY2001: FY2002

DELIVERY DATES: FY1999: FY 2000: Jul 00 FY2001: FY2002

INSTALLATION SCHEDULE: PY 1 2 3 4 FY99 1 2 3 4 FY00 1 2 3 4 FY01 1 2 3 4

INPUT 4

OUTPUT 4

INSTALLATION SCHEDULE: 1 2 3 4 FY02 1 2 3 4 FY03 1 2 3 4 FY04 1 2 3 4 FY05 1 2 3 4 TC TOTAL

INPUT 4

OUTPUT 4

MODIFICATION/TITLE: LFA Trainer for IOSC/Dam Neck, VA

COST CODE

MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships and Shore Facilities

DESCRIPTION/JUSTIFICATION: Low Frequency Active (LFA) capability on SWATH ships will be IOC in FY00. The LFA trainer will provide for operational and maintenance training of LFA to ship operators and MILDET personnel at IOSC.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment									1	1.3													1	1.3	
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*									1	0.08													1	0.08	
FY97 EQUIP																							0	0.00	
FY98 EQUIP																							0	0.00	
FY99 EQUIP																							0	0.00	
FY00 EQUIP									1	0.08													1	0.08	
FY01 EQUIP																							0	0.00	
FY 02 EQUIP																							0	0.00	
FY03 EQUIP																							0	0.00	
FY04 EQUIP																							0	0.00	
FY05 EQUIP																							0	0.00	
FY TC EQUIP																							0	0.00	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.00		0.08		0.00		0.00		0.00		0.00		0.00		0.00		0.08	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.00		1.26		0.00		0.00		0.00		0.00		0.00		0.00		1.34	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months

PROCUREMENT LEADTIME: 13 Months

CONTRACT DATES: FY 1999 FY2000 Oct-99 FY2001: FY2002

DELIVERY DATES: FY1999: FY2000 Jul-00 FY2001: FY2002

INSTALLATION SCHEDULE: PY 1 2 3 4 FY99 1 2 3 4 FY00 1 2 3 4 FY01 1 2 3 4

INPUT 1

OUTPUT 1

INSTALLATION SCHEDULE: 1 2 3 4 FY02 1 2 3 4 FY03 1 2 3 4 FY04 1 2 3 4 FY05 1 2 3 4 TC TOTAL

INPUT 1

OUTPUT 1

MODIFICATION TITLE: LFA Mitigation SONAR
 COST CODE:
 MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships and Shore Facilities
 DESCRIPTION/JUSTIFICATION: LFA Mitigation Sonar is to be installed on the LFA Active SWATH in FY00 to provide warning of mammals in the immediate vicinity to prevent environmental impact during LFA operations.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									1	1.10													1	1.10	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support									1	0.10													1	0.10	
Installation of Hardware*																							0	0.00	
FY97 EQUIP																							0	0.00	
FY98 EQUIP																							0	0.00	
FY99 EQUIP																							0	0.00	
FY00 EQUIP									1	0.10													1	0.10	
FY01 EQUIP																							0	0.00	
FY 02 EQUIP																							0	0.00	
FY03 EQUIP																							0	0.00	
FY04 EQUIP																							0	0.00	
FY05 EQUIP																							0	0.00	
FY TC EQUIP																							0	0.00	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.00		0.10		0.00		0.00		0.00		0.00		0.00		0.00		0.10	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.00		1.20		0.00		0.00		0.00		0.00		0.00		0.00		1.20	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PROCUREMENT LEADTIME: 13 Months

CONTRACT DATES: FY 1999 FY2000 FY2001: Oct-00 FY2002

DELIVERY DATES: FY1999: FY2000 FY2001: Jul-01 FY2002

INSTALLATION SCHEDULE: PY 1 2 3 4 FY99 1 2 3 4 FY00 1 2 3 4 FY01 1 2 3 4

INPUT 1

OUTPUT 1

INSTALLATION SCHEDULE: 1 2 3 4 FY02 1 2 3 4 FY03 1 2 3 4 FY04 1 2 3 4 FY05 1 2 3 4 TC TOTAL

INPUT 1

OUTPUT 1

MODIFICATION TITLE: Field Changes/Modifications
 COST CODE:
 MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships and Shore Facilities
 DESCRIPTION/JUSTIFICATION: Field Changes/Modifications for correction of deficiencies identified by Fleet use, communications equipment, and replacement of aging/unsupportable shipboard equipment

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment					2	1.3	4	0.61	16	1.40	16	1.30	9	0.70	5	1.08	4	0.95	15	0.81			71	8.14		
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*					2	0.2	4	0.22	16	0.33	16	0.26	9	0.19	5	0.23	4	0.52	15	0.15			71	2.05		
FY97 EQUIP																									0	0.00
FY98 EQUIP					2	0.2																			0	0.00
FY99 EQUIP							4	0.22																	2	0.20
FY00 EQUIP									16	0.33															4	0.22
FY01 EQUIP											16	0.26													16	0.33
FY02 EQUIP													9	0.19											9	0.19
FY03 EQUIP															5	0.23									5	0.23
FY04 EQUIP																	4	0.52							4	0.52
FY05 EQUIP																			15	0.2					15	0.15
FY TC EQUIP																									0	0.00
TOTAL INSTALLATION COST		0.0		0.0		0.2		0.22		0.33		0.26		0.19		0.23		0.52		0.15		0.00				2.05
TOTAL PROCUREMENT COST		0.0		0.0		1.4		0.83		1.73		1.56		0.89		1.31		1.47		0.96		0.00				10.19

ADMINISTRATIVE LEADTIME: 3 Months PROCUREMENT LEADTIME: 13 Months

CONTRACT DATES: FY1999: Oct 98 FY2000: Oct 99 FY2001: Oct 00 FY2002: Oct 01

DELIVERY DATES: FY1999: Jul 99 FY2000: Jul 00 FY2001: Jul 01 FY2002: Jul 02

INSTALLATION SCHEDULE:	PY	FY99				FY00				FY01				FY02				FY03				FY04				FY05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT	2				4				16				16																		
OUTPUT	2				4				16				16																		
INPUT					9				5				2															71			
OUTPUT					9				5				2															71			

MODIFICATION TITLE: SHIP ELECTRONICS UPGRADE
 COST CODE:
 MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships and Shore Facilities
 DESCRIPTION/JUSTIFICATION: Upgrade of ship electronics for twinline arrays

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits Nonrecurring Equipment							2	4.10					2	4.42	2	4.53	1	2.31	1	2.36			8	17.73	
Equipment Nonrecurring Engineering Change Orders Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*							2	0.28					2	0.28	2	0.28	1	0.14	1	0.14			8	1.12	
FY 97 EQUIP																							0	0.00	
FY98 EQUIP																							0	0.00	
FY99 EQUIP							2	0.28															2	0.28	
FY00 EQUIP																							0	0.00	
FY01 EQUIP																							0	0.00	
FY 02 EQUIP													2	0.28									2	0.28	
FY03 EQUIP															2	0.28							2	0.28	
FY04 EQUIP																	1	0.1					1	0.14	
FY05 EQUIP																			1	0.1			1	0.14	
FY TC EQUIP																							0	0.00	
TOTAL INSTALLATION COST		0.0		0.0		0.0	0.28	0.00	0.00	0.00	0.00	0.28	0.28	0.28	0.28	0.14	0.14	0.14	0.14	0.00	0.00		1.12		
TOTAL PROCUREMENT COST		0.0		0.0		0.0	4.38	0.00	0.00	0.00	4.70	4.81	2.45	2.50	0.00	0.00							18.85		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 months PROCUREMENT LEADTIME: 16 Months

CONTRACT DATES: FY 1999: Nov 98 FY2002: Oct 01 FY2003: Oct 02 FY 2004: Oct 03

DELIVERY DATES: FY1999: Sep-99 FY2002: Jul 02 FY2003: Jul 03 FY2004: Jul 04

INSTALLATION SCHEDULE: PY FY99 FY00 FY01

	1	2	3	4	1	2	3	4	1	2	3	4
--	---	---	---	---	---	---	---	---	---	---	---	---

INPUT 2

OUTPUT 2

INSTALLATION SCHEDULE: FY02 FY03 FY04 FY05 TC TOTAL

	1	2	3	4	1	2	3	4	1	2	3	4		
--	---	---	---	---	---	---	---	---	---	---	---	---	--	--

INPUT 2 2 1 1 8

OUTPUT 2 2 1 1 8

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE Tactical Support Centers (ASW OPS Ctr) (#2246)			SUBHEAD 52WH	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$5.1	\$2.6	\$4.4	\$6.4	\$6.3	\$5.7	\$5.9	\$6.0	Continuing	Continuing
<p>Narrative Description/Justification: The Tactical Support Centers (TSC) are nodes of the Navy Command and Control System, which provides the Maritime Sector Commander with the facilities and capabilities to plan and execute assigned missions. These missions may include Anti-Surface Warfare (ASUW), Over-The-Horizon Targeting (OTH-T), power projection, maritime surveillance, antisubmarine warfare (ASW), mining, search and rescue, drug enforcement operations, special operations, battle group/amphibious task force/convoy support and flight crew training. TSC systems operate across the entire threat environment from peacetime surveillance through low intensity conflict/regional contingency operations to general war. The requirement for TSC was established as the patrol aircraft tactical support center (VP-TSC) to support the mission requirements of the P-3C aircraft. The Mobile Operations Control Centers (MOCCs) are modular, rapidly-deployable units, transportable in two P-3 aircraft, which are used to provide Tactical Support capabilities to forward deployed forces where TSCs are not available. The MOCC requirement was validated in March 1988. Current system requirements were validated 27 Nov 96 via ORD 373(1)-88/6-96, Tactical Support Center. New hardware components and processors must be procured to correct critical TSC and MOCC system deficiencies, ensure compatibility with new sensor and weapons systems, ensure compliance with the Global Command and Control System - Maritime (GCCS-M) architecture, Defense Information Infrastructure (DII) Common Operating Environment (COE) and meet documented fleet operational requirements.</p> <p>The FY98 budget request procures: analysis interface equipment and enhancements; facilities equipment; and installations. The FY99 budget request procures: analysis interface equipment and enhancements; and installations. The FY00 budget request procures: analysis interface equipment and enhancements; facilities equipment; and installations.</p>											

UNCLASSIFIED
CLASSIFICATION

COST ANALYSIS													DATE February 99			
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE Tactical Support Centers (ASW OPS Ctr) (#2246)						SUBHEAD 52WH				
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			PY			FY 1998			FY 1999			FY 2000				
			QTY	TOTAL COST		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
WH046	ANALYSIS INTERFACE EQUIP	A						2,905			1,759					3,481
WH050	FACILITIES EQUIP	A						173			0					327
WH776	NON-FMP INSTALLATION	A						1,982			888					626
	TOTAL CONTROL							5,060			2,647					4,434
Remarks:																

MODIFICATION TITLE: TACTICAL SUPPORT CENTERS (TSC) (formerly ASW Operations Center) SUBHEAD/COST CODE: 52WH/WH046
 COST CODE: WHO46

MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: TSC are nodes of the NCCS Ashore, with fixed sites and mobile components (MOCCs). They provide the Maritime Sector Commander with the capability to plan, direct and control the tactical operations of joint Naval Expeditionary Forces and other assigned units within his respective area of responsibility. These operations include littoral and open ocean surveillance, anti-surface warfare, over-the-horizon targeting, counter drug operations, mining, search and rescue, and special operations. This subhead contains TSC sensor analysis capabilities, avionics and weapons system interfaces and facilities equipment. The MOCCs are rapidly deployable, self contained, take-what-you-need C4I systems which can be transported in two fleet-configured P-3 aircraft for contingency operations. This Cost Code contains equipment and associated software for interfacing analysis and processing equipment to the supported weapons systems (aircraft).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Evolutionary Acquisition of COTS equipment; anticipate OT every 18-24 months

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total						
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$					
RDT&E																													
PROCUREMENT:																													
Kit Quantity																													
Installation Kits																													
Installation Kits Nonrecurring																													
Equipment	VAR	29.7	VAR	6.7	VAR	2.9	VAR	1.8	VAR	3.5	VAR	5.0	VAR	5.3	VAR	5.0	VAR	5.2	VAR	5.4	CONT	CONT	VAR	70.5					
Equipment Nonrecurring																													
Engineering Change Orders																													
Data																													
Training Equipment																													
Support Equipment																													
Other																													
Interm Contractor Support																													
Installation of Hardware*	68	7.6	24	1.7	34	1.9	13	6.3	20	0.5	16	1.0	13	1.0	15	0.7	15	0.7	17	0.6	CONT	CONT	VAR	22.0					
PRIOR YR EQUIP	68	7.6																							68	7.6			
FY 97 EQUIP			24	1.7																						24	1.7		
FY 98 EQUIP					34	1.9	9	6.0																			43	7.9	
FY 99 EQUIP							4	0.3																			4	0.3	
FY 00 EQUIP									20	0.5																	20	0.5	
FY 01 EQUIP											16	1.0															16	1.0	
FY 02 EQUIP													13	1.0													13	1.0	
FY 03 EQUIP															15	0.7											15	0.7	
FY 04 EQUIP																	15	0.7									15	0.7	
FY 05 EQUIP																			17	0.7							17	0.7	
FY TC EQUIP																						CONT	CONT	VAR	CONT				
TOTAL INSTALLATION COST		7.6		1.7		1.9		6.3		0.5		1.0		1.0		0.7		0.7		0.6		CONT						22.0	
TOTAL PROCUREMENT COST		37.3		8.4		4.8		8.1		4.0		6.0		6.3		5.7		5.9		6.0		CONT						92.5	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: VAR

PROCUREMENT LEADTIME: VAR

CONTRACT DATES:

FY 1998: VAR FY 1999: VAR FY 2000: VAR FY 2001:

DELIVERY DATES:

FY 1998: VAR FY 1999: VAR FY 2000: VAR FY 2001:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	126	5	5	3		13	7			10	6		
OUTPUT	126		5	5	3			13	7			10	6

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		7	6			7	8			7	8			9	8		CONT	CONT
OUTPUT			7	6			7	8			7	8			9	8	CONT	CONT

Notes/Comments

* P-5 contains various quantities of equipment procured. P-3A contains "Shore Sites installed" as measures of quantity

* Equipment cost includes initial training.

P-1 Shopping List-Item No 55-3 of 55-4

Exhibit P-3a, Individual Modification Program

Unclassified

Classification

MODIFICATION TITLE: TACTICAL SUPPORT CENTERS (TSC)(formerly ASW Operations Center) SUBHEAD/COST CODE: 52WH/WH050
 COST CODE: WHO50

MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: TSC are nodes of the NCCS Ashore, with fixed sites and mobile components (MOCs). They provide the Maritime Sector Commander with the capability to plan, direct and control the tactical operations of joint Naval Expeditionary Forces and other assigned units within his respective area of responsibility. These operations include littoral and open ocean surveillance, anti-surface warfare, over-the-horizon targeting, counter drug operations, mining, search and rescue, and special operations. This subhead contains TSC sensor analysis capabilities, avionics and weapons system interfaces and facilities equipment. The MOCs are rapidly deployable, self contained, take-what-you-need C4I systems which can be transported in two fleet-configured P-3 aircraft for contingency operations. This Cost Code contains the Facilities Equipment necessary to house, power and support the processing equipment and interfaces.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Evolutionary Acquisition of COTS equipment; anticipate OT every 18-24 months

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$				
RDT&E																												
PROCUREMENT:																												
Kit Quantity																												
Installation Kits																												
Installation Kits Nonrecurring																												
Equipment	VAR	5.7	VAR	0.0	VAR	0.2	VAR	0.0	VAR	0.3	VAR	0.3	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	CONT	CONT	0	6.5		
Equipment Nonrecurring																												
Engineering Change Orders																												
Data																												
Training Equipment																												
Support Equipment																												
Other																												
Interm Contractor Support																												
Installation of Hardware*	2	1.0	9	0.8	3	0.1	0	0.0	3	0.1	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	CONT	CONT	20	2.1		
PRIOR YR EQUIP	2	1.0	9	0.8																						11	1.8	
FY 97 EQUIP																											0	0.0
FY 98 EQUIP					3	0.1																					3	0.1
FY 99 EQUIP																											0	0.0
FY 00 EQUIP									3	0.1																	3	0.1
FY 01 EQUIP											3	0.1															3	0.1
FY 02 EQUIP																											0	0.0
FY 03 EQUIP																											0	0.0
FY 04 EQUIP																											0	0.0
FY 05 EQUIP																											0	0.0
FY TC EQUIP																											0	0.0
TOTAL INSTALLATION COST		1.0		0.8		0.1		0.0		0.1		0.1		0.0		0.0		0.0		0.0		0.0		CONT			2.1	
TOTAL PROCUREMENT COST		6.7		0.8		0.3		0.0		0.4		0.4		0.0		0.0		0.0		0.0		0.0		CONT			8.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: VAR PROCUREMENT LEADTIME: VAR

CONTRACT DATES: FY 1998: VAR FY 1999: VAR FY 2000: VAR

DELIVERY DATES: FY 1998: VAR FY 1999: VAR FY 2000: VAR

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 99 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4

INPUT 14 3 3

OUTPUT 14 3 3

INSTALLATION SCHEDULE: 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 FY 04 1 2 3 4 FY 05 1 2 3 4 TC TOTAL

INPUT TBD TBD

OUTPUT TBD TBD

Notes/Comments

* P-5 contains various quantities of equipment procured. P-3A contains "Shore Sites installed" as measures of quantity

* Equipment cost includes initial training.

P-1 Shopping List-Item No 55-4 of 55-4

Exhibit P-3a, Individual Modification Program

Unclassified

Classification

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1999
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APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY 2-COMMUNICATIONS AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # <i>Carrier ASW Module/224700</i>
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Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS
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	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Total	
QUANTITY												
EQUIPMENT COST (In Millions)	N/A		11.6	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5.4	
SPARES COST (In Millions)	N/A										\$0.70	

PROGRAM DESCRIPTION/JUSTIFICATION:

This program has been consolidated into the Undersea Warfare Support Equipment line (BLI = 217600) beginning in FY 2000.

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 1999			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY 2-COMMUNICATIONS AND ELECTRONIC EQUIPMENT										P-1 ITEM NOMENCLATURE/LINE ITEM # AN/SLQ-32(V)/231200			
Program Element for Code B Items:										OTHER RELATED PROGRAM ELEMENTS			
	Prior Years	ID Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)													
	N/A		N/A	1.957	\$1.5	\$1.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$5.4
SPARES COST (In Millions)													
	N/A		N/A	0.1	\$0.1	\$0.2	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$0.70
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>The Anti-Ship Missile Defense (ASMD) Electronic Warfare (EW) Project (formerly Design-to-price EW Program), provides a family of modular shipboard electronic warfare equipments which are installed in most CV/CVN, combatants and auxiliaries in the surface Navy. The equipments consist of five configurations. The (V)1 and (V)2 are computer controlled Electronic Support Measures (ESM) Systems that detect, sort, classify, identify and continuously display signals within frequency range. The (V)3 and (V)4 provide the capabilities of the passive system plus an integrated active electronic countermeasures response for all signals classified as a threat. The (V)5 provides for an ECM capability on smaller class ships.</p> <p>FY 98 thru FY 00: FMP - Installation of equipment for the Fleet Modernization Program (FMP).</p> <p>FY 98 thru FY 00: Non FMP - Installation of training equipment at shore facilities/activities.</p>													

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE/LINE ITEM # <i>WLR-1H (2320)</i>					
Program Element for Code B Items: N/A							OTHER RELATED PROGRAM 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			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST (In Millions)			\$0.0	\$1.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.8
SPARES COST (In Millions)												
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>Starting with the FY 2000 budget, this program was consolidated into the Submarine Support Equipment line - 256000.</p>												

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE Information Warfare Systems 2340		SUBHEAD 52LG		
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL	
QUANTITY												
COST (in millions)	\$99.5	\$3.6	\$4.3	\$4.1	\$4.3	\$4.2	\$4.8	\$5.9	\$6.0	Cont.	Cont.	

Narrative Description/Justification: The Information Warfare (IW) systems program funds capabilities enabling joint and fleet commanders to conduct IW. It mans, trains, and equips naval forces to conduct IW. IW is defined as "actions taken to achieve information superiority by affecting adversary information, information-based processes, information systems, and computer-based networks while defending one's own information, information-based processes, information systems, and computer-based networks." Because Naval Forces are forward deployed, Naval IW capabilities must be embedded in the fleet and ready for use on a moments notice. Accordingly, the CNO directed (OPNAVINST 3430.26 and 5450) the establishment of the Fleet Information Warfare Center (FIWC) and the Naval Information Warfare Activity (NIWA).

The FIWC is the naval Center of Excellence for IW tactics, personnel, doctrine, and training. FIWC will provide tailored IW training to deploying Naval forces and shore establishments, provide Computer Incident Response Teams (Navy's Defensive IW effort), identify requirements and priorities for IW systems, deploy and operate IW equipment, act as the IW opposition force in fleet exercises, and provide trained and qualified IW personnel to joint task force and fleet staffs. NIWA is Navy's IW principal technical development agent and interface to Service and national level agencies engaged in the pursuit of IW technologies.

Due to the rapidly developing pace of technology (turns over every 18 months) and emerging threat countries/entities, this line must be adaptable to ever changing requirements for capabilities. Specific capabilities and equipment to be procured by this line include:

- AN/ULQ-13 deception van.
- FIWC equipment which will provide significant capability to support IW tactical and training requirements worldwide.
- IW attack equipment provides operational commanders the tools they need to deny or interfere with an adversary's information system.
- IW/C2W equipment procures and fields software and hardware to support the afloat Command and Control Warfare Commander (C2WC). The platform for this capability is JMCIS. Target configuration is three workstations per platform to support IW/C2W planning, analysis and execution.
- Electronic attack (EA) equipment procures systems which can be used on ships, subs, aircraft and on land. Initial systems will operate in the VHF/UHF band and will be fielded to the fleet in a "carry on" mode.
- Psychological operations (PSYOPS) equipment will be used on ships and on land. The primary function is to broadcast AM/FM radio. The unit is self-contained with its own vehicles, antenna, power source and transmitting equipment. Migrate towards integrating PSYOPS into organic transmitters, reducing requirement for stand alone vans

P-1 SHOPPING LIST

ITEM NO. PAGE NO.
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Exhibit P-40

UNCLASSIFIED
CLASSIFICATION

COST ANALYSIS							DATE: Feb-99					
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					SUBHEAD		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					INFORMATION WARFARE SYSTEMS					52LG		
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS									
			PY		FY 1998		FY1999		FY 2000			
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
LG018	PRODUCTION SUPPORT	A	VAR	1,218								
LG022	FEWSG AN/ULQ-13 MOD KITS	A	3	4,334								
LG023	FIWC HARDWARE	A	VAR	2,473								
LG050	IW/CW EQUIPMENT	A	14	1,103	5	350	4	448	7	784		
LG051	C2 PROTECT EQUIPMENT	A	VAR	978								
LG052	IW ATTACK EQUIPMENT	A	4	1,103								
LG053	EA EQUIPMENT	A			4	2,025	5	2,452	4	1,912		
LG054	PSYOP EQUIPMENT	A			1	769	1	770	1	775		
LG055	TD EQUIPMENT	A			1	398	1	430	1	450		
LG776	INSTALLATION NON-FMP		10	241								
LG777	INSTALLATION FMP				2	150	2	194	2	200		
TOTAL PROGRAM				11,450	3,692	4,294	4,121					

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING											A. DATE	
											Feb-99	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						Information Warfare Systems					52LG	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
LG050	IW/C2W Equipment	98	SAIC	SS/CPFF	NRAD	Existing*	Dec-97	Jun-98	5	70	Yes	Yes
		99					Dec-98	Mar-99	4	112	Yes	Yes
		00					Dec-99	Feb-00	7	112	Yes	Yes
LG053	EA Equipment	98	ROCKWELL COLLINS	SS/CPFF	NIWASD	Sep-94	Dec-97	Jun-98	4	506	Yes	
		99					Dec-98	Mar-99	5	490	Yes	
		00					Dec-99	Mar-00	4	478	Yes	
LG055	TD Equipment	98	PROTECH	SS/CPFF	NSWC, Crane	Existing*	Dec-97	Aug-98	1	398	Yes	
		99					Dec-98	Aug-99	1	430	Yes	
		0					Dec-99	Jun-00	1	450	Yes	
LG054	Psyops Equipment	98	C-CUBED	SS/CPFF	JAVAIRWARCE St. Indigoes	Existing*	Jan-98	Aug-98	1	769	Yes	
		99					Jan-99	Aug-99	1	770	Yes	
		00					Jan-00	Jun-00	1	775	Yes	
D. REMARKS												
* LINE ITEM TO BE ISSUED UNDER EXISTING CONTRACT.												

UNCLASSIFIED

**INDIVIDUAL MODIFICATION
EXHIBIT P-3A**

MODELS OF SYSTEMS AFFECTED:

TYPE MODIFICATION:

MODIFICATION TITLE: LG776 - INSTALLATION OF FIWC EQUIPMENT

DESCRIPTION/JUSTIFICATION: INSTALLATION OF PORTABLE IWC2W EQUIPMENT AT VARIOUS CRYPTOLOGIC SHORE SITES

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA, \$ in Millions)

	FY95 & PY		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		T C		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0
PROC	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Installation Kits																						
Installation Kits NR																						
Equipment			4	1.40	4	1.20															8	2.6
Equipment NR																						
Engr Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Install Cost			4	0.10	4	0.15															8	0.3
Total Procurement			4	1.50	4	1.35															8	2.9

MODELS OF SYSTEM AFFECTED:

MODIFICATION TITLE:

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIWC PERSONNEL INSTALL AND REMOVE EQUIPMENT.

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME:

CONTRACT DATES: FY1998:

FY 1999:

FY 2000:

DELIVERY DATE: FY2000:

FY 2001:

FY 2002:

COST:	PY		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TO COMPL		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
PRIOR YEARS																						
FY 1996																						
FY 1997																						
FY 1998																						
FY 1999																						
FY 2000																						
FY 2001																						
FY 2002																						
FY 2003																						
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
IN	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET										DATE	
APPROPRIATION/BUDGET ACTIVITY										February 1999	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE			SUBHEAD	
							Electronic Warfare Support Equipment 2343			52LD	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$4.1									
<p>Note: Electronic Warfare Support Equipment transfers to the Shipboard Cryptologic Systems Program NARM 33236000 in FY 99. Detail budget justification material for PY through FY98 is included in the Shipboard Cryptologic Systems Program for budget comparability.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: (U) The equipment, devices and subsystems within this line provides the capabilities to (a) maintain the integrity of USN C3 networks, and targeting systems by utilizing measures which prevent adversary access to these networks and targeting systems, (b) assess the performance and stability of USN communications links/networks, radars, and electronic countermeasure for airborne and shipboard electromagnetic systems, (c) simulate hostile electronic countermeasures and weapons targeting functions to exercise fleet capabilities in C3, Anti-Air Warfare, Anti-Surface Warfare, and Electronic Warfare, and (d) assess the performance of electronic counter countermeasures (both hardware fixes and training effectiveness) techniques during system operational employment. The FY 96-99 program includes projects which consist of equipments, devices, subsystems, and/or systems which provide the capability to perform these functions. They are:</p> <p>(U) Electronic Warfare Reprogrammable Library (EWRL) - provides tactical data libraries Navy wide to all air, surface, and subsurface tactical automated electronic warfare systems. The EWRL support program requires the theater Electronic Intelligence (ELINT) centers to provide ELINT data in a specific format to the Electronic Warfare Systems Software Support Facilities.</p> <p>(U) Ships Signal Exploitation Equipment (SSEE) Phase 2 - procures permanently installed equipment which replaces obsolete equipment with Non-Developmental Items (NDI) and provides an open scaleable architecture for achieving commonality among surface cryptologic systems. SSEE provides the afloat cryptologist with a major portion of threat identification, analysis of Communications Intelligence (COMINT) as well as indications to radio direction finding assets. Equipment includes Receivers, RF Management Systems Recorders, Audio Distribution Systems, computers, radio direction finding systems, antennas, and ancillary hardware.</p> <p>(U) SSEE PHASE 2 INCREMENT D: procures equipment to update the SSEE Phase 2 systems to a modular and open architecture. The SSEE Increment D open system distributed client server architecture will use Digital Signal Processing (DSP), Versa Module Europa (VME) and VME Extensions for Instrumentation (VXI) components. A applications such as Desperado, Short Swing, and Sand Sailor will be integrated into the Increment D system.</p> <p>(U) Vulnerability Assessment System Support (VASS) - procures equipment required to identify the Navy's susceptibility to Electronic Signal Monitoring (ESM) and Electronic Attack (EA). The Signals Warfare Support Center (SWSC) at NSGA Northwest VA utilizes the following VASS systems to perform this mission: one SWSC Technical Analysis Research Suite (STARS); two mobile collection vans, AN/MRQ-11(v), Coyote; two Electronic Warfare Operations Kits (EWOK); one SWSC portable jamming suite (SPJS) in an AN/SSQ-99 Van; one naval security group signal processor; and one ISEA Support System for integration and testing.</p> <p>(U) The ULQ-16 upgrade provides the ULQ-16 with Specific Emitter Identification (SEI) capability. SEI provides tactical units with a stand-off, all weather, day and night capability to locate, identify and track targets of interest by positively correlating selected radar emission characteristics to a platform. This capability supports Combat Identification, Covert Surveillance/Tracking, Strike Planning and Battle Damage Assessment and significantly reduces the scope of effort and commitment of resources required to conduct reconnaissance. The FY 97 program will procure cards required to provide the SEI capability to the ULQ-16.</p> <p>(U) The Transportable Radio Direction Finding (T-RDF) and associated deck and/or mast antenna is a complete communication band shipboard T-RDF system for signal acquisition and bearing computation for surface combatants and is designed to operate in the harsh shipboard environment.</p> <p>(U) Installation Data: SSEE Phase 2 candidate platforms include CG and L-class ships and various shore sites. Installations performed by field activity and contractor personnel. T-RDF candidate platforms include CG 47 class ships and 1 shore site at NTTC, Pensacola, FL. T-RDF pre-grooms are done by SPAWARSSYSCOM field activities or system integration contractors. T-RDF systems are installed by Fleet Electronic Support personnel.</p> <p>CODE B ITEM: RDT&E,DW, Program Element: 0305885G</p>											

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/LINE ITEM # C3 COUNTERMEASURES / 234600/234605					
Program Element for Code B Items:								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)	N/A			6.7	\$10.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	16.7
SPARES COST (In Millions)	N/A			N/A	0	0	0	0	0	0	0	N/A	0
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>JUSTIFICATION: (U) The C3 Countermeasures program provides funds for various equipment, devices, subsystems, and systems which provide the capability to degrade the effectiveness of enemy weapons by performing countermeasure functions against his command, control, and communications (C3) and weapons targeting systems. The funds remaining in this program are provided to install Outlaw Bandit passive countermeasure systems previously procured on surface combatant ships.</p>													

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE SHIPBOARD IW EXPLOIT SYSTEMS 2360			SUBHEAD 521U	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		20.6*	\$40.1	\$48.0	\$37.7	\$43.6	\$44.9	\$57.6	\$55.7	Continuing	Continuing
<p>PROGRAM COVERAGE:</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: *This budget line is a consolidation of several shipboard Information Warfare (IW) exploit systems procurement lines. Those were COMBAT DF (NARM 2419), OUTBOARD (NARM 2430), EW Support (SSEE) (NARM 2343), BGPHEs (NARM 2434). These lines are being consolidated for efficiency of management and also as a reflection of greater commonality in the systems. This latter point reflects the continuing effort to collapse "stovepipes" in order to achieve a scaleable, modular open architecture cryptologic system made up of common hardware components and running common operator interface software. This consolidation aligns the procurement budget structure to coincide with the R&D and O&MN structures which were consolidated previously into common Shipboard IW Exploit Systems lines.</p> <p>(U) This line procures the following:</p> <p>(U) Automated Digital Acquisition Subsystem (ADAS) hardware and associated installation and production support. ADAS is an upgrade to the Combat DF (AN/SRS-1) system. Combat DF is an information warfare exploitation and direction finding system with the capability to detect, locate and identify hostile targets at long-range and input this information into the ship's tactical data system. The ADAS upgrade provides the foundation for exploitation of unconventional and Low Probability of Intercept (LPI) signal types.</p> <p>(U) The OUTBOARD System is currently ineffective against elements of the current/projected threat environment which includes counter narcotics operations. Its equipment is old and becoming expensive and impossible to maintain. An OUTBOARD Logistic Update Program was established to correct these deficiencies IAW an approved program management proposal by (a) replacing outdated equipment, establishing a common logistic support baseline, upgrading the Subsystem Direction Finder (DF) via an acquisition of hardware/software Engineering Change Proposal (ECP) to increase through-put speed, DF on Skywave Signals, and (b) modernizing the subsystems. A Cooperative Outboard Logistics Update (COBLU) joint cooperative program between the United States and the United Kingdom (U.K.) was established 1 July 1994 with a Memorandum of Understanding (MOU) being signed by both governments. The COBLU program provides upgrades to the existing OUTBOARD System (AN/SSQ-108) to provide Comprehensive Surface Tactical (CESM) capability to the 21st century. The program will make maximum use of already developed military and commercial signal exploitation equipment. The systems architecture will require minimal effort to implement future technologies necessary to handle the evolving threat. Program is being executed in two phases; Phase 0 is an interim update that focuses on transitioning Human Computer Interface (HCI) to a Joint Maritime Command Information System (JMCIS) environment and integrating with DFCEP. Phase 1 focuses on a total update of front-end sensors.</p> <p>(U) Ships Signal Exploitation Equipment (SSEE) Phase 2 - procures permanently installed equipment which replaces obsolete equipment with Non-Developmental Items (NDI) and provides an open scaleable architecture for achieving commonality among surface cryptologic systems. SSEE provides the afloat cryptologist with a major portion of threat identification, analysis of Communications Intelligence (COMINT) as well as indications to radio direction finding assets. Equipment includes Receivers, RF Management Systems Recorders, Audio Distribution Systems, computers, radio direction finding systems, antennas, and ancillary hardware.</p>											

BUDGET ITEM JUSTIFICATION SHEET		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
<p>OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: (continued)</p> <p>(U) SSEE PHASE 2 INCREMENT D: Procures equipment that will completely digitizes the system, adds signal analysis/processing capability and provides an open architecture that accommodates additional functional capabilities. The SSEE Increment D open system distributed client server architecture will use Digital Signal Processing (DSP), Versa Module Europa (VME) and VME Extensions for Instrumentation (VXI) components. Applications such as Desperado and Short Swing will be integrated into the Increment D system.</p> <p>(U) Vulnerability Assessment System Support (VASS) - procures equipment required to identify the Navy's susceptibility to Electronic Signal Monitoring (ESM) and Electronic Attack (EA). The Signals Warfare Support Center (SWSC) at NSGA Northwest VA utilizes the following VASS systems to perform this mission: one SWSC Technical Analysis Research Suite (STARS); two mobile collection vans, AN/MRQ-11(v), Coyote; two Electronic Warfare Operations Kits (EWOK); one SWSC portable jamming suite (SPJS) in an AN/SSQ-99 Van; one naval security group signal processor; and one ISEA Support System for integration and testing.</p> <p>(U) The Transportable Radio Direction Finding (T-RDF) and associated deck and/or mast antenna is a complete communication band shipboard Direction Finding system for bearing computation for surface combatants and is designed to operate in the harsh shipboard environment.</p> <p>(U) The Battle Group Passive Horizon Extension System (BGPHEs AN/ULQ-20) extends the Battle Groups line-of-sight radio horizon by controlling remote receivers in an aircraft sensor payload. Intercepted signals of interest are sent via the Common High Bandwidth Data Link (CHBDL) to the surface terminal (BGPHEs-ST). The BGPHEs-ST provides the ability for cryptologic operators to monitor, record and analyze selected signals of interest. Reports can be prepared and information disseminated from the surface terminal via the Tactical Intelligence Information Exchange System (TACINTEL) or directly to the host ship's C4I network.</p> <p>Installations are accomplished by Alteration Installation Teams (AIT) during ship pierside availability.</p> <p>Code B Item: COBLU, RDT&E, DW, Program Element 0305885G, Milestone III, July 1999. Program has approval to procure one LRIP unit.</p>	<p>SHIPBOARD IW EXPLOIT SYSTEMS 2360</p>	<p>521U</p>

**UNCLASSIFIED
CLASSIFICATION**

COST ANALYSIS													DATE February 1999				
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE SHIPBOARD IW EXPLOIT SYSTEMS 2360						SUBHEAD 521U					
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS														
			QTY	PY				FY 1998			FY 1999			FY 2000			
				TOTAL COST				QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
1N005	PRODUCTION SUPPORT	A									61						
1N006	ADAS	A						2	2,456	4,911							
1U001	ADAS	A										5	2,357	11,784	4	1,911	7,643
1U015	ADAS TSTAR MOD KITS	A													6	395	2,370
1U013	ECP/OBSOLECENCE INTEGRATION	A												1,660			
1N776	INSTALLATION NON-FMP	A								205							
1N777	INSTALLATION FMP	A								269							
	INSTALL									246							
	DSA									23							
LH023	OUTBOARD DF KITS	A						3	1,339	4,017							
LH024	PRODUCTION SUPPORT	A								409							
LH027	COBLU PHASE 1 SYSTEM	B								5,998							
1U004	COBLU PHASE I	B									1	13,688	13,688	3	6,732	20,196	
LH776	INSTALLATION NON-FMP	A								180							
LH777	INSTALLATION FMP	A								468							
	INSTALL									386							
	DSA									82							

Remarks: Cost Code: LH027, FY98 reflects U.S. share of non-recurring engineering costs as stated in the COBLU Memorandum of Understanding.
 Cost Code: 1U004, FY99 includes the procurement of 1 EDM upgrade and non-recurring engineering costs
 Cost Code: 1U001, FY00 unit cost decrease reflects the procurement of 2 ADAS COLT Trainers. These 2 systems are not full-up ADAS Systems
 Cost Code: 1U013, FY99 reflects non-recurring engineering costs associated with the ADAS TSTAR Mod kits

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COST ANALYSIS														DATE February 1999			
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE SHIPBOARD IW EXPLOIT SYSTEMS 2360							SUBHEAD 521U			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS														
			PY		FY97			FY 1998			FY 1999			FY 2000			
			QTY	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
LD041	VASS	A						8	43	347							
LD043	PERMANENTLY INSTALLED AND MANNED SHIPS SIGNAL EXPLOITATION EQUIP (SSEE) PHASE 2	A						4	475	1,901							
LD044	PRODUCTION SUPPORT	A								388							
LD045	ULQ-16 UPGRADE	A															
1U009	T-RDF SYSTEMS	A									3	460	1,380	2	469	938	
LD047	T-RDF ANTENNAS	A															
1U010	T-RDF ANTENNAS	A									9	80	718	9	99	890	
1U008	SSEE PHASE 2 INCREMENT D	A									7	940	6,580	7	959	6,713	
LD777	INSTALLATION - FMP	A								1,472							
	INSTALL									1,330							
	DSA									142							
1U012	PRODUCTION SUPPORT	A											1,442			1,859	
1U019	BGPHEs-ST	A												3	1530	4,590	
1U776	INSTALLATION-NON FMP	A											252			175	
1U777	INSTALLATION FMP	A											2,568			2,657	
	INSTALL												2,184			2,264	
	DSA												384			393	
	TOTAL CONTROL									20,626			40,072			48,031	

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SHIPBOARD IW EXPLOIT SYSTEMS 2360					521U	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1N006	ADAS	98	SANDERS/NH	OPTION	OSP	NA	Jan-98	Jul-99	2	2,456	YES	N/A
1U001	ADAS	99	SANDERS/NH	OPTION	OSP	N/A	Feb-99	Dec-00	5	2,357	YES	N/A
		00	SANDERS/NH	OPTION	OSP	N/A	Jan-00	Jul-01	4	1,911	YES	N/A
1U015	ADAS T-STAR MOD KITS	00	SANDERS/NH	OPTION	OSP	N/A	Jan-00	Jan-01	6	395	YES	N/A
1U004	COBLU PHASE 1 SYSTEM *	98	VARIOUS	VARIOUS	OSP/SSC	N/A	Jan-98	N/A	0	5,998	YES	N/A
		99	VARIOUS	VARIOUS	OSP/SSC	N/A	Nov-98	Feb-00	1	13,688	YES	N/A
		00	SANDERS/NH	SS	OSP	Apr-99	Nov-99	Feb-01	3	6,732	YES	N/A
1U008	SSEE PHASE 2 INCREMENT D	99	VARIOUS	COTS	SSC/SC	N/A	Feb-99	Jun-99	7	940	YES	N/A
		00	VARIOUS	COTS	SSC/SC	N/A	Nov-99	Mar-00	7	959	YES	N/A

D. REMARKS

* FY 98 Reflects U.S. share of the non-recurring engineering costs as stated in the COBLU Memorandum of Understanding. FY99 reflects non-recurring engineering costs and the procurement of 1 EDM upgrade. Program has approval to procure one LRIP unit.

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				SUBHEAD		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SHIPBOARD IW EXPLOIT SYSTEMS 2360				521U		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1U009	T-RDF SYSTEMS	99 00	SWRI SA, TEXAS SWRI SA, TEXAS	OPTION OPTION	OSP OSP	N/A N/A	Feb-99 Jan-00	Jul-99 Jun-00	3	460	YES	N/A
									2	469	YES	N/A
1U010	T-RDF ANTENNAS	99 00	SWRI SA, TEXAS SWRI SA, TEXAS	OPTION OPTION	OSP OSP	N/A N/A	Feb-99 Jan-00	Jul-99 Jun-00	9	80	YES	N/A
									9	99	YES	N/A
1U019	BGPHESES-ST	00	VARIOUS	COTS	SSC/SC	N/A	Dec-99	Dec-00	3	1,530	YES	N/A

D. REMARKS

COTS - Commercial off-the-shelf hardware procurements from various vendors.

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UNCLASSIFIED

February-99

MODIFICATION TITLE: ADAS-SHIP
 COST CODE: 1N006/1U001/1U777

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: (U) Automated Digital Acquisition Subsystem (ADAS) hardware and associated installation and production support. ADAS is an upgrade to the Combat DF (AN/SRS-1) system. The ADAS upgrade provides the foundation for exploitation of unconventional and Low Probability of Intercept (LPI) signal types.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	1	2.8	2	5.2	1	2.5	5	11.8	1	1.9													10	24.2	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	1	0.2	2	0.5	1	0.2	5	1.3	1	0.3	0	0.0	0	0.0	0	0.0			10	2.5	
PRIOR YR EQUIP					1	0.2																	1	0.2	
FY 97 EQUIP							2	0.5															2	0.5	
FY 98 EQUIP									1	0.2													1	0.2	
FY 99 EQUIP											5	1.3											5	1.3	
FY 00 EQUIP													1	0.3									1	0.3	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.2		0.5		0.2		1.3		0.3		0.0		0.0		0.0		0.0		2.5	
TOTAL PROCUREMENT COST		2.8		5.2		2.7		12.3		2.1		1.3		0.3		0.0		0.0		0.0		0.0		26.7	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MOS

PROCUREMENT LEADTIME: 21 MOS

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Feb-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: Jul-99 FY 1999: Dec-00 FY 2000: Jul-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	1		2				1			1	1	2	1
OUTPUT	1		2				1			1	1	2	1

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	1																		
OUTPUT	1																		

Notes/Comments

Exhibit P-3A, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

February-99

MODIFICATION TITLE: ADAS-SHORE
 COST CODE: 1N006/1U001/1U776
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: (U) Automated Digital Acquisition Subsystem (ADAS) hardware and associated installation and production support. ADAS is an upgrade to the Combat DF (AN/SRS-1) system. The ADAS upgrade provides the foundation for exploitation of unconventional and Low Probability of Intercept (LPI) signal types.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	1	0.3	1	0.3	0	0.0	2	0.2	1	0.3	0	0.0	0	0.0	0	0.0			5	1.1	
PRIOR YR EQUIP																									
FY 97 EQUIP					1	0.3																			
FY 98 EQUIP							1	0.3																	
FY 99 EQUIP																									
FY 00 EQUIP																									
FY 01 EQUIP																									
FY 02 EQUIP																									
FY 03 EQUIP																									
FY 04 EQUIP																									
FY 05 EQUIP																									
FY TC EQUIP																									
TOTAL INSTALLATION COST		0.0		0.0		0.3		0.3		0.0		0.2		0.3		0.0		0.0		0.0		0.0			1.1
TOTAL PROCUREMENT COST		0.0		2.6		2.7		0.3		5.7		0.2		0.3		0.0		0.0		0.0		0.0			11.8

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MOS PROCUREMENT LEADTIME: 21 MOS

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Feb-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: Jul-99 FY 1999: Dec-00 FY 2000: Jul-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	1				1								2
OUTPUT	1				1								2

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL												
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4														
INPUT	1																														
OUTPUT	1																														

Notes/Comments

Exhibit P-3A, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

February-99

MODIFICATION TITLE: ADAS T-STAR MOD KITS- SHIP
 COST CODE: 1U015/1U777
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									6	2.4													6	2.4	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.2	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP											6	0.2										6	0.2		
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.2		0.0		0.0		0.0		0.0		0.0		0.2	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		2.4		0.2		0.0		0.0		0.0		0.0		0.0		2.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MOS

PROCUREMENT LEADTIME: 15 MOS

CONTRACT DATES:

FY 1998:

FY 1999:

FY 2000: Jan-00

DELIVERY DATES:

FY 1998:

FY 1999:

FY 2000: Jan-01

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT									3	3		
OUTPUT									3	3		

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		
OUTPUT																		

Notes/Comments

Exhibit P-3A, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

February-99

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

OUTBOARD-SHIP
 LH023/LH777

(U) The OUTBOARD program is being upgraded by replacing outdated equipment and improving logistic supportability.
 The program will incorporate a DF ECP to increase the through-put speed and to permit Direction Finding (DF) on Skywave Signals

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	15	16.4			1	1.3																	16	17.7	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	15	4.4	0	0.1	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0			16	4.9	
PRIOR YR EQUIP	15	4.4		0.1																			15	4.5	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP					1	0.4																	1	0.4	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		4.4		0.1		0.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		4.9	
TOTAL PROCUREMENT COST		20.8		0.1		1.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		22.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MOS

PROCUREMENT LEADTIME: 9 MOS

CONTRACT DATES:

FY 1998: Nov-97

FY 1999:

FY 2000:

DELIVERY DATES:

FY 1998: May-98

FY 1999:

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	16												
OUTPUT	16												

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT																								16	
OUTPUT																									16

Notes/Comments: Total reflects inventory objective.

UNCLASSIFIED

February-99

MODIFICATION TITLE: OUTBOARD-SHORE
 COST CODE: LH023/LH776
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: (U) The OUTBOARD program is being upgraded by replacing outdated equipment and improving logistic supportability. The program will incorporate a DF ECP to increase the through-put speed and to permit Direction Finding (DF) on Skywave Signals

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring Equipment	4	6.3			2	2.7																	6	9.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	4	0.4	0	0.0	2	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.6	
PRIOR YR EQUIP	4	0.4																					4	0.4	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP					2	0.2																	2	0.2	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.4		0.0		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.6	
TOTAL PROCUREMENT COST		6.7		0.0		2.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		9.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MOS PROCUREMENT LEADTIME: 9 MOS

CONTRACT DATES: FY 1998: Nov-97 FY 1999: FY 2000:

DELIVERY DATES: FY 1998: May-98 FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 6

OUTPUT 6

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 6

OUTPUT 6

Notes/Comments: Total reflects inventory objective.

UNCLASSIFIED

February-99

MODIFICATION TITLE: COBLU-SHIP
 COST CODE: 1U004/1U777
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: (U) The COBLU system provides comprehensive surface tactical CESM capability into the 21st century and focuses on a total update of OUTBOARD sensors

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring Equipment							1	2.0	2	13.5	2	13.7	2	14.0	4	28.6	2	14.6					13	86.4	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6	2	1.2	2	1.2	2	1.3	4	2.6	2	1.3	0.0	0.0	13	8.2	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP							1	0.6															1	0.6	
FY 00 EQUIP									2	1.2													2	1.2	
FY 01 EQUIP											2	1.2											2	1.2	
FY 02 EQUIP													2	1.3									2	1.3	
FY 03 EQUIP															4	2.60							4	2.6	
FY 04 EQUIP																	2	1.3					2	1.3	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	14.1	14.9	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	0.0	0.0	8.2	8.2	
TOTAL PROCUREMENT COST	0.0	0.0	0.0	0.0	0.0	0.0	2.0	14.1	14.1	14.9	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	0.0	0.0	8.2	94.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 MOS PROCUREMENT LEADTIME: 17 MOS

CONTRACT DATES: FY 1998: FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: Feb-00 FY 2000: Feb-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																															
OUTPUT																															
INPUT																															
OUTPUT																															

Notes/Comments: Total reflects inventory objective.

UNCLASSIFIED

February-99

MODIFICATION TITLE: COBLU-SHORE
 COST CODE 1U004/1U776
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: (U) The COBLU Phase provides comprehensive surface tactical CSM capability into the 21st century and focuses on a total update of OUTBOARD sensors

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									1	6.7	1	6.4	1	7.0										3	20.1
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6	1	0.6	1	0.6	0	0.0	0	0.0	0.0	0.0	3	1.8	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP											1	0.6											1	0.6	
FY 01 EQUIP													1	0.6									1	0.6	
FY 02 EQUIP															1	0.6							1	0.6	
FY 03 EQUIP																	1	0.6					0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
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	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0		1.8	
TOTAL PROCUREMENT COST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	6.7	7.0	7.0	7.6	7.6	6.6	6.6	0.0	0.0	0.0	0.0	0.0	0.0		21.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 MOS PROCUREMENT LEADTIME: 17 MOS

CONTRACT DATES: FY 1998: FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: Feb-00 FY 2000: Feb-01

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

	1	2	3	4	1	2	3	4	1	2	3	4
--	---	---	---	---	---	---	---	---	---	---	---	---

INPUT 1

OUTPUT 1

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--

INPUT 1 1 3

OUTPUT 1 1 3

Notes/Comments: Total reflects inventory objective.

UNCLASSIFIED

February-99

MODIFICATION TITLE: SSEE Phase 2- SHIP
 COST CODE LD043/LD777

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/ JUSTIFICATION: (U) The SSEE Program will provide the battle group the capability to exploit Signals Of Interest (SOI) by providing a state-of-the-art system which detects, acquires, and collects data on any potential threat to the battle group. This information, in conjunction with Combat/EW Systems and C3I elements, supports the tactical combat decision making process and the national or strategic collection objective

DEVELOPMENT STATUS/ MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	24	6.5	10	3.1	4	1.9																	38	11.5	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	22	4.3	11	2.1	5	1.3	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	38	7.7	
PRIOR YR EQUIP	22	4.3	2	0.6																			24	4.9	
FY 97 EQUIP			9	1.5	1	0.1																	10	1.6	
FY 98 EQUIP					4	1.2																	4	1.2	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		4.3		2.1		1.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		7.7	
TOTAL PROCUREMENT COST		10.8		5.2		3.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		19.2	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 MOS

PROCUREMENT LEADTIME: 6 MOS

CONTRACT DATES:

FY 1998: Nov-97

FY 1999:

FY 2000:

DELIVERY DATES:

FY 1998: Mar-98

FY 1999:

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01																
	1	2	3	4	1	2	3	4	1	2	3	4													
INPUT	38																								
OUTPUT	38																								

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT																									38
OUTPUT																									38

Notes/Comments: Total reflects inventory objective.

Exhibit P-3A, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

February-99

MODIFICATION TITLE: SSEE Phase 2- SHORE
 COST CODE: LD043/LD777

MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

(U) The SSEE Program will provide the battle group the capability to exploit Signals Of Interest (SOI) by providing a state-of-the-art system which detects, acquires, and collects data on any potential threat to the battle group. This information, in conjunction with Combat/EW Systems and C3I elements, supports the tactical combat decision making process and the national or strategic collection objective

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring	5	1.3	1	0.3																			6	1.6	
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	5	1.4	1	0.03	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0			6	1.4	
PRIOR YR EQUIP	5	1.4																					5	1.4	
FY 97 EQUIP			1	0.03																			1	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		1.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.4	
TOTAL PROCUREMENT COST		2.7		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		3.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 MOS

PROCUREMENT LEADTIME: 6 MOS

CONTRACT DATES:

FY 1998:

FY 1999:

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999:

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	6											
OUTPUT	6											

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT																					
OUTPUT																					

Notes/Comments: Total reflects inventory objective.

UNCLASSIFIED

February-99

MODIFICATION TITLE: SSEE INCREMENT D- SHIP
 COST CODE: 1U008/1U777

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: (U) The SSEE Program will provide the battle group the capability to exploit Signals Of Interest (SOI) by providing a state-of-the-art system which detects, acquires, and collects data on any potential threat to the battle group. This information, in conjunction with Combat/EW Systems and C3I elements, supports the tactical combat decision making process and the national or strategic collection objective

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring Equipment							7	6.6	6	5.7	2	2.0	5	5.0	4	4.1							24	23.4	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	7	1.2	6	1.1	2	0.4	5	0.9	4	0.7	0	0.0	0	0.0			24	4.3	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP							7	1.2															7	1.2	
FY 00 EQUIP									6	1.1													6	1.1	
FY 01 EQUIP										2	0.4												2	0.4	
FY 02 EQUIP												5	0.9										5	0.9	
FY 03 EQUIP														4	0.7								4	0.7	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		1.2		1.1		0.4		0.9		0.7		0.0		0.0		0.0		4.3	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		7.8		6.8		2.4		5.9		4.8		0.0		0.0		0.0		27.7	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 MOS

PROCUREMENT LEADTIME: 6 MOS

CONTRACT DATES: FY 1998: FY 1999: Feb-99 FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: Jun-99 FY 2000: Mar-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT				6	1			2	2	2			1	1																	
OUTPUT				6	1			2	2	2			1	1																	
INPUT				2	3			2	2																		24				
OUTPUT				2	3			2	2																		24				

Notes/Comments

Exhibit P-3A, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

February-99

MODIFICATION TITLE: SSEE INCREMENT D- SHORE
 COST CODE: 1U008/1U776

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: (U) The SSEE Program will provide the battle group the capability to exploit Signals Of Interest (SOI) by providing a state-of-the-art system which detects, acquires, and collects data on any potential threat to the battle group. This information, in conjunction with Combat/EW Systems and C3I elements, supports the tactical combat decision making process and the national or strategic collection objective

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									1	1.0													1	1.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0			1	0.2	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP									1	0.2													1	0.2	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.2	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		1.2		0.0		0.0		0.0		0.0		0.0		0.0		1.2	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 MOS

PROCUREMENT LEADTIME: 6 MOS

CONTRACT DATES: FY 1998: FY 1999: FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: FY 2000: Mar-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01															
		1	2	3	4	1	2	3	4	1	2	3	4												
INPUT																									
OUTPUT																									

INSTALLATION SCHEDULE:	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	TC	TOTAL							
																			INPUT						
OUTPUT																									

Notes/Comments

Exhibit P-3A, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

February-99

MODIFICATION TITLE: T-RDF-SHIP
 COST CODE LD047/1U009/1U777

MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: (U) Transportable Radio Direction Finding (T-RDF) is a complete communication band shipboard T-RDF system for signal acquisition and bearing computation for surface combatants and is designed to operate in the harsh shipboard environment

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total							
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$						
RDT&E																														
PROCUREMENT:																														
Kit Quantity																														
Installation Kits																														
Installation Kits Nonrecurring Equipment																														
Equipment Nonrecurring																														
Engineering Change Orders																														
Data																														
Training Equipment																														
Support Equipment																														
Other																														
Intern Contractor Support																														
Installation of Hardware*	0	0.0	0	0.0	0	0.0	4	0.5	3	0.4	3	0.4	2	0.3	0	0.0	0	0.0	0	0.0			12	1.6						
PRIOR YR EQUIP																														
FY 97 EQUIP																														
FY 98 EQUIP																														
FY 99 EQUIP							4	0.5																4	0.5					
FY 00 EQUIP									3	0.4															3	0.4				
FY 01 EQUIP											3	0.4														3	0.4			
FY 02 EQUIP													2	0.3													2	0.3		
FY 03 EQUIP																													0	0.0
FY 04 EQUIP																													0	0.0
FY 05 EQUIP																													0	0.0
FY TC EQUIP																													0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.5		0.4		0.4		0.3		0.0		0.0		0.0		0.0							1.6	
TOTAL PROCUREMENT COST		0.0		0.2		0.0		1.9		1.3		2.3		1.3		1.0		0.0		0.0		0.0							8.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MOS PROCUREMENT LEADTIME: 8 MOS

CONTRACT DATES: FY 1998: FY 1999: Feb-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: FY 1999: Jul-99 FY 2000: Jun-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT		2	1	1		2	1			2	1																				12
OUTPUT		2	1	1		2	1			2	1																				12

Notes/Comments: * Inventory objective is 14 systems with antennas. Systems are carry-on hardware (not permanently installed).
 ** Installs reflect pregrams. Pregram installations are required in order to utilize the T-RDF systems as carry-on hardware during critical missions.

UNCLASSIFIED

February-99

MODIFICATION TITLE: BGPHERS-SHIP
 COST CODE: 1U019/1U777

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: (U) The Battle Group Passive Horizon Extension System (BGPHERS) extends the Battle Groups line-of-sight radio horizon by controlling remote receivers in an aircraft sensor payload. BGPHERS provides the ability for cryptologic operators to monitor, record, and analyze selected signal of interest. Reports can be prepared and information disseminated from BGPHERS via the Tactical Intelligence Information Exchange System (TACINTEL) or directly to the host ship's C4I network.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									3	4.6	2	3.1	1	1.6	2	3.2	5	8.3	4	6.8			17	27.6	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	2.3	2	1.5	1	0.8	2	1.6	5	4.1	4	3.3	17	13.6	
PRIOR YR EQUIP																							0	0.0	
FY 95 EQUIP																							0	0.0	
FY 96 EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP											3	2.3											3	2.3	
FY 01 EQUIP													2	1.5									2	1.5	
FY 02 EQUIP															1	0.8							1	0.8	
FY 03 EQUIP																	2	1.6					2	1.6	
FY TC EQUIP																			5	4.1	4	3.3	9	7.4	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		2.3		1.5		0.8		1.6		4.1		3.3		13.6	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		4.6		5.4		3.1		4.0		9.9		10.9		3.3		41.2	

ADMINISTRATIVE LEADTIME: 3 MOS

PROCUREMENT LEADTIME: 15 MOS

CONTRACT DATES: FY 1998: FY 1999: FY 2000: Dec-99

DELIVERY DATES: FY 1998: FY 1999: FY 2000: Dec-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT: 1 1 1

OUTPUT: 1 1 1

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT: 1 1 1 1 1 1 1 1 1 1 1 2 4 17

OUTPUT: 1 1 1 1 1 1 1 1 1 1 1 2 4 17

Notes/Comments

Exhibit P-3A, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE
February 1999

APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT
P-1 ITEM NOMENCLATURE SHIPBOARD IW EXPLOIT SYSTEMS 2360
SUBHEAD NO. 521U

COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01											FISCAL YEAR 02											FISCAL YEAR 03											L A T E R				
				CY00	CALENDAR YEAR 01										CALENDAR YEAR 02										CALENDAR YEAR 03																
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN		JUL	AUG	SEP	
1U001	ADAS	99	5		1	1		1	1		1																														0
		00	4								1	1		1	1																								0		
1U015	ADAS T-STAR MOD KITS	00	6			1	1	1	1	1	1																												0		
1U004	COBLU PHASE 1 SYSTEM	00	3				1		1	1																													0		
1U019	BGP HES-ST	0	3		1			1		1																													0		

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

NAVMAT FORM 7110/4 (REVISED 11/77)

BUDGET ITEM JUSTIFICATION SHEET

DATE February 1999

APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE			SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							COMBAT DIRECTION FINDING 2419			521N	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$5.4									

Note: Combat Direction Finding transfers to the Shipboard Cryptologic Systems Program NARM 33236000 in FY 99. Detail budget justification material for PY through FY98 is included in the Shipboard Cryptologic Systems Program for budget comparability.

PROGRAM COVERAGE:

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

(U) This line item provides Electronic Warfare Signals Acquisition and Direction Finding (DF) Systems (AN/SRS-1) with the capability to (1) detect, (2) locate, (3) identify hostile targets at long-range, and (4) input this information into the ships tactical data system. The design of Combat DF (CDF) is based on the proven technology of OUTBOARD but provides greater flexibility and responsiveness to new threat signals while reducing space and manning requirements. Block 0 provides Narrowband Step-Search Signal Acquisition and DF against conventional communications signals. The Automated Digital Acquisition System (ADAS) integrates with Block 0 as a modular subsystem and provides the foundation for exploitation of unconventional and Low Probability of Intercept (LPI) signal types.

FY 95 procured reliability mod kits to replace antiquated CDF Block 0 hardware.

FY 96 procured one ADAS and production support.

FY 97 procures three ADAS, production support, and reliability mod kits to replace antiquated CDF Block 0 hardware.

FY 98 procures four ADAS, production support, and installation.

BUDGET ITEM JUSTIFICATION SHEET

DATE February 1999

APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE			SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							OUTBOARD MODERNIZATION 2430			52LH	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$11.1									

Note: Outboard Modernization transfers to the Shipboard Cryptologic Systems Program NARM 33236000 in FY 99. Detail budget justification material for PY through FY98 is included in the Shipboard Cryptologic Systems Program for budget comparability.

PROGRAM COVERAGE:

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: (U) This line provides for the logistic update of the OUTBOARD Electronic Warfare System which provides the operational commander with a real-time passive capability to detect, locate, track and target hostile units at long-range (over-the-horizon).

(U) The OUTBOARD System is currently ineffective against elements of the current/projected threat environment which includes counter narcotics operations. Its equipment is old and becoming expensive and impossible to maintain. An OUTBOARD Logistic Update Program was established to correct these deficiencies IAW an approved program management proposal by (a) replacing outdated equipment, establishing a common logistic support baseline, upgrading the Subsystem Direction Finder (DF) via an acquisition of hardware/software Engineering Change Proposal (ECP) to increase through-put speed, DF on Skywave Signals, and (b) modernizing the subsystems. A joint cooperative program between the United States and the United Kingdom (U.K.) was established 1 July 1994 with a Memorandum of Understanding (MOU) being signed by both governments. The Cooperative OUTBOARD Logistics Update (COBLU) program provides upgrades to the existing OUTBOARD System (AN/SSQ-108) to provide Comprehensive Surface Tactical (CESM) capability to the 21st century. The program will make maximum use of already developed military and commercial signal exploitation equipment. The systems architecture will require minimal effort to implement future technologies necessary to handle the evolving threat. Program is being executed in two phases; Phase 0 is an interim update that focuses on transitioning Human Computer Interface (HCI) to a Joint Maritime Command Information System (JMCIS) environment and integrating with DFECF. Phase 1 focuses on a total update of front-end sensors.

- (U) FY 95 funds procured 9 DF ECP kits, production support and installation.

- (U) FY 96 funds installed the hardware which was procured in FY 95.

- (U) FY 97 funds procured production support required to prepare the contract documentation necessary to procure the hardware required in FY 98.

- (U) FY 98 funds procured and installed three Direction Finding Kits. Also, FY 98 will fund the Navy share of the non-recurring engineering costs associated with the COBLU Phase 1 system as cited in the MOU. The U.K. will procure 5 systems in FY 98.

Inventory Objective: (U) 22 OUTBOARD/COBLU PH 1 - 16 shipboard and 6 shore (2 for training at Naval Technical Training Center (NTTC) Pensacola, FL; 1 for software support activity ; 2 for 7b4 Fleet Trainer Devices (FCTCPAC San Diego, CA and FCTCLANT Dam Neck, VA); 1 for land base test facility for ECP support).

Installation Agent(s): Installations are accomplished by formal SHIPALT by Alteration Installation Team (AIT) during ship pierside availability.
Code B Item: RDT&E, DW Program Element 0305885G, Milestone III, April 1998.

BUDGET ITEM JUSTIFICATION SHEET

DATE February 1999

APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE			SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							Common High Bandwidth Data Link 2434			52XU	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$42.2	\$65.1	\$40.1	\$23.4	\$19.9	\$19.4	\$47.7	\$47.8	Continuing	Continuing

PROGRAM COVERAGE:

(U) The Battle Group Passive Horizon Extension System (BGPHERS AND/ULQ-20) extends the Battle Group's line-of-sight radio horizon by controlling remote receivers in an aircraft sensor payload. Intercepted signals of interest are sent via the Common High Bandwidth Data Link (CHBDL) to the surface terminal (BGPHERS-ST). BGPHERS is interoperable with the USAF Direction Finding/Communication Intelligence (DF/COMINT) and can be expanded to provide Electronic Intelligence (ELINT) coverage. BGPHERS will become the Navy's Signals Intelligence (SIGINT) component of the Distributed Common Ground Station (DCGS) and be multi-service interoperable and Joint SIGINT Avionics Family (JSAF) compliant.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

(U) The BGPHERS-ST provides the ability for cryptologic operators to monitor, record and analyze selected signals of interest. Reports can be prepared and information disseminated from the surface terminal via the Tactical Intelligence Information Exchange System (TACINTEL) or directly to the host ship's C4I network. Beginning in FY 00, the BGPHERS-ST portion of this budget has been consolidated into the Shipboard IW Exploit budget (NARM 2360).

(U) The Common High Bandwidth Data Link - Shipboard Terminal (CHBDL - ST) will provide a wideband data link between Navy/Joint airborne sensor systems and the shipboard processors of national second tactical reconnaissance programs. It is designed to communicate with the BGPHERS, the Joint Services Imagery Processing System - Navy (JSIPS-N), the Aircraft Carrier Tactical Support Center (CV-TSC), and the Joint Surveillance Target Attack Radar System (Joint STARS). CHBDL - ST benefits the fleet by providing a horizon extension for line-of-sight sensor systems for use in battle damage assessment or mission planning and is interoperable with the USAF U2 aircraft.

(U) FY 98 procures 6 BGPHERS - ST systems, 4 CHBDL - ST systems, CHBDL test equipment, production support, and installation.

(U) FY 99 procures 6 BGPHERS - ST systems, 6 CHBDL - ST systems, 1 Dual Band backfit kit, 2 Dual Simultaneous Mission (DSM)/Asynchronous Transfer Mode (ATM) backfit kits, production support, and installation.

(U) FY 00 procures 3 CHBDL - ST systems, 2 Dual Simultaneous Mission (DSM)/Asynchronous Transfer Mode (ATM) backfit kits, production support, and installation.

(U) Installation Agent(s): Installations are accomplished by formal shipalt by alteration installation team (AIT).

**UNCLASSIFIED
CLASSIFICATION**

COST ANALYSIS													DATE February 1999			
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE Common High Bandwidth Data Link						SUBHEAD 52XU				
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			PY			FY 1998			FY 1999			FY 2000				
			QTY	TOTAL COST				QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
XU001	BGPHERS - ST	A					6	1,223	7,338	6	1,478	8,870				
XU003	CHBDL - ST	A					4	6,270	25,079	6	6,692	40,152	3	7,181	21,544	
XU005	PRODUCTION SUPPORT	A							2,248			1,547			1,400	
XU006	ECP PROCUREMENT/INTEGRATION	A													2,016	
XU007	DSM/ATM BACKFIT KITS	A							0	2	1,500	3,000	2	1,500	3,000	
XU008	TEST EQUIPMENT	A							563			0			0	
XU009	DUAL BAND BACKFIT KITS	A							0	1	2,000	2,000			0	
XU776	INSTALLATION NON - FMP	A							0			571			823	
XU777	INSTALLATION FMP	A							6,941			8,918			11,300	
	INSTALL								6,114			7,907			9,968	
	DSA								827			1,011			1,332	
	TOTAL CONTROL								42,169			65,058			40,083	
Remarks:																

DD FORM 2446, JUN 86

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE											
											February 1999											
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD											
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						Common High Bandwidth Data Link 2434					52XU											
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE										
XU001	BGPHEs - ST	98	VARIOUS *	VARIOUS *	SSC-SC	N/A	Dec-97	Dec-98	6	1,223	YES	N/A										
		99											VARIOUS *	VARIOUS *	SSC-SC	N/A	Feb-99	Feb-00	6	1,478	YES	N/A
XU003	CHBDL - ST	98	L3 COMMUNICATIONS	OPTION	SPAWAR	N/A	Nov-97	Dec-98	4	6,270	YES	N/A										
		99											TBD	COMP	SPAWAR	Jul-97	Nov-98	Feb-00	6	6,692	YES	N/A
		00											TBD	OPTION	SPAWAR	N/A	Nov-99	Feb-01	3	7,181	YES	N/A
XU007	DSM/ATM BACKFIT KITS	99	TBD	COMP	SPAWAR	Jul-97	Mar-99	Jun-00	2	1,500	YES	N/A										
		00											TBD	OPTION	SPAWAR	N/A	Nov-99	Feb-01	2	1,500	YES	N/A
XU009	DUAL BAND BACKFIT KIT	99	TBD	COMP	SPAWAR	Jul-97	Feb-99	May-00	1	2,000	YES	N/A										

D. REMARKS
* Commercial off-the-shelf (COTS) hardware to be procured from various contract sources through SSC- Charleston.

UNCLASSIFIED

February-99

MODIFICATION TITLE: Battle Group Passive Horizon Extension System Surface Terminal (BGPHE-ST) (XU001/XU777) - Ship
 COST CODE XU001/XU777

MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: The BGPHE-ST program provides the ability for cryptologic operators to monitor, record and analyze selected signals of interest. can be prepared and information disseminated from the surface terminal via TACTEL or directly to the ship's C4I network.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	0	0.0	3	4.3	4	4.9	5	7.4															12	16.6
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	3	2.4	4	2.9	5	3.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12	9.0
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP					3	2.4																	3	2.4
FY 98 EQUIP							4	2.9															4	2.9
FY 99 EQUIP									5	3.7													5	3.7
FY 00 EQUIP																							0	0.0
FY 01 EQUIP																							0	0.0
FY 02 EQUIP																							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0		0.0		2.4		2.9		3.7		0.0		0.0		0.0		0.0		0.0		0.0		9.0
TOTAL PROCUREMENT COST		0.0		4.3		7.3		10.3		3.7		0.0		0.0		0.0		0.0		0.0		0.0		25.6

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 PROCUREMENT LEADTIME: 15

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Feb-99 FY 2000:

DELIVERY DATES: FY 1998: Dec-98 FY 1999: Feb-00 FY 2000:

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

INPUT 3 1 1 2 2 2 1

OUTPUT 3 1 1 2 2 2 1

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

INPUT 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 TC TOTAL

OUTPUT 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 TC TOTAL

Notes/Comments

UNCLASSIFIED

February-99

MODIFICATION TITLE: Battle Group Passive Horizon Extension System Surface Terminal (BGPHE-SST) (XU001/XU776) - Shore
 COST CODE XU001/XU776

MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: The BGPHE-SST program provides the ability for cryptologic operators to monitor, record and analyze selected signals of interest. can be prepared and information disseminated from the surface terminal via TACTEL or directly to the ship's C4I network.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment					2	2.4	1	1.5															3	3.9	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	2	0.6	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.9	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP							2	0.6															2	0.6	
FY 99 EQUIP									1	0.3													1	0.3	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.6		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.9	
TOTAL PROCUREMENT COST		0.0		0.0		2.4		2.1		0.3		0.0		0.0		0.0		0.0		0.0		0.0		4.8	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 PROCUREMENT LEADTIME: 15

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Feb-99 FY 2000:

DELIVERY DATES: FY 1998: Dec-98 FY 1999: Feb-00 FY 2000:

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

	1	2	3	4	1	2	3	4	1	2	3	4
--	---	---	---	---	---	---	---	---	---	---	---	---

INPUT 0 2 1

OUTPUT 0 2 1

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--

INPUT 3

OUTPUT 3

Notes/Comments

UNCLASSIFIED

February-99

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

Common High Bandwidth Data Link (Surface Terminal) (CHBDL-ST) - Ship
 XU003/XU777
 Provides the shipboard communications terminal for the transfer of data from remote airborne sensors to the Battle Group Passive Horizon Extension System - Shipboard Terminal

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment			3	25.6	4	25.3	5	36.7	3	21.5	2	15.1	2	15.0	2	15.3	3	24.0	3	24.5	1	8.3	28	211.3	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	3	3.7	4	5.0	4	6.3	4	5.2	2	2.7	2	2.7	2	2.8	3	4.2	4	6.7	28	39.3	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP					3	3.7																	3	3.7	
FY 98 EQUIP							4	5.0															4	5.0	
FY 99 EQUIP									4	6.3	1	1.3											5	7.6	
FY 00 EQUIP											3	3.9											3	3.9	
FY 01 EQUIP													2	2.7									2	2.7	
FY 02 EQUIP															2	2.7							2	2.7	
FY 03 EQUIP																	2	2.8					2	2.8	
FY 04 EQUIP																			3	4.2			3	4.2	
FY 05 EQUIP																					3	5.0	3	5.0	
FY TC EQUIP																					1	1.7	1	1.7	
TOTAL INSTALLATION COST		0.0		0.0		3.7		5.0		6.3		5.2		2.7		2.7		2.8		4.2		6.7		39.3	
TOTAL PROCUREMENT COST		0.0		25.6		29.0		41.7		27.8		20.3		17.7		18.0		26.8		28.7		15.0		250.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 17

CONTRACT DATES: FY 1998: Nov-97 FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: Dec-98 FY 1999: Feb-00 FY 2000: Feb-01

	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	3	1	1	2			2	2	1	1	2																				
OUTPUT	3		1	1	2				2	2	1	1	2																		
INPUT			1	1		1	1			1	1							1	2							4		28			
OUTPUT				1	1			1	1			1	1							1	2						4		28		

Notes/Comments

UNCLASSIFIED

February-99

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

Common High Bandwidth Data Link - Surface Terminal (CHBDL-ST) - Shore
 XU003/XU776

Provides the shipboard communications terminal for the transfer of data from remote airborne sensors to the Battle Group Passive Horizon Extension System can be prepared and information disseminated from the surface terminal via TACTEL oor directly to the ship's C4I network.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							1	3.5															1	3.5	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP									1	0.3													1	0.3	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.3	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		3.5		0.3		0.0		0.0		0.0		0.0		0.0		0.0		3.8	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 17

CONTRACT DATES: FY 1998: FY 1999: Nov-98 FY 2000:

DELIVERY DATES: FY 1998: FY 1999: Feb-00 FY 2000:

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

INPUT 0 1

OUTPUT 0 1

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

INPUT 1

OUTPUT 1

Notes/Comments

UNCLASSIFIED

February-99

MODIFICATION TITLE: Dual Band Backfit Kit - Ship
 COST CODE: XU009/XU777
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							1	2.0															1	2.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.0	
PRIOR YR EQUIP																							0	0.0	
FY 95 EQUIP																							0	0.0	
FY 96 EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP									1	1.0													1	1.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		1.0		0.0		0.0		0.0		0.0		0.0		0.0		1.0	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		2.0		1.0		0.0		0.0		0.0		0.0		0.0		0.0		3.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 17

CONTRACT DATES: FY 1998: FY 1999: Feb-99 FY 2000:

DELIVERY DATES: FY 1998: FY 1999: May-00 FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 0 1

OUTPUT 0 1

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 1

OUTPUT 1

Notes/Comments

UNCLASSIFIED

February-99

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

CHBDL-ST DSM/ATM Backfit Kits - Ship
 XU007/XU777
 Provides the shipboard communications terminal for the transfer of data from remote airborne sensors to the Battle Group Passive Horizon Extension System - Shipboard Terminal

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							2	3.0	2	3.0							6	9.6	6	9.7			16	25.3	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	2	0.2	2	0.2	0	0.0	0	0.0	0	0.0	6	0.5	6	0.5	16	1.4	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP									2	0.2													2	0.2	
FY 00 EQUIP										2	0.2												2	0.2	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																			6	0.5			6	0.5	
FY 05 EQUIP																					6	0.5	6	0.5	
FY TC EQUIP																					6	0.5	6	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.2		0.2		0.0		0.0		0.0		0.5		0.5		1.4	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		3.0		3.2		0.2		0.0		0.0		9.6		10.2		0.5		26.7	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 17

CONTRACT DATES: FY 1998: FY 1999: Mar-99 FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: Jun-00 FY 2000: Feb-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL														
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4																
INPUT	0							1	1			1	1																																
OUTPUT	0							1	1			1	1																																

Notes/Comments

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE/LINE ITEM # <i>AN/WLQ-4 (2516)</i>					
Program Element for Code B Items: N/A							OTHER RELATED PROGRAM 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			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST (In Millions)			\$1.4	\$2.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.3
SPARES COST (In Millions)												
PROGRAM DESCRIPTION/JUSTIFICATION:												
Starting with the FY 2000 budget, this program was consolidated into the Submarine Support Equipment line - 256000.												

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999																	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2: COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/LINE ITEM # SUBMARINE SUPPORT EQUIPMENT/256000/256000-05																	
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS N/A																	
	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)	N/A	A		\$6.8	\$3.9	\$35.2	\$27.8	\$27.6	\$44.6	\$29.2	\$51.0	N/A	\$226												
SPARES COST (In Millions)													0												
PROGRAM DESCRIPTION/JUSTIFICATION:																									
<p>This program consolidates the following programs in FY 2000:</p> <table style="width:100%; border: none;"> <tr> <td style="padding-left: 20px;">From:</td> <td style="padding-left: 20px;">251600</td> <td style="padding-left: 20px;">AN/WLQ-4</td> </tr> <tr> <td></td> <td style="padding-left: 20px;">218000/05</td> <td style="padding-left: 20px;">Sonar Support Equipment</td> </tr> <tr> <td></td> <td style="padding-left: 20px;">232000/05</td> <td style="padding-left: 20px;">AN/WLR-1</td> </tr> <tr> <td style="padding-left: 20px;">To:</td> <td style="padding-left: 20px;">25600/05</td> <td style="padding-left: 20px;">Submarine Support Equipment Program</td> </tr> </table> <p>SSEP:</p> <p>(U) The Submarine Support Equipment Program was established to develop and support systems which provide the capability to exploit signal intercepts and imagery for tactical support and early warning of threat sensors. The AN/WLR-8(V)2 is a tactical Electronic Warfare Support Measure (ESM) Receiver for the SSN 688 Class Submarines providing intercept, surveillance, and signal parameter analysis of electromagnetic signals for threat warning. Funds buy unique equipment in limited quantities that are maintained in a pool and rotated among attack submarines as dictated by scheduled operations and to provide specific capability improvements to major SSN sensor systems. This also procures support equipment for shore based acoustic intelligence analysis centers. This program also procures AN/WLR-8 (V)2 threat detection with an Instantaneous Frequency Monitoring (IFM) signal intercept capability that provides near 100% probability of intercept throughout the SHF frequency band. This improvement significantly increases the systems' capability to detect short duration and wideband threat emissions and will maintain the AN/WLR-8 as a viable ESM System beyond FY-2000. AN/WLR-8(V)2 Extremely High Frequency (EHF) Field Change Kits extend the receiver frequency range of the AN/WLR-8(V)2. This improvement upgrades the tactical threat warning capability to intercept the threat radar signals operating in the EHF frequency band. This also procures R&M and operational improvement field change kits and special mission support equipment.</p> <p>A. ML002 - AN/WLR-8(V)2 Extremely High Frequency Field Change Kits will extend the frequency range of the AN/WLR-8(V)2.</p> <p>B. ML003 - SSEP special support equipment allows the procurement of special purpose test equipment utilized by the Type Commander Groom Teams. Exact quantities vary from year to year based on Fleet requirements. Provides analysis equipment for SSEP Aural Analysis Booths at New London, CT; Pearl Harbor, HI; and San Diego, CA. Equipment is used for analysis of AN/BQH-5(V)4 acoustic intelligence data. Six sets of equipments are required. Variable quantities bought in each fiscal year.</p> <p>C. ML005 - Procures AN/BRD-7 Reliability and Maintainability (R&M) Field Change Kits; bearing calculator improvement to enhance the direction finding capability of the AN/BRD-7 system; printers to replace existing obsolete printers in the AN/BRD-7 System.</p>														From:	251600	AN/WLQ-4		218000/05	Sonar Support Equipment		232000/05	AN/WLR-1	To:	25600/05	Submarine Support Equipment Program
From:	251600	AN/WLQ-4																							
	218000/05	Sonar Support Equipment																							
	232000/05	AN/WLR-1																							
To:	25600/05	Submarine Support Equipment Program																							

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #	
OTHER PROCUREMENT, NAVY/BA-2: COMMUNICATION & ELECTRONIC EQUIPMENT	SUBMARINE SUPPORT EQUIPMENT/256000	
<p>D. ML010 - Procures WLR-8 Field Change Kits to replace obsolete displays.</p> <p>E. ML011 - Procures AN/WLR-8 R&M Field Change Kits.</p> <p>F. ML013 - Procures special purpose test equipment to aid in testing and troubleshooting ESM Systems at the Submarine Intermediate Maintenance Activity (IMAs).</p> <p>G. ML014 - Provides for the refurbishment of the AN/WLR-8 Systems for backfit on SSN 688 Submarines.</p> <p>H. ML015 - Procures SSN ESM Backfit System Improvements in FY2000/1.</p> <p>I. ML016 - Procures HPI Reliability and Maintainability Field Change Kits and Field Change Kits to replace obsolete materials.</p> <p>J. ML017 - NSSN AN/BLQ-10 (V) FCKs</p> <p>K. ML018 - AN/BLQ (V) IEM FCKs</p> <p>L. ML5IN - Provides for the Installation of Equipment including Fleet Modernization Program Installations for Training Equipment and Installation of Equipment in Other Shore Facilities. Installations will be performed by Alteration installation Teams (AITs).</p> <p>M. MLDSA - The budget reflects the transfer of design services into the appropriate equipment P1 line item in accordance with full funding policy FY98 and out.</p>		

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #	
OTHER PROCUREMENT, NAVY/BA-2: COMMUNICATION & ELECTRONIC EQUIPMENT	SUBMARINE SUPPORT EQUIPMENT/256000	
<p><u>AN/WLQ-4</u></p> <p>(U) This line procures upgrades to the AN/WLQ-4(V)1 and modification kits resulting from redesign of obsolescent subassemblies of the AN/WLQ-4(V) Submarine ESM Systems. It procures spares and repair parts for the Mini-N-Suite. It supports training curricula updates for the WLQ-4(V)1 System. It procures upgrades to the AN/WLQ-4(V)/(V)1 software support and maintenance support equipment. Funding also procures Test Program Sets (TPS) which provide technical and workload capability to test all analog, digital, radio frequency, and hybrid spare units of the AN/WLQ-4(V)/(V)1 systems. TPSs are used with existing Automatic Test Equipment (ATE) located at the Repair Depot, NRAD, San Diego. The Repair/Test Stations include ATE, TPS, test fixture special repair tools, test equipment and documentation. The AN/WLQ-4 and AN/WLQ-4(V)1 Systems use many of the same modules. The description of each building block line item is as follows:</p> <p>A. ML019 - Reliability & Maintainability Mod Kits provides various AN/WLQ-4(V)1 upgrades, AN/WLQ-4(V)/(V)1 obsolescence replacement kits,, R&M Kits and Software Support Activity (SSA) equipment upgrades.</p> <p>B. ML020 - Mini-N-Suite - The funds provided in FY-98 thru FY-05 will be used to purchase repair parts for the Mini-N-Suite.</p> <p>C. ML021 - AN/WLQ-4(V)1 Trainer - The funds provided in FY-98 thru FY-05 will be used to procure curriculum updates associated with system upgrades and various R&M Mod Kits.</p> <p>D. ML022 - AN/WLQ-4(V)1 Depot Upgrade - The funds provided in FY-98 thru FY-05 will be used to provide various upgrades to system TPS as well as upgrades to Depot Test Support Equipment.</p> <p>E. ML023 - AN/WLQ-4(V)1 HPI (High Probability Intercept) Kits - The one (1) HPI Kit identified in FY-97 will be used as a Configuration Control Model (CCM) and the two identified by FY-98 will be used on ship installations.</p> <p>F. ML024 - AN/WLQ-4(V)1 Intermediate Maintenance Activity (IMA) Support.</p>		

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE/LINE ITEM #	
OTHER PROCUREMENT, NAVY/BA-2: COMMUNICATION & ELECTRONIC EQUIPMENT	SUBMARINE SUPPORT EQUIPMENT/256000	
 <u>SONAR SUPPORT EQUIPMENT</u> 		
<p>Program provides significant OPNAV approved performance enhancement field changes for in-service ASW sonars on submarines. It also provides life cycle support in producing field changes required because of aging, obsolete, or unreliable components or casualties. Funding is included for the installation of equipment including Fleet Modernization Program installations, trainer and shore site installations. In addition, various modifications to sonar general equipments are procured. This funding includes execution of the following major upgrades:</p>		
<p>A. ML025 - Procures planned improvements for ancillary sonars, including their support equipment and materials.</p> <p>Procurement of the AN/BQS-15 Remote Ahead Profiling (RAP) improvement began in FY96. RAP provides a major display improvement for under-ice and mine avoidance operations. The total objective is 29 kits. One kit was procured in FY96; ten in FY97 and six in FY98. Eight (8) will be procured in FY00. Four (4) will be procured in later years.</p> <p>Procurement of nineteen (19) AN/UNQ-9 (IDARs replacement) systems in FY 98 and 39 in FY 99 for all FAST ATTACK Submarines. Of this amount fourteen (14) will be installed in FY00. These systems will be a COTS modified system.</p> <p>Procurement of thirty-two (32) COTS AN/BQN-17 UPGRADES, which is the primary depth sounder on SSN 688 Class Submarines, is planned for FY00 and FY 01.</p> <p>Procurement of the AN/BQS-15 EC-19 Precision Bottom Mapping Upgrade is planned to start in FY02. This upgrade assists the ship in making decisions on how to safely exit the minemfield. The total objective is twenty (20) kits. Five (5) kits are planned for FY 02; five (5) kits are planned for FY03 and ten (10) are planned for FY 05.</p>		
<p>B. ML026 - Provides engineering upgrades for the Signal Data Converter Storer (SDCS) Interface Units. Upgrades incorporate combat system updates, interfaces and new functionality.</p>		
<p>C. ML830 - Funds production engineering services that support procurement and installation of these systems.</p>		

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-2:	SUBMARINE SUPPORT EQUIPMENT/256000	
COMMUNICATION & ELECTRONIC EQUIPMENT		
 <u>AN/WLR-1 SURFACE - N86</u>		
<u>SURFACE WARFARE (N86):</u>		
<p>A. ML027 - FY00-FY03 funding is for the procurement of modification kits. These modification kits are required to replace obsolete and high maintenance components and to extend the life cycle of the system on WHEC Class Cutters. Requirements include the installatin of COTS/NDI equipment and the installation and support of the upgraded equipment.</p> <p>B. ML5IN: FY00-FY03 funding is for the installation of modification kits. These modification kits are required to replace obsolete and high maintenance components and to extend the life cycle of the system on WHEC Class Cutters. Requirements include the installation of COTS/NDI equipment and the installation and support of the upgraded equipment.</p>		

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-2: COMMUNICATION & ELECTRONIC EQUIPMENT					ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE SUPPORT EQUIPMENT PROGRAM/82ML/256000								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
	(SUBMARINE WARFARE (N87))													
ML002	EHF Extension Field Change Kits	A			0			0			0			
ML003	SSEP Special Support Equipment	A			265			269			306			
ML005	AN/BRD-7 FCK's	A			509			912			889			
ML010	AN/WLR-8 Display Obsolescence	A	31	25	780			0			0			
ML011	AN/WLR-8 R&M FCKs	A			593			526			768			
ML013	ESM IMA Support	A			108			118			165			
ML014	AN/WLR-8 Refurb.	A			0			0			0			
ML015	SSN ESM Backfit System Improvement	A						4	3,448	13,792				
ML016	HPI R&M Field Change Kits	A								0				
ML017	NSSN AN/BLQ-10 (V) FCKs	A								0				
ML018	AN/BLQ-10 (V) IEM FCKs	A								0				
ML019	Reliability Modification Kits: Reliability & Maintability Mod Kits ERTS/CRTS Upgrades, SSA ADP, & GFE	A								656				
ML020	Mini-N-Suite	A								73				
ML021	AN/WLQ-4(V) Trainer	A								334				
ML022	AN/WLQ-4(V)1 Depot Upgrade	A								20				
ML023	AN/WLQ-4(V)1 HPI Kits	A								0				
ML024	AN/WLQ-4(V)1 IMA Support	A								139				
SUBTOTAL					2,255			1,825			17,142			0

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2 COMMUNICATIONS & ELECTRONICS EQUIPMENT						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD SSEP/82ML/2560							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
ML025	ANCILLARY SONARS IMPROVEMENTS AN/BQS-15 EC-18 (RAP) AN/UNQ-9 (IDARS REPLACEMENT) AN/BQN-17 *	A							8	268.0	2,144			
									20	375.0	7,500			
ML5IN	FMP INSTALLATION OF EQUIPMENT SSN ESM Backit Sys. Imp. FMP Install SSN ESM DSA Installation AN/BQS-15 EC-18 (RAP) AN/UNQ-9 (IDARS Replacement) AN/BQS-15 EC-17 AN/BQN-17 Air AN/WLR-1 FMP Installation - N88 Surface FMP Installation - N86	A A A A A A A			3642 856			1,683 413						26 0 0 217 0 75 612 636
ML026	ADAP ENGINEERING UPGRADES	A							33	21.4	707			
ML830	Sonar Production Engineering	A												3,219
ML900	Sonar Consulting Services	A												495
ML027	Air AN/WLR-1H(V)5 Modification Kits								2	486	971			
ML028	Surface AN/WLR-1H(V)5 Modification Kits								3	486	1,457			
* ML025 (AN/BQN-17) FY00 TOTAL COST INCLUDES CONTRACTOR FIRST ARTICLE COSTS. Due to an administrative error in PBD-752, an \$8M increase to AN/BQN-17 in FY 00 was erroneously placed in Budget Activity 3, Aviation Support Equipment instead of Budget Activity 2, Submarine Support Equipment Program.														
SUBTOTAL FROM PREVIOUS PAGE:					2,255			1,825			17,142			
GRAND TOTAL					6,753			3,921			35,201			

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-2: COMMUNICATION & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE SUB. SUPPORT EQUIPMENT PROGRAM				SUBHEAD 82ML	
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										
ML010 - AN/WLR-8 Display	31	25.16	NRAD, San Diego		RC	A&T San Diego, CA	4/98	4/99	YES	N/A
FY-00										
ML015- SSN ESM BSI	4	3448	NAVSEA	10/99	CP	Lockheed Martin	4/00	10/01	YES	N/A
ML026 SDCS ENG. UPG.	33	21.4	NAVSEA		C/FP	NUWC Newport, RI	5/00	6/00	YES	N/A
ML025 AN/BQN-17	20	375.0	NUWC	10/99	C/FP	Unknown	3/00	9/00	YES	N/A
ML025 AN/BQS-15 EC-18 (RAP)	8	268.0	DCMC		SS/FP	Raytheon, RTSC	2/00	8/00	YES	N/A
ML027 Air WLR-1H(V)5 Mod. Kits	2	485.5			CONTRACT	COTS/NDI / TBD	12/99	6/00	YES	N/A
ML028 Sur. WLR-1H(V)5 Mod. Kits	3	485.7			CONTRACT	COTS/NDI / TBD	12/99	6/00	YES	N/A
D. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SSN ESM BACKFIT SYS. (ML015) TYPE MODIFICATION: _____ MODIFICATION TITLE: AN/BLQ-10 (V)

DESCRIPTION/JUSTIFICATION:
 Provides intercept, surveillance, and signal parameter analysis in order to resolve obsolescent equipment problems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>RDT&E</u>																									
<u>PROCUREMENT</u>																									
INSTALLATION KITS																									
INSTALLATION KITS NONRECURRING																									
EQUIPMENT	1	4.5								3	10.3	4	14.9	2	8.5	6	22.7	5	20.6	5	21.0	26		102.7	
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT														1	4.3								1		4.3
SUPPORT EQUIPMENT																									
OTHER: CCM																1	3.8						1		3.8
OTHER: GFE										1	3.4												1		3.4
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST												1	0.8	3	2.6	4	2.6	2	1.0	16	11.7	26		18.7	
TOTAL PROCUREMENT	1	4.5								4	13.7	4	15.7	3	15.4	7	29.1	5	21.6	21	32.7	29		132.9	

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

MODELS OF SYSTEMS AFFECTED: SSN ESM Backfit Sys.(ML015) MODIFICATION TITLE: AN/BLQ-10 (V)

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: AITs

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1998: _____

FY 1999: _____

FY 2000: 4/00

DELIVERY DATE: FY 1998: _____]

FY 1999: _____

FY 2000: 10/01

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS												1	0.800										1	0.800		
FY 1996 EQUIPMENT																										
FY 1997 EQUIPMENT																										
FY 1998 EQUIPMENT																										
FY 1999 EQUIPMENT																										
FY 2000 EQUIPMENT											0.026			3	2.557								3	2.583		
FY 2001 EQUIPMENT																	4	2.566					4	2.566		
FY 2002 EQUIPMENT																			2	1.022			2	1.022		
FY 2003 EQUIPMENT																						6	4.380	6	4.380	
FY 2004 EQUIPMENT																							5	3.650	5	3.650
TO COMPLETE																							5	3.65	5	3.650

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1997 & Prior	FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	26	
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	16	26	

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SONAR SUPPORT EQUIPMENT/82WK
 MODELS OF SYSTEM AFFECTED: AN/BQS-15 TYPE MODIFICATION: _____ MODIFICATION TITLE: REMOTE AHEAD PROFILING UPGRADE WK036

DESCRIPTION/JUSTIFICATION:

THIS IS A COTS UPGRADE.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RD&E</i>																							0	0.0
<i>PROCUREMENT</i>																								
INSTALLATION KITS																							0	0.0
INSTALLATION KITS NONRECURRING																							0	0.0
EQUIPMENT	1	0.287	10	2.545	6	1.544			8	2.144										4	3.408	29	9.928	
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																								0.000
INSTALL COST					11	0.705	6	0.408			8	0.600								4	0.460	29	2.175	
TOTAL PROCUREMENT		0.287		2.545		2.249		0.408		2.144		0.600										3.868	12.103	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

SONAR SUPPORT EQUIPMENT/82WK

MODELS OF SYSTEMS AFFECTED: AN/BQS-15 MODIFICATION TITLE: REMOTE AHEAD PROFILING UPGRADE; WK036

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 1 Month

PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 1997: May-97

FY 1998: Jan-98 FY 1999: N/A

DELIVERY DATE: FY 1997: Sep-97

FY 1998: Jul-98 FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1995 EQUIPMENT																									
FY 1996 EQUIPMENT					1	0.063																		1	0.063
FY 1997 EQUIPMENT					10	0.641																		10	0.641
FY 1998 EQUIPMENT							6	0.408																6	0.408
FY 1999 EQUIPMENT																									
FY 2000 EQUIPMENT										8	0.600													8	0.600
FY 2001 EQUIPMENT																									
FY 2002 EQUIPMENT																									
FY 2003 EQUIPMENT																									
TO COMPLETE																						4	0.460	4	0.460

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	1	4	5	1	5	1	0	0	0	0	0	0	4	2	2	0	0	0	0	0	0	0	0	0	25	25
Out	0	0	0	0	0	0	3	6	2	5	1	0	0	0	0	0	0	4	2	2	0	0	0	0	0	0	0	0	0	25	25

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 SONAR SUPPORT EQUIPMENT/82WK
 MODELS OF SYSTEM AFFECTED: AN/BQN-17 TYPE MODIFICATION: _____ MODIFICATION TITLE: AN/BQN-17

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>RDT&E</u>																								0	0.0
<u>PROCUREMENT</u>																									
INSTALLATION KITS																								0	0.0
INSTALLATION KITS NONRECURRING																									0.0
EQUIPMENT								20	7.500	12	3.148													32	10.648
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									0.075	3	0.110	8	0.279	10	0.360	6	0.221							27	1.045
TOTAL PROCUREMENT									7.575		3.258		0.279		0.360		0.221								11.693

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO.
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UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

SONAR SUPPORT EQUIPMENT/82WK

MODELS OF SYSTEMS AFFECTED: AN/BQN-17

MODIFICATION TITLE: AN/BQN-17

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 1 Month

PRODUCTION LEADTIME: _____

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1995 EQUIPMENT																									
FY 1996 EQUIPMENT																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT																									
FY 1999 EQUIPMENT																									
FY 2000 EQUIPMENT											3	0.110	5	0.168	1	0.038	6	0.221						15	0.537
FY 2001 EQUIPMENT													3	0.111	9	0.322								12	0.433
FY 2002 EQUIPMENT																									
FY 2003 EQUIPMENT																									
TO COMPLETE																									

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	2	2	2	2	3	2	3	2	2	2	2	0	27	27
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	2	2	2	2	3	2	3	2	2	2	2	0	27	27				

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 MODELS OF SYSTEM AFFECTED: AN/WLR-1H TYPE MODIFICATION: _____ MODIFICATION TITLE: AN/WLR-1H(V)5 MOD KITS LA020

DESCRIPTION/JUSTIFICATION:

For FY99-FY05 funding is for the procurement of modification kits. These modification kits are required to replace obsolete and high maintenance components to extend the life cycle of the system until installation of AIEWS Increment 1 aboard CV/CVNs (N88) and to replace existing systems on WHEC Class Cutters (N86). Requirement includes the procurement of COTS/NDI equipment and the installation and support of the upgraded equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1996		FY 1997		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)	0																							0	0.0	
<u>RDT&E</u>																									0	0.0
<u>PROCUREMENT</u>																										0.0
INSTALLATION KITS																										0.0
INSTALLATION KITS NONRECURRING																										0.0
EQUIPMENT (Modification Kits)								5	2.5	2	1.0	4	2.0	4	2.0	3	1.5	1	0.5	0	0.0			22	9.4	
EQUIPMENT NONRECURRING																										0.0
ENGINEERING CHANGE ORDERS																										0.0
DATA																										0.0
TRAINING EQUIPMENT																										0.0
SUPPORT EQUIPMENT																										0.0
OTHER:																										0.0
OTHER																										0.0
OTHER																										0.0
INTERIM CONTRACTOR SUPPORT																										0.0
INSTALL COST								5	1.3	2	0.3	4	0.8	4	0.7	3	0.5	1	0.1	0	19			22	22.7	
TOTAL PROCUREMENT					0	0.0		5	3.7	2	1.3	4	2.8	4	2.7	3	2.0	1	0.6	0	19			22	32.1	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AN/WLR-1H MODIFICATION TITLE: AN/WLR-1H(V)5 MOD KITS LA020

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: _____

ADMINISTRATIVE LEADTIME: 2 Months

PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A FY 1999: Dec 98

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A FY 1999: Jun 99

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	0	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1997 EQUIPMENT																								0	0.00
FY 1998 EQUIPMENT					0	0.0																	0	0.00	
FY 1999 EQUIPMENT							3	0.4															3	0.38	
FY 2000 EQUIPMENT									5	1.3													5	1.27	
FY 2001 EQUIPMENT										2	0.3												2	0.33	
FY 2002 EQUIPMENT											4	0.8											4	0.77	
FY 2003 EQUIPMENT													4	0.7									4	0.69	
FY 2004 EQUIPMENT															3	0.5							3	0.50	
FY 2005 EQUIPMENT																	1	0.1					1	0.12	
TO COMPLETE																						0	0.0	0	4.06

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	21	1	0	2	0	1	4	0	0	0	1	0	1	1	3	0	0	0	3	1	0	0	3	0	0	0	0	1	0	22	22
Out	21	1	0	0	2	0	0	4	1	0	0	1	1	0	0	3	1	0	0	3	1	0	0	2	1	0	0	0	1	22	22

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ITEM PAGE

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT RDT&E PROGRAM ELEMENT: 0604518N Program Element for Code B Items:							P-1 ITEM NOMENCLATURE/LINE ITEM # NAVY TACTICAL DATA SYSTEM (NTDS)/260500 (ADVANCED COMBAT DIRECTION SYSTEM (ACDS)) OTHER RELATED PROGRAM 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	N/A	A										
EQUIPMENT COST (In Millions)			\$24.9	\$8.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$32.9
SPARES COST (In Millions)			\$0.4	\$0.2	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$0.7
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>The Navy Tactical Data System Program provides funds for the Advanced Combat Direction System as a general purpose Combat Direction System (CDS) in major warships, which permits rapid integration of ship sensor information, analysis and display of tactical information, and designation of weapon systems to force threats. ACDS consists of three major subsystems, namely, the Data Processing, Data Display and Data Link Subsystems. Data Processing and Data Display Subsystems are assigned to the Program Executive Office, Theater Surface Combatants and the Data Links are assigned to the Space and Naval Warfare Systems Command. The Advanced Combat Direction System (ACDS) is an upgrade to the NTDS Data Processing and Data Display subsystems and associated computer programs and documentation.</p> <p>These program funds are for:</p> <p>(LU047) Ruggedized Non-Developmental Item (NDI)/Commercial-Off-The-Shelf (COTS) display/computer/peripheral support equipment and associated engineering changes for CV/CVN Class ships to replace and augment specific ACDS equipment for major combat direction system warfighting improvements and integration with Link 16 (C2P/JTIDS), Cooperative Engagement Capability (CEC), Joint Maritime Command Information System (JMCIS) and other combat system elements.</p> <p>(LU059) Ruggedized NDI/COTS support equipment and engineering changes for LHA-1 and LHD-1 Class ships to augment specific ACDS equipment for major combat direction system warfighting improvements and integration with Link 16 (C2P/JTIDS), Joint Maritime Command Information System (JMCIS) and other combat system elements.</p> <p>(LU005) Field changes and ORDALTs for ACDS/NTDS ships and shore sites;</p> <p>(LU055) Computer program modifications, system engineering, testing and ILS documentation for Block 0 and pre-Block 0 ACDS/NTDS baselines, required to support differences in ship configurations and for system acceptance testing prior to delivery to the ships and sites.</p>												

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 1999			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY 1810 / BA2 Program Element for Code B Items: 0603755N (FY 1994-97) 0603658N (FY1998-05)								P-1 ITEM NOMENCLATURE/LINE ITEM # <p style="text-align: center;"><i>Cooperative Engagement Capability(CEC) / 260600</i></p> OTHER RELATED PROGRM ELEMENTS N/A					
	Prior Years	ID Code		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY				5	7	3	9	15	20	8	9	46	122
EQUIPMENT COST (In Millions)		B		\$71	\$82	\$60	\$74	\$156	\$185	\$124	\$125	\$459	\$1,336
SPARES COST (In Millions)					\$3	\$6	\$5	\$6	\$6	\$6	\$4	CONT.	CONT.
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>The Cooperative Engagement Capability (CEC) networks Theater Air and Missile Defense sensors and weapons systems so that they operate as a single distributed air and missile defense system. CEC does this by distributing radar and other sensor data from each ship, aircraft or land unit (or Cooperating Unit within the distributed network) to all other Cooperating Units within theater through a real time, line of sight, high data rate data distribution network. Designed with a highly directional transmit and receive antenna, CEC is extremely resistant to jamming. It is also designed to utilize highly accurate time and distance measurements to develop what is known as gridlock for very low error relative unit position information. CEC gridlock allows extremely small error in alignment between sensors throughout the battle area. Each CU independently employs high capacity, parallel processing and advanced algorithms to combine all distributed sensor data into a fire control quality track picture that is the same for all cooperating units. That identical information is provided to each unit's combat weapons system to allow cooperative engagements, including engagements in which the firing unit may not have local sensor track of the target. CEC significantly improves battle force in-depth defenses, including both local area and ship defense capabilities against current and future aircraft and missiles. Future integration into land based defensive systems will extend the sensor and engagement capabilities ashore, where CEC will enable effective over-land air and missile defense against emerging air threats including overland cruise missiles in a complex littoral environment.</p> <p>Major CEC subsystems are the Data Distribution System (DDS), and the Cooperative Engagement Processor (CEP). The DDS encodes and distributes ship sensor and management data, and is a high capacity, jam resistant, directive system providing precision gridlocking and a high throughput of data. The CEP is a high capacity distributed processor which is able to process force levels of data in a manner that allows output to be considered "real time" fire control data. This data is passed to the ship's combat system as fire control quality data for which the ship can cue its onboard sensors or use the data to engage targets without actually tracking them with local sensors.</p> <p>CEC equipment is planned for installation at various Naval and commercial shipyards. The equipment is planned to be installed aboard CG, DDG51, CV/CVN, LHD, LHA, DD-963, and LSD-41 ship classes, and at land based test sites.</p> <p>CEC was approved for entry into Engineering and Manufacturing Development (E&MD) in May 1995. Eleven (11) Advanced Development Models (ADM) and Engineering Development Models (EDM) and eleven (11) Pre-Production Units (PPU) are being purchased under the development contract.</p> <p>Estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.</p>													

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						B	Cooperative Engagement Capability (CEC) / A2UC							
1810 / BA2														
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
	<u>N86</u>													
	EQUIPMENT													
UC001	Cooperative Engagement Transmitting / Processing System (CETPS) AN/USG-2	B	5	7,571	37,856	7	6,465	45,252	3	7,320	21,960			
UC002	AN/UYQ-70 Display	A	16	800	12,800	12	594	7,124	28	516	14,438			
UC830	Production Engineering Support	A			13,072			6,561			6,665			
UC004	KITS	A			1,030			1,000			4,000			
UC005	Non-Recurring / Depot				1,000			2,500			3,500			
UC006	VISTA Training				1,700									
UC007	AN / USG-3	B				3	5,520	16,560						
	INSTALL													
UC51N	FMP Installation				1,725			213			3,957			
UC61N	Non-FMP Installation				1,725			2,783			5,974			
TOTAL PROGRAM							70,908			81,993			60,494	

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy 1810 / BA2					C. P-1 ITEM NOMENCLATURE Cooperative Engagement Capability (CEC)				February 1999		
									SUBHEAD A2UC		
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/USG-2(V)	5	*7,571	Arlington, VA	1/98	CPIF/AF	Raytheon Systems Company St. Petersburg, FL	4/98	10/99	YES	N/A	
AN/UYQ-70	16	**800	Arlington, VA	4/95	CP	Lockheed Martin Tactical Defense Systems	4/98	10/99	YES	N/A	
FISCAL YEAR (99) AN/USG-2(V)	7	*6,465	Arlington, VA	1/99	CPIF	Raytheon Systems Company	3/99	9/00	YES	N/A	
AN/USG-3(V)	3	5,520	Arlington, VA	1/99	CPIF	St. Petersburg, FL	3/99	9/00	YES	N/A	
AN/UYQ-70	12	**594	Arlington, VA	1/99	CP	Lockheed Martin Tactical Defense Systems	3/99	9/00	YES	N/A	
FISCAL YEAR (00) AN/USG-2(V)	3	*7,320	Arlington, VA	1/00	CPIF	Raytheon Systems Company St. Petersburg, FL	5/00	11/01	YES	N/A	
AN/UYQ-70	28	**516	Arlington, VA	12/97	FFP	Lockheed Martin Tactical Defense Systems	5/00	11/01	YES	N/A	

D. REMARKS

* - Unit cost is comprised of the CES system, antennas, training, logistics, technical data, systems integration and test.

** - Unit cost is comprised of Q-70, OJ663 and ADS MKVI display consoles, as well as associated display peripherals.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/USG-2(V) TYPE MODIFICATION: BGAAW Improvment MODIFICATION TITLE: CETPS

DESCRIPTION/JUSTIFICATION:

Battle Group Anti-Air Warfare (AAW) Improvement

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: M/S-II (May 95) *M/S-III (1Q FY00) TDP AVAIL (Sep 98)

FINANCIAL PLAN (IN MILLIONS)	CURRENTLY UNDER EVALUATION																				TC	TOTAL		
	FY 1994 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005					
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$				
<i>RDT&E</i>	11	763.1	6.0	224.3	5	200.5		200.6		114.9		98.2		50.7		49.5		47.6		47.8		CONT.		
<i>PROCUREMENT</i>																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT (AN/USG-2)							4	25.9	3	22.0	9	47.8	15	76.9	20	102.4	8	42.1	9	45.6	46	226.8	114	589.5
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT					5	37.9	3	19.4															8	57.3
SUPPORT EQUIPMENT (AN/USG-3)								16.6																16.6
OTHER - NON-RECURRING DEPOT STANDUP						1.0		2.5		3.5														7.0
OTHER - KITS						1.0		1.0		4.0			4.5		8.9		3.2							22.6
OTHER - PROD ENG SUPPORT						13.1		6.6		6.7		6.8		6.9		7.0		7.2		7.3		30.7		92.3
VISTA TRAINING						1.7																		1.7
PROCUREMENT COST					5	54.7	7	72.0	3	36.2	9	54.6	15	88.3	20	118.3	8	52.5	9	52.9	46	257.5	122	787.0
INSTALL COST						1.7		0.1		2.2		8.9		12.8		21.5		41.8		33.3		126.6		248.9
TOTAL PROGRAM					5	56.4	7	72.1	3	38.4	9	63.5	15	101.1	20	139.8	8	94.3	9	86.2	46	384.1	122	1035.9

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

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

MODELS OF SYSTEMS AFFECTED: AN/USG-2(V) MODIFICATION TITLE: CETPS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARDS

ADMINISTRATIVE LEADTIME: 12 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1998: 18 Months

FY 1999: 18 Months

FY 2000: 18 Months

DELIVERY DATE: FY 1998: 18 Months

FY 1999: 18 Months

FY 2000: 18 Months

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT						1.7				5 *	3.8												5	5.5	
FY 1999 EQUIPMENT								0.1			1.9	7	5.0										7	7.0	
FY 2000 EQUIPMENT											0.3	1	1.6	2	2.3								3	4.2	
FY 2001 EQUIPMENT													2.3	4	8.6	5	6.6						9	17.5	
FY 2002 EQUIPMENT														1.3	1	10.2	14	22.5					15	34.0	
FY 2003 EQUIPMENT														0.6		4.7	4	18.5	16	26.1			20	49.9	
FY 2004 EQUIPMENT																		0.7			4.6	8	13.2	8	18.5
FY 2005 EQUIPMENT																		0.1			2.6	9	15.7	9	18.4
TO COMPLETE																						46	97.7	46	97.7

* Non-FMP installation

INSTALLATION SCHEDULE SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	3	1	1	1	3	2	2	1	1	3	1	1	2	2	1	2	9	3	4	3	4	4	5	63	122
Out	0	0	0	0	0	0	3	1	1	1	3	2	2	1	1	3	1	1	2	2	1	2	9	3	4	3	4	4	5	63	122

P-3A

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UYQ-70 TYPE MODIFICATION: BGAAW Improvment MODIFICATION TITLE: Display Set

DESCRIPTION/JUSTIFICATION:

Battle Group Anti-Air Warfare (AAW) Improvement

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1997		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)																									
<i>RDT&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS																									
INSTALLATION KITS NONRECURRING																									
EQUIPMENT					12	9.6	12	7.1	28	14.4	8	4.9	92	53.7	76	39.0	20	11.5	48	26.4	80	47.4	376	214.0	
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT					4	3.2																		4	3.2
SUPPORT EQUIPMENT																									
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
TOTAL PROCUREMENT					16	12.8	12	7.1	28	14.4	8	4.9	92	53.7	76	39.0	20	11.5	48	26.4	80	47.4	380	217.2	
INSTALL COST							0.1	1.8			4.6	0.9	6.6		17.9		12.3		27.0		0			71.2	
TOTAL PROGRAM COST					16	12.8	12	7.2	28	16.2	8	9.5	92	54.6	76	45.6	20	29.4	48	38.7	80	74.4	380	288.4	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AN/UYQ-70

MODIFICATION TITLE: Display Set

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: SHIPYARDS

ADMINISTRATIVE LEADTIME: 12 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1998: 18 Months

FY 1999: 18 Months

FY 2000: 18 Months

DELIVERY DATE: FY 1998: 18 Months

FY 1999: 18 Months

FY 2000: 18 Months

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT									16	*	2.2													16	2.2
FY 1999 EQUIPMENT								0.1		0.4	12	1.1												24	1.6
FY 2000 EQUIPMENT										1.4	28	3.4												16	4.8
FY 2001 EQUIPMENT												0.1		0.4	8	1.0								8	1.5
FY 2002 EQUIPMENT														0.3		4.6	92	12.3						92	17.2
FY 2003 EQUIPMENT														0.2		1.0	16	5.3	60	9.4				76	15.9
FY 2004 EQUIPMENT																		0.2			1.1	20	2.9	20	4.2
FY 2005 EQUIPMENT																		0.1			1.8	48	7.7	48	9.6
TO COMPLETE																						80	16.4	80	16.4

* Non-FMP installations

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	16	0	0	20	20	0	0	0	0	0	8	0	0	20	44	16	28	12	20	8	20	148	380
Out	0	0	0	0	0	0	0	0	16	0	0	20	20	0	0	0	0	0	8	0	0	20	44	16	28	12	20	8	20	148	380

P-3A

P-1 SHOPPING LIST

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET										DATE	February 1999
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APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE GCCS-M (formerly JMCIS Afloat) BLI#2608			SUBHEAD 52JG
--	--	--	--	--	--	--	--	---	--	--	------------------------

	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$33.5	\$38.2	\$25.1	\$24.0	\$25.7	\$27.0	\$27.0	\$41.5	Continuing	Continuing

PROGRAM COVERAGE:

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: Global Command and Control System Maritime (GCCS-M) Afloat is a major component of the Global Command and Control System (GCCS). GCCS-M is the Navy's fielded Command and Control system, a key component of the Copernicus ... Forward C4I strategy, and is the Navy's tactical implementation of the GCCS. GCCS-M has aggressively pursued an evolutionary acquisition strategy in rapidly developing and fielding new C4I capabilities for users. GCCS-M Afloat's latest phase includes migration to the Defense Information Infrastructure (DII), incorporation of Fleet requirements for merging tactical and non-tactical networks, support for the IT-21 initiative and application of mature Web and Personal Computer (PC) technologies to provide required information/capabilities.

GCCS-M Afloat (formerly referred to as Joint Maritime Command Information System (JMCIS) and Navy Tactical Command System Afloat (NTCS-A) provides Tactical Command, Control, Computers and Intelligence (C3I) systems tailored to meet platform C3I mission and function and ensure joint interoperability among Numbered Fleet Commanders (NFC), Commander, Joint Task Force (CJTF), Joint Force Air Component Commander (JFACC), Officer in Tactical Command (OTC), Composite Warfare Commander (CWC), Subordinate Warfare Commanders (SWC), Commander Amphibious Task Forces (CATF), Commander, Landing Forces (CLF) and Commanding Officer/Tactical Action Officer (CO/TAO). GCCS-M Afloat upgrades the Sensitive Compartmented Information (SCI) and General Service (GENSER) source information management systems which receive, process, correlate, fuse, assess, and display the readiness and disposition of own, neutral, and potentially hostile forces together with Electronic Warfare (EW) resource and environmental information. GCCS-M Afloat provides tactical commanders with an accurate, reliable, survivable and Common Operational Picture (COP) which includes complete all-source information management, display and dissemination, rapid access to organic/theater/national intelligence and databases, and multi-source data fusion and imagery exploitation. GCCS-M Afloat consists of the following:

The GCCS-M Afloat Unit Level system is the tactical command, control, and computers system for the battle group/force warfighting combatants/Amphibious Readiness Group (ARG). It is located in shipboard command and control spaces located on unit level ships (i.e., AO/AOE/AE/ARS, CG/CGN, DD/DDG, FFG, and LPD/LSD/LST). The Mine Warfare (MIW) Unit Level C4I system procurements were included in this program for all MCM and MHC ships beginning in FY 96. Subsequent GCCS-M Afloat system upgrades will begin in FY 97.

The GCCS-M Afloat Force Level system is the core battle group/force commander's warfighting system. It is located on force level combatants (i.e. CV/CVN, LCC, LHA, LHD, MCS and AGF) centrally located in the flag command and control spaces with workstations distributed on a local area network throughout ship spaces. The GCCS -M Afloat system consists of workstations, color large screen displays, remote displays, video switches, fiber optic local area networks which provide the tactical commander with a COP, automated decision aids and an integrated tactical shipboard intelligence system that utilize joint organic, non-organic (remote sources) and environmental information/intelligence in the decision making and warfighting process. Full GCCS-M Afloat capability was delivered to the fleet in multiple phases. NTCS-A baseline system provided non-SCI capabilities. The NTCS-A III upgrade adds equipment to achieve full NTCS-A capability for force level platforms/sites. This upgrade added SCI capability along with additional computer processing, communication interfaces, information distribution, operator workstations, remote monitors and peripheral support equipment for a fully functional NTCS-A system. The shipboard NTCS-A Afloat baseline systems were completed in FY94. NTCS-A III procurement and installation was completed in FY 97. Upgrades to the NTCS-A Afloat procurements began in FY96 to add additional Joint service capability. JMCIS' 98 added COTS software and hardware to facilitate connectivity on own ship and among BG/ARG Joint Task Forces and Internet data providers. JMCIS'98 will become GCCS-M in FY 98.

The GCCS-M Afloat Integrated Video Display system and Digital Video System (DVS) for Force Level ships will provide a secure briefing system for live and taped briefings to command, control and

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE GCCS-M (formerly JMCIS Afloat) BLI#2608
		SUBHEAD 52JG
<p>The GCCS-M Afloat Integrated Video Display system and Digital Video System (DVS) for Force Level ships will provide a secure briefing system for live and taped briefings to command, control and mission planning spaces on force level combatants. These systems are being added as part of GCCS-M Afloat and will be completed in FY 05.</p> <p>GCCS-M Afloat Force Level, Unit Level, and Shore site upgrades will support the evolutionary acquisition of modern non-development hardware and software to meet changing Navy/Joint requirements of command, control, computers, and intelligence systems, and meet emerging interface requirements. Upgrades will be grouped into hardware and software Engineering Change Proposals (ECPs) to meet Fleet requirements including: Joint Force Air Component Commander (JFACC)/Contingency Tactical Automated Planning System (CTAPS) Joint task force functions/operations on the force level and selective platforms beginning in FY 97, and GCCS-M Afloat 2-way data line interface to Link 16 on Force Level and Unit Level Platforms to begin in FY98. In addition, hardware/software improvements include color large screen displays, fiber optic LAN hardware, updated LAN protocol software, multimedia computer upgrades, secure imagery processing, audio/video transmission systems, introduction of specialized computer interface cards, and utilization of PC, WEB and other COTS Information Technology.</p> <p>Contingency Theater Automated Planning System (CTAPS) is the current system that is used by the Joint Services to produce, generate, disseminate and monitor execution of the air tasking order (ATO) and is being funded until FY 00 in the GCCS-M Afloat program. Theater Battle Management Core Systems (TBMCS) is the replacement for CTAPS. Navy CTAPS host ships and remote equipped ships will be transitioned/upgraded to TBMCS equipped platforms.</p> <p>TBMCS is a suite of USAF software applications that support air and space operations. TBMCS contains 14 joint applications that have been designated as joint standard software applications. They provide U.S. forces with the ability to plan and control air operations, including air and space control and air and missile defense. All DOD air operations, planners will use TBMCS to produce, generate, disseminate, and monitor execution of the ATO, air defense plan, master air attack plan, target nomination list, joint integrated prioritize target list, candidate target list, airspace control order (ACO) and other products addressed in Joint Pub 3-56.1, Command and Control for Joint Air Operations.</p> <p>TBMCS is located on force level combatants (CV/CVN, LCC, LHA, LHD, AGF) located in the Joint Force Air Component Commander (JFACC) spaces with servers and workstations on a local area network.</p> <p>TBMCS includes migration to the Defense Information Infrastructure Common Operating Environment (DII COE) and Y2K compliance for the Joint Standard software applications used to produce, generate, disseminate and monitor the execution of the ATO.</p> <p>FY98 includes funds to procure 4 additional C3I systems for Mine Warfare platforms, 3 additional integrated Video Systems, upgrade equipment for NTCS-A Shore sites, state of the art upgrades for both JMCIS Afloat Unit Level combatant platforms and Force Level Combatants and Command ships to include CTAPS, 2-way Link 16 and Radiant Mercury capability, production engineering support, and installation funds to support planned FY 98 installs.</p> <p>FY99 includes funds to procure/install GCCS-M UNIX and NT C3I upgrade systems and Y2K software upgrades for 16 Force Level platforms, 156 Unit Level platforms, 1 Mine ship, 8 submarines, 7 shore support sites, and 3 Digital Video Systems (DVS) for Force Level ships. Funds also provide for necessary hardware, software, and installation to correct the Y2K problems on the above platforms/sites. Also included are funds for production engineering support and initial training.</p> <p>FY00 includes funds to procure and install GCCS-M NT C3I systems for 4 Force Level ships, 70 Unit Level ships (including 22 submarine), 1 mine ship, 5 shore support sites, and 2 digital video system for Force Level platforms. Also included are funds for production engineering support and initial training.</p> <p>FY01 includes funds to procure and install GCCS-M NT C3I systems for 57 Unit Level ships (including 33 submarine), 4 shore support sites and 2 Digital Video Systems (DVS) for Force Level platforms. Also included are funds to procure and install one GCCS-M Force Level Technology Insertion upgrade system, funds for production engineering and initial training.</p> <p>INSTALLING AGENT: All installations will be accomplished by AIT.</p>		

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COST ANALYSIS													DATE February 1999		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE GCCS-M(formerly JMCIS Afloat) BL#2608						SUBHEAD 52JG			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS												
			PY			FY 1998			FY 1999			FY 2000			
			QTY	TOTAL COST		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
JG023	GCCS-M Integrated Video Display System	NA				2	540.0	1,080	3	875.0	2,625	2	791.5	1,583	
JG028	GCCS-M Afloat Unit Level Upgrade	A				68	*	7,067	109	*	14,044	70	*	9,828	
JG029	GCCS-M Afloat Force Level	A				24	*	13,189	24	*	6,830	4	*	2,816	
JG030	GCCS-M Afloat Shore Site	A				2	*	656	7	*	1,500	5	*	1,371	
JG031	GCCS-M Afloat/MIW System Equip	A				4	117.5	470	1	222.0	222	1	317.0	317	
JG666	Training Trainers	A						120			120			120	
	Curriculum Development							210			430			380	
JG776	Non-FMP Installation	A						198			330			468	
JG777	FMP	A						9,933			11,465			6,515	
JG830	Production Engineering Support							555			600			550	
JG041	TBMCS Afloat Force Level H/W											3	169.0	507	
JG042	TBMCS Shore Site H/W											3	204.0	612	
	TOTAL CONTROL							33,478			38,166			25,067	

Remarks: *Quantities do not reflect complete systems, rather the number of ships supported.

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						GCCS-M (formerly JMCIS Afloat) BLI#2608					52JG	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
JG023	GCCS-M Integrated Video Display System	98	Various	Option C/FFP	SPAWAR		Nov-97	Jan-98	2	540	YES	N/A
		99	Various	Option C/FFP	SPAWAR		Nov-98	Jan-99	3	875	YES	N/A
		00	Various	Option C/FFP	SPAWAR		Nov-99	Jan-00	2	792	YES	N/A
JG031	GCCS-M Afloat/MIW System Equip	98	Various	Option C/FFP	NISMIC/SPAWAR		Nov-97	Jan-98	4	118	YES	N/A
		99	Various	Option C/FFP	SPAWAR		Nov-98	Jan-99	1	222	YES	N/A
		00	Various	Option C/FFP	SPAWAR		Nov-99	Jan-00	1	317	YES	N/A
D. REMARKS												
JG023 - FY99 buy includes nonrecurring costs.												

MODIFICATION TITLE: GCCS-M Afloat II Shipboard (52JG)
 COST CODE: JG023
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: GCCS-M Afloat/ Integrated Video Display System will provide a secure briefing system for live and taped briefings to command, control, and mission planning spaces on GCCS-M Force Level combatants.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RD&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	5	2.5	0.0	0.0	2	1.1	3	2.6	2	1.6	2	1.6	3	2.5	3	2.6	3	2.7	3	2.8	CONT		26	20.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	5	2.5	0	0.0	2	1.4	3	1.5	2	1.4	2	1.3	3	2.8	3	2.8	3	2.4	3	2.0	CONT		26	18.1	
PRIOR YR EQUIP	5	4.5																					5	4.5	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP					2	1.4																	2	1.4	
FY 99 EQUIP							3	1.5															3	1.5	
FY 00 EQUIP								2	1.4														2	1.4	
FY 01 EQUIP										2	1.3												2	1.3	
FY 02 EQUIP												3	2.8										3	2.8	
FY 03 EQUIP														3	2.8								3	2.8	
FY 04 EQUIP																3	2.40						3	2.4	
FY 05 EQUIP																		3	2.0				3	2.0	
TOTAL INSTALLATION COST		2.5		0.0		1.4		1.5		1.4		1.3		2.8		2.8		2.4		2.0	CONT	0.0		18.1	
TOTAL PROCUREMENT COST		5.0		0.0		2.5		4.1		3.0		2.9		5.3		5.4		5.1		4.8		0.0		38.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 mos. PROCUREMENT LEADTIME: 3 mos.

CONTRACT DATES: FY 1998: Various FY 1999: Various FY 2000: Various

DELIVERY DATES: FY 1998: Various FY 1999: Various FY 2000: Various

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	7		1	1	1		1	1			1	1	
OUTPUT	7			2	1			1	1			1	1

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		1	2			1	2			1	2			1	2			26
OUTPUT			1	2			1	2			1	2			1	2		26

Notes/Comments: Quantities refer to number of Force Level Ships. Currently there are 28 Force Level Ships in the Fleet.
 Prior year installations were for "analog 23TV systems". FY98 installations are for "analog 9-TV Systems". FY99 and outyear installations are for "digital TV systems".

P-1 Shopping List-Item No 70-5 of 70-11

MODIFICATION TITLE: GCCS-M Afloat Unit Level Upgrade (52JG)
 COST CODE: JG028

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Supports the evolutionary acquisition of modern non-development hardware and software on GCCS-M Afloat Force Level Platforms to meet changing requirements of C4I and meet emergent interface requirements of Joint Task Force Operations to include JFACC/CTAPS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment			36	3.9	68	7.1	109	14.0	70	9.8	57	9.4	17	3.4	23	6.4	38	7.3	57	10.3	CONT		475	71.6	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	36	3.1	68	3.4	109	4.5	70	2.6	57	3.5	17	2.6	23	2.7	38	4.2	57	5.8	CONT		475	32.4	
PRIOR YR EQUIP	0	0.0																						0	0.0
FY 97 EQUIP			36	3.1																				36	3.1
FY 98 EQUIP					68	3.4																		68	3.4
FY 99 EQUIP							109	4.5																109	4.5
FY 00 EQUIP								70	2.6															70	2.6
FY 01 EQUIP										57	3.5													57	3.5
FY 02 EQUIP												17	2.6											17	2.6
FY 03 EQUIP														23	2.7									23	2.7
FY 04 EQUIP																38	4.2							38	4.2
FY 05 EQUIP																		57	5.8					57	5.8
																					CONT			0	0.0
TOTAL INSTALLATION COST	0.0		3.1		3.4		4.5		2.6		3.5		2.6		2.7		4.2		5.8		0.0			32.4	
TOTAL PROCUREMENT COST	0.0		7.0		10.5		18.5		12.4		12.9		6.0		9.1		11.5		16.1		0.0			104.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 mos. PROCUREMENT LEADTIME: 3 mos.

CONTRACT DATES: FY 1998: Various FY 1999: Various FY 2000: Various

DELIVERY DATES: FY 1998: Various FY 1999: Various FY 2000: Various

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 104 60 29 20 36 26 8 20 28 9

OUTPUT 104 75 20 14 30 30 10 23 25 9

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 10 7 11 12 19 19 29 28 475

OUTPUT 7 10 11 12 19 19 29 28 475

Notes/Comments: Quantities refer to Unit Level ships. Currently there are 192 Unit Level ships in the Fleet. In FY98, 26 ships w/JMCIS 2.2; 40 ships w GCCS-M NT; 2 submarines w/NT. In FY99, 56 ships w/GCCS-M Y2K; 44 ships w/GCCS-M NT; and 9 subs w/GC In FY01, 42 ships w/GCCS-M NT and 15 submarines w/GCCS-M NT.

MODIFICATION TITLE: GCCS-M Afloat Force Level Upgrade (52JG)
 COST CODE: JG029

MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Supports the evolutionary acquisition of modern non-development hardware and software on GCCS-M Afloat Force Level Platforms to meet changing requirements of C4I and meet emergent interface requirements of Joint Task Force Operations to include JFACC/CTAPS

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	2	1.2	16	9.0	24	13.1	24	6.8	4	2.8	1	1.6	5	8.9	4	7.0	4	6.6	7	11.9	CONT		91	68.9	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	2	1.2	16	3.0	24	3.7	24	3.7	4	1.5	1	0.5	5	1.1	4	1.0	4	0.5	7	1.7	CONT		91	17.9	
PRIOR YR EQUIP	2	1.2																					2	1.2	
FY 97 EQUIP			16	3.0																			16	3.0	
FY 98 EQUIP					24	3.7																	24	3.7	
FY 99 EQUIP							24	3.7															24	3.7	
FY 00 EQUIP									4	1.5													4	1.5	
FY 01 EQUIP											1	0.5											1	0.5	
FY 02 EQUIP													5	1.1									5	1.1	
FY 03 EQUIP															4	1.0							4	1.0	
FY 04 EQUIP																	4	0.5					4	0.5	
FY 05 EQUIP																			7	1.7			7	1.7	
FY TC EQUIP																					CONT		0	0.0	
		1.2		3.0		3.7		3.7		1.5		0.5		1.1		1.0		0.5		1.7		0.0		17.9	
TOTAL PROCUREMENT COST		2.4		12.0		16.8		10.5		4.3		2.1		10.0		8.0		7.1		13.6		0.0		86.8	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 mos. PROCUREMENT LEADTIME: 3 mos.

CONTRACT DATES: FY 1998: Various FY 1999: Various FY 2000: Various

DELIVERY DATES: FY 1998: Various FY 1999: Various FY 2000: Various

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT: 42 12 12 2 2 1

OUTPUT: 42 12 12 2 2 1

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT: 3 2 2 2 2 2 3 4 91

OUTPUT: 3 2 2 2 2 2 3 4 91

Notes/Comments: Quantities refer to Force level Ships. Currently there are 28 Force level ships in the fleet. In FY98, 9 ships w/JMCIS 2.2; 4 ships w/Y2K; 11 ships NT. FY99, 24 ships Y2K and 13 ships w/GCCS-M NT. FY00, 4 ships w/GCCS-M NT. FY01, 1 ship technology insertion.

P-1 Shopping List-Item No 70-7 of 70-11

Exhibit P-3a, Individual Modification Program

Unclassified
 Classification

MODIFICATION TITLE: GCCS-M Afloat Shore Site Upgrade (52JG)
 COST CODE: JG030
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Supports the evolutionary upgrade of non-development hardware and software on GCCS-M Afloat training sites, ISEA and SSA. All equipment is procured and installed as Lots of equipment this is specific to that particular site.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	1	0.2	2	0.6	7	1.5	5	1.4	4	0.8	3	0.6	3	0.6	3	0.6	3	0.7	CONT	CONT	CONT	CONT	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	1	0.2	2	0.4	7	0.3	5	0.3	4	0.2	3	0.2	3	0.3	3	0.1	3	0.9	CONT	CONT	CONT	CONT	
PRIOR YR EQUIP			1	0.2																					
FY 97 EQUIP					2	0.4																			
FY 98 EQUIP							7	0.3																	
FY 99 EQUIP									5	0.3															
FY 00 EQUIP											4	0.2													
FY 01 EQUIP													3	0.2											
FY 02 EQUIP															3	0.3									
FY 03 EQUIP																	3	0.1							
FY 04 EQUIP																			3	0.9					
FY 05 EQUIP																					CONT	CONT	CONT	CONT	
TOTAL INSTALLATION COST	0.0		0.2		0.4		0.3		0.3		0.2		0.2		0.3		0.1		0.9		CONT	CONT	CONT	CONT	
TOTAL PROCUREMENT COST	0.0		0.4		1.0		1.8		1.7		1.0		0.8		0.9		0.7		1.6						

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 mos. PROCUREMENT LEADTIME: 2 mos.

CONTRACT DATES:

FY 1998: Various FY 1999: Various FY 2000: Various

DELIVERY DATES:

FY 1998: Various FY 1999: Various FY 2000: Various

INSTALLATION SCHEDULE:

	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	3		4	3			2	3			2	2							2	1											
OUTPUT	3			4	3			2	3			2	2																		
INPUT			2	1			2	1			2	1							2	1								31			
OUTPUT				2	1			2	1			2	1															31			

Notes/Comments: Quantities refer to shore sties that will be installed with GCCNS-N Y2K fixes and GCCS-M NT. FY01 is shore sites with technology insertion.

UNCLASSIFIED

February 1999

MODIFICATION TITLE: GCCS-M Afloat/MIW System Equip
 COST CODE: JG031

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Supports the acquisition of hardware and software for mine command ships. This system supports the mine ship commanding Officer's by providing a composite tactical picture, command and control.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	4	1.2	16	4.0	4	0.5	1	0.2	1	0.3											26	6.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	4	1.2	16	0.4	4	0.6	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	26	2.4
PRIOR YR EQUIP	4	1.2																			4	1.2
FY 97 EQUIP			16	0.4																	16	0.4
FY 98 EQUIP					4	0.6															4	0.6
FY 99 EQUIP							1	0.1													1	0.1
FY 00 EQUIP								1	0.1												1	0.1
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
TOTAL INSTALLATION COST		1.2		0.4		0.6		0.1		0.1		0.0		0.0		0.0		0.0		0.0		2.4
TOTAL PROCUREMENT COST		2.4		4.4		1.1		0.3		0.4		0.0		0.0		0.0		0.0		0.0		8.6

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 mos. PROCUREMENT LEADTIME: 3 mos.

CONTRACT DATES: FY 1998: Various FY 1999: Various FY 2000: Various

DELIVERY DATES: FY 1998: Various FY 1999: Various FY 2000: Various

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	24		1					1					
OUTPUT	24			1				1					

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		26
OUTPUT																		26

Notes/Comments: Quantities refer to Mine Command ships.

UNCLASSIFIED

February 1999

MODIFICATION TITLE: TBMCS
 COST CODE: JG041
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: TBMCS
 is the
 current

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									3	0.5	14	2.3	5	0.6	7	0.9	3	0.5	12	2.0	CONT		44	6.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*									3	0.2	14	0.9	5	0.2	7	0.2	3	0.2	12	0.8	CONT		44	2.5	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP									3	0.2													3	0.2	
FY 01 EQUIP											14	0.9											14	0.9	
FY 02 EQUIP													5	0.2									5	0.2	
FY 03 EQUIP															7	0.2							7	0.2	
FY 04 EQUIP																	3	0.2					3	0.2	
FY 05 EQUIP																			12	0.8			12	0.8	
FY TC EQUIP																					CONT		0	0.0	
TOTAL INSTALLATION COST										0.2	0.9		0.2		0.2		0.2		0.8		0.0			2.5	
TOTAL PROCUREMENT COST										0.7	3.2		0.8		1.1		0.7		2.8		0.0			9.3	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 mos. PROCUREMENT LEADTIME: 3 mos.

CONTRACT DATES: FY 1998: Various FY 1999: Various FY 2000:

DELIVERY DATES: FY 1998: Various FY 1999: Various FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 2 1 7 7

OUTPUT 2 1 7 7

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 3 2 4 3 1 2 6 6 44

OUTPUT 3 2 4 3 1 2 6 6 44

Notes/Comments: Quantities refer to Force Level ships installing TBMCS.

UNCLASSIFIED

February 1999

MODIFICATION TITLE: TBMCS
 COST CODE: JG042
 MODELS OF SYSTEMS AFFECTED: TBMCS
 DESCRIPTION/JUSTIFICATION: TBMCS is the current

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$				
RDT&E																												
PROCUREMENT:																												
Kit Quantity																												
Installation Kits																												
Installation Kits Nonrecurring																												
Equipment									3	0.6		1	0.2		4	0.9		2	0.4		4	0.2		2	0.9	CONT	16	3.2
Equipment Nonrecurring																												
Engineering Change Orders																												
Data																												
Training Equipment																												
Support Equipment																												
Other																												
Interim Contractor Support																												
Installation of Hardware*									3	0.1		1	0.1		4	0.2		2	0.2		4	0.1		2	0.1	CONT	16	0.8
PRIOR YR EQUIP																												
FY 97 EQUIP																												
FY 98 EQUIP																												
FY 99 EQUIP																												
FY 00 EQUIP									3	0.1																		
FY 01 EQUIP												1	0.1															
FY 02 EQUIP														4	0.2													
FY 03 EQUIP																2	0.2											
FY 04 EQUIP																		4	0.1									
FY 05 EQUIP																					2	0.1						
FY TC EQUIP																												
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.1		0.1		0.2		0.2		0.1		0.1		0.0		0.8				
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		0.7		0.3		1.1		0.6		0.3		1.0		0.0		4.0				

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 mos. PROCUREMENT LEADTIME: 3 mos.

CONTRACT DATES: FY 1998: Various FY 1999: Various FY 2000: Various

DELIVERY DATES: FY 1998: Various FY 1999: Various FY 2000: Various

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 1 2 1

OUTPUT 1 2 1

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 2 2 1 1 2 2 1 1 16

OUTPUT 2 2 1 1 2 2 1 1 16

Notes/Comments Quantities refer to training sites, SSC San Diego, SSC Charleston, FCTCLANT, and FCTCPAC that will be receiving TBMCS.

										DATE	
										February 1999	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					261100 Naval Tactical Command Support System					52DY	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$83.5	\$73.0	\$48.2	\$52.8	\$48.1	\$54.3	\$47.3	\$49.6	CONTINUING	CONTINUING
<p>Narrative Description/Justification:</p> <p>PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS: The Naval Tactical Command Support System (NTCSS) is a multi-function program designed to provide standard tactical support information systems to various afloat and associated shore-based fleet activities. The mission is to provide the full range of responsive tactical support ADP hardware and software in support of the management of information, personnel, material and funds required to maintain and operate ships, submarines, and aircraft. NTCSS is to provide an efficient management of afloat tactical support data, through the use of standardized hardware and software, to meet the mission support information management requirements for force sustainment in support of the new direction of the Navy and Marine Corps. On 6 June 1995, NTCSS and its component subsystems, discussed below, were selected as Command and Control migration systems under the auspices of ASD (C3I).</p> <p>NTCSS incorporates the functionality of the Shipboard Non-Tactical ADP Program (SNAP) systems, the Naval Aviation Logistics Command Management Information System (NALCOMIS), and the Maintenance Resource Management System (MRMS).</p> <p>SNAP is an automated information system that supports organizational level maintenance, supply, financial and administrative functions on afloat units, at Marine Aviation Logistic Squadrons (MALS) and at associated shore activities. Due to the age and obsolescence of SNAP I, which is currently deployed on the larger ships and at the MALS, and SNAP II, which is currently deployed on the smaller ships and submarines, these systems are being replaced with SNAP III in the 1994 through 2000 time frame. SNAP improves equipment supportability and maintainability and thus readiness through: the improvement in the accuracy of the maintenance, supply, financial and related support data maintained and reported by the ship; and the acceleration of management report preparation and data transmission. The scope of SNAP includes 325 ships and approximately 100 shore activities.</p> <p>NALCOMIS is an automated, real time, interactive, management information system that provides a modern management tool for day-to-day management of aircraft maintenance at the organizational and intermediate levels. NALCOMIS automates the management of the aviation repairables inventory, providing nose-to-tail tracking through the repair and operations cycles. The scope of NALCOMIS includes 71 aviation intermediate maintenance activities located afloat (CV/LHA/LHD) and ashore at MALS and Naval Air Stations (NASs), and approximately 359 Navy and Marine Squadrons.</p> <p>MRMS is an automated information system that supports ship intermediate maintenance management of the Atlantic and Pacific Fleets. MRMS supports Type Commands, Group Commanders, Area Coordinators, Readiness Support Groups, Submarine Squadrons, Ship Repair Facilities, and various Intermediate Maintenance Activities, both afloat and ashore, for budgeting, planning, production and analysis of ship maintenance. MRMS improves ship readiness through improved maintenance and ship repair management, information resource management, and maintenance data processing. The scope of MRMS includes approximately 16 shipboard and 65 shore based intermediate and maintenance and planning activities.</p>											

BUDGET ITEM JUSTIFICATION SHEET

DATE February 1999

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	261100 Naval Tactical Command Support System	52DY

Narrative Description/Justification: (continued)

Funding for FY98 procures: 1) NTCSS equipment sets for ships ; 2) NTCSS equipment for Naval Air Stations, Shore Maintenance Activities, Fleet Training Centers and MALS; and 3) necessary production engineering and installation support.

Funding for FY99 procures: 1) NTCSS equipment sets for ships; 2) NTCSS equipment for Naval Air Stations, Shore Support Facilities, Fleet Training Centers and MALS; and 3) necessary production engineering and installation support

Funding for FY00 procures: 1) NTCSS equipment sets for ships; 2) NTCSS equipment for Naval Air Stations, Shore Support Facilities, Fleet Training Centers and MALS; and 3) necessary production engineering and installation support.

INSTALLATION AGENT: All FMP installations will be accomplished by Alteration Installation Team (AIT).

P-1 SHOPPING LIST

Exhibit P-40, Budget Item Justification

ITEM NO. **PAGE NO.**
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COST ANALYSIS											DATE						
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT											P-1 ITEM NOMENCLATURE 261100 Naval Tactical Command Support System			SUBHEAD 52DY			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS														
			PY		FY 1998		FY 1999		FY 2000								
			QTY	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST				
DY001	Battle Group (BG) Equipment	A	12	58,576													
DY002	MALS/Shore Equipment	A	17	11,087	12	751	9,011	12	750	8,994							
DY004	Ship Set Equipment	A	22	3,909	71	709	50,310	29	753	21,836							
DY005	Ship Set Equipment Upgrades	A						17	837	14,223	34	715	24,321				
DY006	MALS/Shore Equipment Upgrades	A						61	261	15,942	72	225	16,190				
DY500	Production Engineering Support	A	Var	7,342	Var		2,904	Var		4,100	Var		3,038				
DY776	Non-FMP Installation	A		785			458			4,325			2,438				
DY777	FMP Installation	A		38,067													
	Installation						20,073			3,490			1,859				
	DSA						749			120			376				
TOTAL CONTROL							119,766			83,505			73,030				48,222
Remarks:																	
Higher budgeted amount for Production Engineering Support in FY99 covers additional software implementation teams in support of the Y2K effort.																	

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING										A. DATE		
										February 1999		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					SUBHEAD		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					261100 Naval Tactical Command Support System					52DY		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
	MALS/Shore Equipment	99	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-98	Jan-99	12	\$84,840	Yes	
			Sysorex/Vanstar	IDIQ	Navy		Nov-98	Jan-99	12	\$231,320	Yes	
			Various	IDIQ	Navy		Nov-98	Jan-99	12	\$433,360	Yes	
D. REMARKS												
Between years, shore site configurations changed, i.e., more larger sites in one year compared to another. As a result, the per unit costs are different. Moreover, different shore site configurations require different peripherals listed under the "Various" category, which leads to per unit cost differences in that category.												

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE				
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT											C. P-1 ITEM NOMENCLATURE 261100 Naval Tactical Command Support System			SUBHEAD 52DY	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE			
	Ship Set Equipment	99	Hewlett Packard/TAC 4 Sysorex/Vanstar Various	IDIQ IDIQ IDIQ	Navy Navy Navy		Nov-98 Nov-98 Nov-98	Jan-99 Jan-99 Jan-99	29 29 29	\$68,660 \$340,850 \$343,440	Yes Yes Yes				
D. REMARKS Between years, the composition of ships change, i.e., one year may have more larger ships like CVs while another year may consist mainly of SSNs. As a result, the per unit costs are different. Moreover, different ships require different peripherals listed under the "Various" category, which leads to per unit cost differences in that category.															

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						261100 Naval Tactical Command Support System					52DY	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DY005	Ship Set Equipment Upgrades	99	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-98	Jan-99	17	\$81,000	Yes	
			Sysorex/Vanstar	IDIQ	Navy		Nov-98	Jan-99	17	\$376,400	Yes	
			Various	IDIQ	Navy		Nov-98	Jan-99	17	\$379,260	Yes	
	Ship Set Equipment Upgrades	00	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-99	Jan-00	34	\$100,800	Yes	
			Vanstar	IDIQ	Navy		Nov-99	Jan-00	34	\$467,700	Yes	
			Various	IDIQ	Navy		Nov-99	Jan-00	34	\$146,810	Yes	

D. REMARKS

Between years, the composition of ships change, i.e., one year may have more larger ships like CVs while another year may consist mainly of SSNs. As a result, the per unit costs are different. Moreover, different ships require different peripherals listed under the "Various" category, which leads to per unit cost differences in that category.

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT											C. P-1 ITEM NOMENCLATURE 261100 Naval Tactical Command Support System		SUBHEAD 52DY
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
DY006	MALS/Shore Equipment Upgrades	99	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-98	Jan-99	61	\$37,780	Yes		
			Sysorex/Vanstar	IDIQ	Navy		Nov-98	Jan-99	61	\$57,660	Yes		
			Various	IDIQ	Navy		Nov-98	Jan-99	61	\$165,900	Yes		
	MALS/Shore Equipment Upgrades	00	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-99	Jan-00	72	\$38,290	Yes		
			Vanstar	IDIQ	Navy		Nov-99	Jan-00	72	\$67,910	Yes		
			Various	IDIQ	Navy		Nov-99	Jan-00	72	\$118,660	Yes		
D. REMARKS Between years, shore site configurations changed, i.e., more larger sites in one year compared to another. As a result, the per unit costs are different. Moreover, different shore site configurations require different peripherals listed under the "Various" category, which leads to per unit cost differences in that category.													

MODIFICATION TITLE: 261100 Naval Tactical (Battle Group Equipment (52DY/DY001)
 MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed mission support ADP systems to replace aging Shipboard Non-Tactical ADP Program (SNAP) systems for Battle Group ships.
 DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship capabilities for displaying and storing CALS initiative information (digitized engineering drawings, automated technical manuals, etc.).

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	10	47.8	2	10.8																			12	58.6	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	9	32.7	2	3.2	1	2.0																	12	37.9	
PRIOR YR EQUIP	9	32.7	1	1.6																			10	34.3	
FY 97 EQUIP			1	1.6	1	2.0																	2	3.6	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST	9	32.7	2	3.2	1	2.0																	12	37.9	
TOTAL PROCUREMENT COST		47.8		10.8		0.0																			58.6

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	12												
OUTPUT	12												

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL*
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		12
OUTPUT																		12

* Total is the inventory objective.

MODIFICATION TITLE: 261100 Naval Tactical (MALS/Shore Equipment (52DY/DY002))
 MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed mission support ADP systems to replace aging SNAP and NALCOMIS systems for Marine Aviation Logistics Squadrons (MALS), Naval Air Stations, and training sites.
 DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship/shore capabilities for displaying and storing CALS initiative information (digitized engineering drawings, automated technical manuals, etc.).

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring	8	6.3	9	4.8	12	9.0	12	9.0															41	29.1	
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	8	0.4	9	0.4	12	0.5	12	0.3															41	1.6	
PRIOR YR EQUIP	8	0.4																					8	0.4	
FY 97 EQUIP			9	0.4																			9	0.4	
FY 98 EQUIP					12	0.5																	12	0.5	
FY 99 EQUIP							12	0.3															12	0.3	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST	8	0.4	9	0.4	12	0.5	12	0.3															41	1.6	
TOTAL PROCUREMENT COST		6.3		4.8		9.0		9.0																29.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1998: Nov-97 FY 1999: Nov-98 FY 2000:

DELIVERY DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 29 4 4 4

OUTPUT 29 4 4 4

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL*
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 41

OUTPUT 41

* Total is the inventory objective.

MODIFICATION TITLE: 261100 Naval Tactical (Ship Set Equipment (52DY/DY004)
 MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed mission support ADP systems to replace aging SNAP systems for unit level ships.
 DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship capabilities for displaying and storing CALS initiative information (digitized engineering drawings, automated technical manuals, etc.). (Note: Total inventory adjusted to reflect increased units completed under BG line.)

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	10	1.7	12	2.2	71	50.3	29	21.8															122	76.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	10	1.1	12	1.1	71	18.1	29	2.1															122	22.4	
PRIOR YR EQUIP	10	1.1																					10	1.1	
FY 97 EQUIP			12	1.1																			12	1.1	
FY 98 EQUIP					71	18.1																	71	18.1	
FY 99 EQUIP							29	2.1															29	2.1	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST	10	1.1	12	1.1	71	18.1	29	2.1															122	22.4	
TOTAL PROCUREMENT COST		1.7		2.2		50.3		21.8																76.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1998: Nov-97 FY 1999: Nov-98 FY 2000:

DELIVERY DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000:

INSTALLATION SCHEDULE: FY 99 FY 00 FY 01

PY	1	2	3	4	1	2	3	4	1	2	3	4
----	---	---	---	---	---	---	---	---	---	---	---	---

INPUT 93 7 8 14

OUTPUT 93 7 8 14

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	TC	TOTAL
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----	-------

INPUT 122

OUTPUT 122

* Total is the inventory objective.

MODIFICATION TITLE: 261100 Naval Tactical (Ship Set Equipment Upgrades (52DY/DY005)
 MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed mission support ADP system upgrades and NTCSS-Optimized software to replace aging systems for Battle Group and unit level ships.
 DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship capabilities for displaying and storing CALS initiative information (digitized engineering drawings, automated technical manuals, etc.).

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							17	14.2	34	24.3	42	27.9	46	26.2	50	25.4	23	15.8	32	23.4			244	157.2	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*							17	1.4	34	1.9	42	2.1	46	1.9	50	1.9	23	1.1	32	1.6			244	11.9	
PRIOR YR EQUIP																								0	0.0
FY 97 EQUIP																								0	0.0
FY 98 EQUIP																								0	0.0
FY 99 EQUIP							17	1.4																17	1.4
FY 00 EQUIP									34	1.9														34	1.9
FY 01 EQUIP											42	2.1												42	2.1
FY 02 EQUIP													46	1.9										46	1.9
FY 03 EQUIP															50	1.9								50	1.9
FY 04 EQUIP																	23	1.1						23	1.1
FY 05 EQUIP																			32	1.6				32	1.6
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST							17	1.4	34	1.9	42	2.1	46	1.9	50	1.9	23	1.1	32	1.6			244	11.9	
TOTAL PROCUREMENT COST								14.2		24.3	27.9	26.2		25.4		15.8		23.4					0	157.2	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1998: FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: Jan-99 FY 2000: Jan-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 2 7 8 8 13 13 10 16 16

OUTPUT 2 7 8 8 13 13 10 16 16

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL*
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 10 18 18 10 20 20 6 8 9 8 12 12 0 244

OUTPUT 10 18 18 10 20 20 6 8 9 8 12 12 0 244

* Total is the inventory objective.

MODIFICATION TITLE: 261100 Naval Tactical (MALS/Shore Equipment Upgrades(52DY/DY006))
 MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed mission support ADP system upgrades, and IMA-Optimized and OMA-Optimized software to replace aging systems at MALS, Naval Air Stations, and training sites.
 DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship/shore capabilities for displaying and storing CALS initiative information (digitized engineering drawings, automated technical manuals, etc.).

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment							61	15.9	72	16.2	81	16.7	70	14.3	91	20.1	70	23.7	51	18.3			496	125.2		
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*							61	4.0	72	2.4	81	2.5	70	2.2	91	3.1	70	3.4	51	2.8			496	20.4		
PRIOR YR EQUIP																								0	0.0	
FY 97 EQUIP																								0	0.0	
FY 98 EQUIP																								0	0.0	
FY 99 EQUIP							61	4.0																61	4.0	
FY 00 EQUIP									72	2.4															72	2.4
FY 01 EQUIP											81	2.5													81	2.5
FY 02 EQUIP													70	2.2											70	2.2
FY 03 EQUIP															91	3.1									91	3.1
FY 04 EQUIP																	70	3.4							70	3.4
FY 05 EQUIP																				51	2.8				51	2.8
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST							61	4.0	72	2.4	81	2.5	70	2.2	91	3.1	70	3.4	51	2.8				496	20.4	
TOTAL PROCUREMENT COST								15.9		16.2		16.7		14.3		20.1		23.7		18.3				0	125.2	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1998: FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: Jan-99 FY 2000: Jan-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	0	19	21	21	19	26	27	19	31	31				
OUTPUT	0	19	21	21	19	26	27	19	31	31				

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL*
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		19	25	26	20	35	36	19	25	26					15	18	18	496
OUTPUT		19	25	26	20	35	36	19	25	26					15	18	18	496

* Total is the inventory objective.

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PRODUCTION SCHEDULE																												DATE														
(DOD EXHIBIT P-21A)																												February 1999														
APPROPRIATION/BUDGET ACTIVITY														P-1 ITEM NOMENCLATURE										SUBHEAD NO.																		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT														261100 Naval Tactical Command Support System										52DY																		
COST CODE	ITEM/MANUFACTURER	FY	S E R V	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98												FISCAL YEAR 99												FISCAL YEAR 00											
							CALENDAR YEAR 98												CALENDAR YEAR 99												CALENDAR YEAR 00											
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E							
T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P							
DY002	COTS H/W and S/W	98		12	12			A		1	2	1	2	1	1	2	1	1																								
DY002	COTS H/W and S/W	99		12	12																																					
DY004	COTS H/W and S/W	98		71	71			A		8	8	7	8	8	7	9	9	7																								
DY004	COTS H/W and S/W	99		29	29																																					
DY005	COTS H/W and S/W	99		17	17																																					
DY005	COTS H/W and S/W	00		34	34																																					
DY006	COTS H/W and S/W	99		61	61																																					
DY006	COTS H/W and S/W	00		72	72																																					

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES					Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT			
COTS Hardware and Software	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE Advanced Tactical Data Link Systems 2614			SUBHEAD Q2DR	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$14.2	\$32.9	\$19.1	\$16.9	\$21.3	\$23.2	\$33.7	\$33.0	Continuing	Continuing

PROGRAM COVERAGE: The Advanced Tactical Data Link Systems (ATDLS) funds the Time Division Multiple Access (TDMA) family of Link-16 terminals in the Joint Tactical Information Distribution System (JTIDS) terminals and the Multifunctional Information Distribution System - Low Volume Terminal (MIDS-LVT) and the Tactical Digital Information Link J (TADIL J) Message Standard databases resident in the Command & Control Processor (C2P) sub-system. The Common Data Link Management System (CDLMS) is designated as Pre-planned Product Improvement (P3I) of the C2P.

LINK-16 TERMINALS (JTIDS): AN/URC-107(V) Joint Tactical Information Distribution System (JTIDS) is an advanced radio system that provides information distribution, position location, and identification capabilities in an integrated form for application to military operations. The system is able to distribute information at high rates, encrypted to provide security, and with sufficient jam resistance to yield high reliability communications in a hostile electromagnetic environment. JTIDS provides the ability to interconnect multiple sources (air, ground, maritime, subsurface, and electronic warfare) and users of information. It provides surface and airborne elements with both a position location capability within a common position reference grid and an intrinsic identification capability through the dissemination of secure position and identity information. It is a multiservice system in that Army JTIDS interoperates with the U.S. Air Force, U.S. Navy, and U.S. Marines JTIDS Class 2 terminals.

MULTI-FUNCTIONAL INFORMATION DISTRIBUTION SYSTEM (MIDS): MIDS is a five-nation cooperative program that provides a third generation Link-16 system that satisfies U.S. and allied requirements to exchange tactical information in a digital format across a broad range of sources. Building on JTIDS, MIDS uses the latest technology to reduce system size and weight. It is designed to be readily reconfigurable for different user needs.

COMMAND AND CONTROL PROCESSOR (C2P) / COMMON DATA LINK MANAGEMENT SYSTEM (CDLMS): The C2P program is the acquisition of standard Navy computers (AN/UYK-43) in conjunction with a software suite to provide the interface between tactical and digital communication systems and selected shipboard processors (Advanced Combat Direction Systems (ACDS) and AEGIS Command & Decision (C&D)). C2P extracts information from the Tactical Digital Information Links (TADILS) A, C & J (or Link-11, Link-4A, and Link-16), translates between TADILS and provides the information back to the on-board processor. This provides flexible capability for rapidly exchanging tactical information using a universal database for translating various Link formats while remaining independent of communication equipment and tactical data computing systems. C2P Rehost (R) provides the same functionality but uses commercial-off-the-shelf (COTS) hardware (AN/UYQ-70), making the system easier and cheaper to upgrade and maintain.

CDLMS is designated as the pre-planned product improvement to the C2P. It is integrated with the C2P(R) via a set of commercial Versa Module Eurocards (VME) to provide enhanced, consolidated displays to monitor and analyze multi-TADIL networks graphically. All procurement of CDLMS hardware will include the Satellite TADIL-J (S-TADIL-J), the Electronic JTIDS Network Library (EJNL) and Telelogistics IT-21 compliant hardware. S-TADIL-J is an additional set of cards and cables integrated into the CDLMS chassis, enabling the system to send Link-16 information over satellite, providing range extension beyond the Theater of Operation. E-JNL provides pre-defined networks (configurations of ships and aircraft) allowing immediate access to different operational configurations. This minimizes delays for reconfiguring the network when new platforms are introduced to a mission. The Telelogistics software provides immediate access to technical, maintenance, repair, and upgrade information via the internet. This allows deployed ships to download the most current manuals and help-aids available.

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE Advanced Tactical Data Link Systems 2614	February 1999 SUBHEAD Q2DR
<p>COMMON SHIPBOARD DATA TERMINAL SETS (CSDTS) LINK-11: Link-11 provides high speed computer-to-computer digital radio communications in the high frequency (HF) and ultra-high frequency (UHF) bands among Tactical Data System (TDS) equipped ships, submarines, aircraft, and shore sites. Currently, the fleet is using AN/USQ-125's to provide Link-11 functionality, utilizing a single radio channel. The CSDTS card set provides multi-frequency Link-11 enhancements, allowing the operation of four (4) parallel channels between units, significantly increasing reliability. CSDTS functionality will be provided as an upgrade to existing AN/USQ-125s, or deployed as an integrated card set in the CDLMS chassis. The Mobile Universal Link Translator System (MULTS) is a rapid response, data link translation and forwarding system that is installed in a moveable shelter mounted on a High-mobility, multi-purpose wheeled vehicle (HMMWV). It forwards digital Link-11 messages via satellite or land line. Currently MULTS provides two-way translation between Link-11 and NATO Link-1, two-way translation between Link-11 and host nation communications, and one-way translation between Link-11 and Link-11B.</p> <p>JUSTIFICATION OF FY98 REQUIREMENTS: FY98 procured the final AN/URC-107(V) JTIDS ship terminals and antenna sets, and computer sets for install on CG and DDG ship classes. Work was begun to develop Ship Installation Drawings (SIDS) and Ship Alteration Requirements (SARS) for integrating S-TADIL-J on multiple ship classes. Funding included: Link-16 Alteration Installation Team (AIT) and shipyard installs for JTIDS terminals, shore installations for MULTS and (2) C2P (R) trainers, non-recurring costs for channel harnesses (for CDLMS), training curriculum and supply support for C2P(R)/CDLMS and Link-11 (CSDTS), support and test equipment, and production support services.</p> <p>JUSTIFICATION OF FY99 REQUIREMENTS: FY99 funds will be used to procure AN/URC-107(V) JTIDS, ship terminals, antenna sets, and CDLMS computer sets (including S-TADIL-J, E-JNL, and Telelogistics) for install on ship classes LHD, DDG, and LCC. FY99 funds will be used to procure MIDS shipboard terminals and for nonrecurring engineering costs to modify an Electronics Cabinet Assembly (ECA), High Power Amplifier Group (HPAG) and terminal controller for use with the MIDS production terminal, that will be procured in FY00. Funds will also be used for MIDS on Ship first article qualification testing and procurement of production data. Work will continue to develop SIDS and SARS for integrating S-TADIL-J on multiple ship classes. CG67 will be upgraded from AN/UYK-43 (old C2P unit) to a C2P(R). Funding also includes production support and training curriculum for MIDS, CDLMS, Link-16 Alteration Installation Team (AIT) and shipyard installs.</p> <p>JUSTIFICATION OF FY00 REQUIREMENTS: FY00 funds will be used to procure, CDLMS computer sets, and associated production support. Installation funding includes CDLMS backfits to upgrade AN/UYK-43 to the AN/UYQ-70 configuration, including (2) training facilities, and final AIT and shipyard installs for the remaining JTIDS terminals.</p> <p>INSTALLATION AGENT: Space and Naval Warfare Systems Center, San Diego (SSC-SD)</p>		

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE Advanced Tactical Data Link Systems 2614
		SUBHEAD Q2DR
<p>DEFINITIONS OF COST CODES:</p> <p>DR001 (JTIDS): All hardware costs associated with AN/URC-107(V) JTIDS terminal hardware, antennas, filter devices and Engineering Change Proposals (ECP). Procurement of JTIDS terminals continues in FY99 due to slip in MIDS production decision.</p> <p>DR002 (JTIDS PRODUCTION SUPPORT): Annualized production support for FY99 includes Consolidated Avionics Support System (CASS) Test Program Set (TPS) ECPs for JTIDS, and JTIDS sustainment engineering production support and system data management.</p> <p>DR003 (C2P/C2P(R)/CDLMS): All hardware costs associated with Command and Control Processor (C2P), C2P Rehost, Common Data Link Management System (CDLMS), Common Shipboard Data Terminal Sets (CSDTS), Satellite TADIL-J, Electronic JTIDS Network Library (E-JNL), Telelogistics, and all associated ECPs. Link-22 will be integrated as part of CDLMS suite starting in FY02.</p> <p>DR004 (C2P(R)/CDLMS PRODUCTION SUPPORT): Annualized production support includes evaluation of C2P(R)/ CDLMS ECPs, and production support services for S-TADIL-J, CDLMS, and E-JNL.</p> <p>DR009 (Link-22 for non-combatants): All hardware cost associated with Link-22 suite for installation on ships without CDLMS capabilities. Includes all associated ECPs (beginning FY04).</p> <p>DR010 (MIDS): All hardware and nonrecurring engineering cost associated with MIDS Ship High Power Link-16 terminal includes MIDS Low Volume Terminal (LVT), Ship Antennas, Electronic Cabinet Assembly, filtering devices, High Power Amplifier Group, Terminal controller, and all associated ECPs. Non-recurring costs in FY99 includes engineering and technical data package for modification of JTIDS Electronics Cabinet Assembly (ECA), High Power Amplifier (HPAG) and terminal controller for use with producing MIDS terminals that will be procured in FY00. MIDS terminals scheduled to be procured for training sites and backfit installations should not require the procurement of a new antenna. MIDS Ship Backfits will be procured to replace outdated JTIDS terminals deployed in the fleet.</p> <p>DR011 (MIDS PRODUCTION SUPPORT): Annualized MIDS on Ship production support services and the evaluation of MIDS Engineering Change Proposals (ECPs).</p> <p>DR666 (TRAINING CURRICULUM): Training Curriculum (end-item) for CDLMS and MIDS Ship Terminal. In FY04 covers Link-22 training curriculum.</p> <p>DR776 (INSTALLATION of EQUIPMENT / Non-FMP): Link-16 equipment installations into shore and training facilities (included MULTS shore installation in FY98, C2P Trainers in FY00, and MIDS Trainers in FY02 & FY04).</p> <p>DR777 (INSTALLATION of EQUIPMENT / FMP): Link-16 Alteration Installation Team (AIT), shipyard installs and DSA, Electronic Environment Effects testing (EEE), and installation engineering and integration coordination for the Fleet. Covers AIT ship installs for JTIDS/C2P, initial MIDS, MIDS/CDLMS, MIDS backfits, C2P/CDLMS backfits, S-TADIL-J backfits, and E-JNL backfits.</p>		

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COST ANALYSIS														DATE February 1999		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE Advanced Tactical Data Link Systems 2614						SUBHEAD Q2DR			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			PY				FY 1998			FY 1999			FY 2000			
			QTY	TOTAL COST			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
DR001	AN/URC-107(V) (JTIDS)	A					3	985	2,956	2	1,058	2,116				
DR002	Production Support (AN/URC-107(V))	N/A							222			200				
DR003	C2P / C2P(R) / CDLMS	A					3	1,089	3,267	18	561	10,102	18	551	9,918	
DR004	Production Support (C2P(R) / CDLMS)	N/A							99			219			330	
DR008	First Article - TACN-N	N/A														
DR009	Link-22 (for non-combatants)	N/A														
DR010	MIDS Shipboard High Power Terminal	B								6	1,641	9,848				
DR011	Production Support (MIDS)	N/A										496				
DR666	Training Curriculum	N/A										1,250				
DR776	Installation of Equipment / Non-FMP	N/A							400						612	
DR777	Installation of Equipment / FMP	N/A							5,747			7,096			6,793	
	DSA								1,261			1,558			1,490	
DR020	CSDTS / Link-11	N/A							269							
	TOTAL CONTROL								14,221			32,885			19,143	

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						Advanced Tactical Data Link Systems 2614					Q2DR	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DR001	AN/URC-107(V) (JTIDS)	98	Rockwell, Cedar Rapids IA	C/FFP	USAF	NA	Dec-97	Jun-99	3	985	YES	NA
		99	Rockwell, Cedar Rapids IA	C/FFP	USAF	NA	Feb-99	Aug-00	2	1,058	YES	NA
DR003	C2P / C2P(R) / CDLMS	98	SSC-San Diego	VARIOUS ¹	VARIOUS	Jun-98	Feb-99	Jun-00 ³	3	1,089	YES	NA
		99	SSC-San Diego	VARIOUS ²	VARIOUS	NA	Feb-99	Feb-00	18	561	YES	NA
		00	SSC-San Diego	VARIOUS ²	VARIOUS	NA	Dec-99	Dec-00	18	551	YES	NA
DR010	MIDS Shipboard High Power Terminal	99	TBD	C/FFP	SPAWAR	Apr-00	Jun-00	Mar-02	6	1,641	YES	N/A

D. REMARKS

- NAVSEA currently contracts C2P with Lockheed-Martin, St Paul MN on Indefinite Order / Indefinite Quantity contracts. C2P(R) / CDLMS units are off-the-shelf hardware.
- Space and Naval Warfare Systems Center (SSC), San Diego integrates various commercial-off-the-shelf (COTS) components.
- DR003: lead-time for CDLMS units procured for installation with initial JTIDS and MIDS terminals is approximately 6 months longer than for CDLMS units procured for backfit installation.

UNCLASSIFIED

February-99

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

C2P/C2P(R)/CDLMS Backfits (SHORE INSTALLATIONS)
DR003

C2P/C2P(R)/CDLMS non-FMP installations include Mobile Universal Link Translator System (MULTS), and the C2P(R)/CDLMS suite, which performs the processing functions (and provides the interface) between the Tactical Digital Information Links (TADILS) and selected shipboard processors. CDLMS provides the ability to graphically display multiple TADIL networks for monitoring and analysis. FY98 and prior year efforts covered C2P/C2P(R) and MULTS shore installations. Efforts beginning in FY00 provide CDLMS backfit shore installations (which do not require antennas) at selected training sites.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	15	27.0					2	1.1															17	28.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	8	2.2	5	0.8	2	0.4	0	0.0	2	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	17	4.0	
PRIOR YR EQUIP	8	2.2	5	0.8	2	0.4																	15	3.4	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP									2	0.6													2	0.6	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		2.2		0.8		0.4		0.0		0.6		0.0		0.0		0.0		0.0		0.0		0.0		4.0	
TOTAL PROCUREMENT COST		29.2		0.8		0.4		1.1		0.6		0.0		0.0		0.0		0.0		0.0		0.0		32.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME:

12 MOS

CONTRACT DATES:

FY 1998:

FY 1999:

Feb-99

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999:

Feb-00

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	15					2						
OUTPUT	15					2						

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		
OUTPUT																		

Notes/Comments

- 1. Total quantity meets inventory objective.

Exhibit P-3A, Individual Modification Program
Unclassified
Classification

UNCLASSIFIED

February-99

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

**Link-16/MIDS TERMINALS (SHORE INSTALLATION)
 DR010**

Link-16 is an advanced radio system providing information distribution, position location, and identification capability ("identify friend-or-foe") at high rates of speed, crypto-secure, and jam resistant. MIDS Terminals are the result of a five-nation cooperative program to provide third generation Link-16 capability at a reduced size, reduced weight, and ultimately a lower cost. Installation of a MIDS terminal at a shore installation (training site) does not require the installation the associated antenna.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							2	3.3					2	1.7	2	1.8	2	1.8			0	0.0	8	8.6	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.5	0	0.0	2	0.5	2	0.5	2	0.6	8	2.1	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP												2	0.5										2	0.5	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																	2	0.5					2	0.5	
FY 03 EQUIP																				2	0.5		2	0.5	
FY 04 EQUIP																					2	0.6	2	0.6	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.0		0.5		0.0		0.5		0.5		0.6		2.1	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		3.3		0.0		0.0		2.2		1.8		2.3		0.5		0.6		10.7	

ADMINISTRATIVE LEADTIME: 8 MOS

PRODUCTION LEADTIME: 20 MOS

CONTRACT DATES: FY 1998: FY 1999: Jun-00 FY 2000:

DELIVERY DATES: FY 1998: FY 1999: Mar-02 FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 0

OUTPUT 0

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 1 1 1 1 1 1 1 1 1 1 2 8

OUTPUT 1 1 1 1 1 1 1 1 1 1 2 8

Notes/Comments

- 1. Total quantity meets inventory objective.

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

**Link-16 (JTIDS Terminals) (SHIP INSTALLATIONS)
 DR001**

Link-16 is an advanced radio system providing information distribution, position location, and identification capability ("identify friend-or-foe") at high rates of speed, crypto-secure, and jam resistant. In FY98, we procured the final JTIDS terminals, with installations scheduled for FY00. JTIDS is being replaced with the next generation terminal, Multi-functional Information Distribution System (MIDS). Installation costs associated with JTIDS includes the cost of C2P (UYK-43) in FY97-99 (6, 9 and 3 respectively), and C2P(R) (UYQ-70) in FY97-00 (3, 0, 6 & 3 respectively).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **MS IIIA**

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	47	57.9	4	5.7	3	3.0	2	2.1															56	68.6	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	24	22.7	11	6.1	9	6.6	9	8.1	1	0.7	2	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	56	45.5	
PRIOR YR EQUIP	24	22.7	11	6.1	7	5.1	5	4.5															47	38.4	
FY 97 EQUIP					2	1.5	2	1.8															4	3.3	
FY 98 EQUIP							2	1.8	1	0.7													3	2.5	
FY 99 EQUIP											2	1.3											2	1.3	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		22.7		6.1		6.6		8.1		0.7		1.3		0.0		0.0		0.0		0.0		0.0		45.5	
TOTAL PROCUREMENT COST		80.6		11.8		9.6		10.2		0.7		1.3		0.0		0.0		0.0		0.0		0.0		114.2	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME:

18 MOS

CONTRACT DATES:

FY 1998: Dec-97

FY 1999: Feb-99

FY 2000:

DELIVERY DATES:

FY 1998: Jun-99

FY 1999: Aug-00

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01					
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	44	2	3	2	2			1			1	1		
OUTPUT	44	1	2	3	2	1			1		1	1		

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT																								56	
OUTPUT																									56

Notes/Comments

1. Total quantity meets inventory objective.

MODIFICATION TITLE: **C2P (AN/UYK-43) / C2P(R) (AN/UYQ-70) / CDLMS (SHIP INSTALLATIONS)**
 COST CODE **DR003**

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION:

C2P(R)/CDLMS provides the capability for rapidly exchanging tactical information using a universal database for translating various Link formats while remaining independent of communication equipment and tactical data computing systems. Cost of installing C2P (UYK-43), C2P(R) (UYQ-70), and the pre-planned product improvement CDLMS are included in the JTIDS terminal installation cost (reflected in P-3A for DR001) for FY 99-00, and in the MIDS terminal installation cost (reflected in P-3A for DR010) for FY 01-05. Installations of C2P in FY97-99 were 6, 9 and 3 respectively, and C2P(R) in FY97-99 were 3, 0, & 6 respectively. CDLMS backfit installs are listed in a separate P-3A.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total							
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$						
RDT&E																														
PROCUREMENT:																														
Kit Quantity																														
Installation Kits																														
Installation Kits Nonrecurring																														
Equipment	47	50.4	4	2.0	3	3.2	4	2.2							3	1.7	6	3.6	0	0.0	2	1.2	69	64.3						
Equipment Nonrecurring																														
Engineering Change Orders																														
Data																														
Training Equipment																														
Support Equipment																														
Other																														
Interm Contractor Support																														
Installation of Hardware*	24	0.0	11	0.0	9	0.0	7	0.0	1	0.0	2	0.0	3	0.0	1	0.0	0	0.0	3	0.0	8	0.0	69	0.0						
PRIOR YR EQUIP	24		11		7		5																		47	0.0				
FY 97 EQUIP					2	0.0	2	0.0																		4	0.0			
FY 98 EQUIP									1	0.0	2	0.0															3	0.0		
FY 99 EQUIP													3	0.0	1	0.0												4	0.0	
FY 00 EQUIP																												0	0.0	
FY 01 EQUIP																												0	0.0	
FY 02 EQUIP																												0	0.0	
FY 03 EQUIP																				3	0.0							3	0.0	
FY 04 EQUIP																						6	0.0					6	0.0	
FY 05 EQUIP																												0	0.0	
FY TC EQUIP																						2	0.0					2	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		0.0		0.0		0.0
TOTAL PROCUREMENT COST		50.4		2.0		3.2		2.2		0.0		0.0		0.0		1.7		3.6		0.0		1.2		64.3		64.3				

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 8 MOS PRODUCTION LEADTIME: 18 MOS

CONTRACT DATES:

FY 1998: Feb-99 FY 1999: Feb-99 FY 2000:

DELIVERY DATES:

FY 1998: Jun-00 FY 1999: Aug-00 FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	44	2	3	2			1		1	1		
OUTPUT	44	1	2	3	1			1		1	1	

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		1	2		1								1	1	1		8	69
OUTPUT			1	2		1								1	1	1	8	69

Notes/Comments:

- Total quantity meets inventory objective.
- Deliver for forward fit unites (units that will be installed for the first time) take six months longer than those procured for "backfit" into existing suites. This is due to longer integration and testing time at the SPAWAR Systems Center.
- Installation costs are included in the Link 16 JTIDS DR001 and MIDS DR010 installation costs.
- Production Leadtime varies between 8 to 18 months depending on hardware leadtime and JTIDS availability. (JTIDS and C2P are installed as a ship set.)

Exhibit P-3A, Individual Modification Program
Unclassified
Classification

UNCLASSIFIED

February-99

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

**CDLMS Backfits (SHIP INSTALLATIONS)
 DR003**

The CDLMS suite performs the processing functions (and provides the interface) between the Tactical Digital Information Links (TADILS) and selected shipboard processors. It provides the ability to graphically display multiple TADIL networks for monitoring and analysis. The purpose of CDLMS backfits are to upgrade the outdated AN/UYS-43s in the fleet with the newer (COTS) AN/UYS-70s. CDLMS includes S-TADIL-J, E-JNL and telelogistics. Identified installation costs include S-TADIL/ E-JNL backfit installs planned in FY98 FY99, FY00, and FY01 (listed as equipment nonrecurring).

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							12	6.6	18	9.5	13	7.2	16	8.2									59	31.5	
Equipment Nonrecurring						0.1		0.2	0.4																
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.4	0	0.5	12	7.6	18	5.8	13	3.8	16	6.9	0	0.0	0	0.0	0	0.0	59	25.0	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP						0.4																	0	0.4	
FY 99 EQUIP								0.5	12	7.0													12	7.5	
FY 00 EQUIP										0.6	18	5.8											18	6.4	
FY 01 EQUIP													13	3.8									13	3.8	
FY 02 EQUIP															16	6.9							16	6.9	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.4		0.5		7.6		5.8		3.8		6.9		0.0		0.0		0.0		25.0	
TOTAL PROCUREMENT COST		0.0		0.0		0.5		7.3		17.5		13.0		12.0		6.9		0.0		0.0		0.0		56.5	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME:

12 MOS

CONTRACT DATES:

FY 1998:

FY 1999:

Feb-99

FY 2000:

Dec-99

DELIVERY DATES:

FY 1998:

FY 1999:

Feb-00

FY 2000:

Dec-00

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	0					1	6	5			6	6	6
OUTPUT	0					1	6	5			6	6	6

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT	1	4	4	4	2	4	5	5																59	
OUTPUT		2	6	5	1	5	4	6																	59

Notes/Comments

1. Total quantity meets inventory objective.

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

**Link-16/MIDS TERMINALS FORWARD FIT, FIRST TIME INSTALLS (SHIP INSTALLATION)
 DR010**

Link-16 is an advanced radio system providing information distribution, position location, and identification capability ("identify friend-or-foe") at high rates of speed, crypto-secure and jam resistant. MIDS Terminals are the result of a five-nation cooperative program to provide third generation Link-16 capability at a reduced size, reduced weight, and ultimately a lower cost. FMP installation of a MIDS terminal includes the cost of installing associated antenna, as well as the C2P(R)/CDLMS unit required. FY01 and FY02 includes the installation of MIDS terminals on 2 Command Ships each year. Command Ships install cost is slightly lower than other ships because a C2P(R)/CDLMS unit is not required.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							4	6.6							3	2.7	6	5.5			2	2.0	15	16.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	1.8	1	0.6	0	0.0	3	2.5	8	5.6	15	10.5	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP													3	1.8	1	0.6							4	2.4	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																				3	2.5		3	2.5	
FY 04 EQUIP																						6	3.9	6	3.9
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																						2	1.7	2	1.7
TOTAL INSTALLATION COST	0.0		0.0		0.0		0.0		0.0		0.0		1.8		0.6		0.0		2.5		5.6		10.5		
TOTAL PROCUREMENT COST	0.0		0.0		0.0		6.6		0.0		0.0		1.8		3.3		5.5		2.5		7.6		27.3		

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME:

20 MOS

CONTRACT DATES:

FY 1998:

FY 1999: Jun-00

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999: Mar-02

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	0												
OUTPUT	0												

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		1	1	1	1								1	1	1		8	15
OUTPUT			1	1	1	1								1	1	1	8	15

Notes/Comments

- 1. Total quantity meets inventory objective.

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

**Link-16/MIDS BACKFITS (SHIP INSTALLATION)
 DR010**

MIDS Backfit provides the Link-16 capability of the MIDS Terminal (DR010) by replacing the outdated JTIDS terminals currently deployed in the fleet with a MIDS-LVT terminals. The installation includes a modification kit to integrate the MIDS terminal into the existing JTIDS Electronic Cabinet Assembly. Installations do not require a new antenna. A learning curve is expected for the first year of installs. A reduction in installation cost is expected for FY02.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment											2	2.0	2	1.7	7	6.4	21	18.8	25	22.9	41	37.8	98	89.5	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.1	2	2.0	7	4.6	87	60.2	98	67.9	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP															2	1.1							2	1.1	
FY 02 EQUIP																	2	2.0					2	2.0	
FY 03 EQUIP																			7	4.6			7	4.6	
FY 04 EQUIP																					21	12.7	21	12.7	
FY 05 EQUIP																					25	16.8	25	16.8	
FY TC EQUIP																					41	30.7	41	30.7	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.1		2.0		4.6		60.2		67.9	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		0.0		2.0		1.7		7.5		20.8		27.5		98.0		157.5	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME:

20 MOS

CONTRACT DATES:

FY 1998:

FY 1999:

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999:

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01																
	1	2	3	4	1	2	3	4	1	2	3	4													
INPUT	0																								
OUTPUT	0																								

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT					1	1			1	1			2	2	2	1	87	98
OUTPUT						1	1		1	1			1	2	2	2	87	98

Notes/Comments :

- Total quantity meets inventory objective.
- Installation costs in FY03 and FY04 are elevated due to MIDS Backfits absorbing the cost of EEE testing and the general installation coordination / engineering normally distributed among all on-going installations. In FY03, the cost is distributed on between MIDS Backfits and CDLMS backfits. In FY04, all costs are distributed only to the MIDS backfits.

UNCLASSIFIED

February-99

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

Link-16 (SUMMARY)
DR001; DR003; DR010

This page sums the following P-3A modification pages C2P/C2P(R)/CDLMS Backfits -Shore (DR003); Link-16/MIDS Terminal -Shore (DR010); Link-16/JTIDS Terminal -Ship (DR001); C2P/C2P(R)/CDLMS -Ship (DR003); CDLMS Backfits -Ship (DR003); Link-16/MIDS Terminal Forward Fit -Ship (DR010); and Link-16/MIDS Backfit -Ship (DR010)

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	109.0	135.3	8.0	7.7	6.0	6.1	26.0	22.0	18.0	9.5	15.0	9.2	20.0	11.5	15.0	12.6	35.0	29.7	25.0	22.9	45.0	41.0	322	307.5	
Equipment Nonrecurring						0.1	0.2	0.4																0.6	
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	56.0	24.9	27.0	6.9	20.0	7.4	16.0	8.6	16.0	8.9	22.0	7.1	21.0	6.1	20.0	8.6	4.0	2.5	15.0	7.6	105.0	66.4	322	155.1	
PRIOR YR EQUIP	56.0	24.9	27.0	6.9	16.0	5.5	10.0	4.5	16.0	5.5	10.0	4.5	16.0	5.5	10.0	4.5	16.0	5.5	10.0	4.5	16.0	5.5	10.0	4.5	
FY 97 EQUIP					4.0	1.5	4.0	1.8																8	3.3
FY 98 EQUIP						0.4	2.0	1.8		2.0	0.7												4	2.9	
FY 99 EQUIP							0.5	14.0		7.6	2.0	1.3											16	9.4	
FY 00 EQUIP										0.6	18.0	5.8											18	6.4	
FY 01 EQUIP													13.0	3.8									15	4.9	
FY 02 EQUIP															2.0	1.1							20	9.4	
FY 03 EQUIP															16.0	6.9	4.0	2.5					15	7.6	
FY 04 EQUIP																						35.0	17.2	35	17.2
FY 05 EQUIP																						25.0	16.8	25	16.8
FY TC EQUIP																						45.0	32.4	45	32.4
TOTAL INSTALLATION COST		24.9		6.9		7.4		8.6		8.9		7.1		6.1		8.6		2.5		7.6		66.4		155.1	
TOTAL PROCUREMENT COST		160.2		14.6		13.5		30.6		18.4		16.3		17.6		21.2		32.2		30.5		107.4		462.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME:

CONTRACT DATES:

FY 1998:

FY 1999:

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999:

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT

OUTPUT

Notes/Comments

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40						DATE: February 1999						
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS / ELECTRONICS						P-1 ITEM NOMENCLATURE/LINE ITEM # MINESWEEPING SYSTEM REPLACEMENT / 262200						
Program Element for Code B Items: 0603502N						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												\$0.0
EQUIPMENT COST (In Millions)	N/A	B	\$15.9	\$17.0	\$20.8	\$16.0	\$76.9	\$63.5	\$61.5	\$48.1	N/A	\$319.7
SPARES COST (In Millions)	N/A	B	\$3.5	\$9.0	\$9.1	\$8.3	\$9.8	\$9.0	\$9.0	\$49.8	N/A	\$107.5
PROGRAM DESCRIPTION/JUSTIFICATION:												
ITEM DESCRIPTION/JUSTIFICATION: Provide systems, subsystems, and engineering change kits for minehunting, navigation, and tactical display operations by the surface MCM force. Engineering change kits improve reliability and maintainability and correct deficiencies to allow equipment to perform in accordance with operational requirements. Also includes funding for the installation of equipment including Fleet Modernization Program installation.												
SSQ-94 (LV057): Provides onboard combat systems training capability for MCM and MHC class ships. It interfaces with the SQQ-32 sonar, SLQ-48 MNS, SSN-2 (MCM) and SYQ-13 (MHC) navigation systems to provide both single operator and CIC team training.												
Battlespace Profiler (LV059): A system consisting of a CPU, printer, sonar performance software, a recoverable probe, motorized winch, and interface card for using expendable probes. It provides capability to accurately sample, display, and interpret temperature/sound velocity profiles. This allows determination of AN/SQQ-30 and AN/SQQ-32 sonar's optimum settings and placement in the water column and provides sonar performance prediction to aid mission planning.												
SQQ-32 Upgrade (LV060): Will replace the two existing operator consoles with modern, full color TAC 4 displays, and will move functionality of 2 AN/UYK-44 computers and Unit 2 dedicated signal processing hardware into TAC 4 / COTS digital signal processors.												
Integrated Combat Weapon System (ICWS) (LV066): The Integrated Combat Weapons System (ICWS) Program is a series of major, incremental Block upgrades to the current combat systems to ultimately provide to the MCM Class ships an affordable and fully integrated combat weapon system comprised of the AN/SQQ-32 Mine Hunting Sonar, the AN/SLQ-48 Mine Neutralization System, the AN/SSQ-94 Combat System Onboard Trainer, and the AN/SSN-2 Navigation System. There are three block upgrades : Block 0 - Establishes a baseline for shipboard configuration Block 1 - Transitions combat systems to an open systems architecture, develops common operator consoles and establishes an ATM/SONET local area network (LAN). Block 2 - Improves performance on "wet end" equipment (sonar and mine neutralization vehicle).												

P-1 SHOPPING LIST

CLASSIFICATION:

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION		DATE: February 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS / ELECTRONICS	P-1 ITEM NOMENCLATURE/LINE ITEM # <i>MINESWEEPING SYSTEM REPLACEMENT/262200</i>	
ITEM DESCRIPTION/JUSTIFICATION (CONTINUED): Engine Replacement (LV067): Funding provided for replacement of Waukesha Diesel Engines aboard MCM-1 and MCM-2. Installation of Equipment (LV5IN): Funding is for the installation of equipment including fleet modernization program installations, installations of training equipment in other shore facilities. Closed Loop Degaussing (CLDG): provide added capability for on-board degaussing system. Items procured in FY 98: SSQ-94 consisting of: SQQ-32 SIC and NIC; Battle Space Profiler; SQQ-32 Upgrade, consisting of TAC 4 Consoles. Items procured in FY 99: Integrated Combat Weapon System, consisting of Doppler Speed Log Replacement. CLDG 1 system. Items to be procured in FY 00: Integrated Combat Weapon System, consisting of Doppler Speed Log Replacement and Isotta-Fraschini Engines. CLDG 1 system. I Estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.		

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CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS / ELECTRONICS						ID Code B	P-1 ITEM NOMENCLATURE/SUBHEAD MINESWEEPING SYSTEM REPLACEMENT / 262200 72LV							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1998			FY 1999			FY 2000					
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST			
	<u>MINE WARFARE, N852</u>													
LV057	SSQ-94	A			2,012			0			0			
LV059	BATTLESPACE PROFILER	A			1,113			0			0			
LV060	SQQ-32 UPGRADE	A			7,814			0			0			
LV065	Closed Loop Degaussing (CLDG)	A				1	2,904	2,904	1	3,050	3,050			
LV066	INTEGRATED COMBAT WEAPON SYSTEM	A			771			9,641			10,516			
LV067	ENGINE REPLACEMENT	A						0	14	400.3	5,604			
LV830	PRODUCTION ENGINEERING				223			294			214			
LV900	CONSULTING SERVICES				153			100			380			
LV5IN	INSTALLATION OF EQUIPMENT				3,776			4,029			998			
TOTAL					15,862			16,968			20,762			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE				
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS / ELECTRONICS					C. P-1 ITEM NOMENCLATURE MINESWEEPING SYSTEM REPLACEMENT				SUBHEAD		
									February 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	
FISCAL YEAR 98											
LV057 SSQ-94	VAR	VAR	NSWC/CRANE	N/A	N/A	NSWC/CRANE	12/97	08/98	YES		
LV059 BSP	VAR	VAR*	NSWC/DAHL/CSS	N/A	SS/FFP	VARIOUS	12/97	01/98	YES		
LV060 SSQ-32 UPGRADE	VAR**	VAR	NAVSEA	N/A	SS/FFP	RAYTHEON PORTSMOUTH, RI	12/97	03/99	YES		
FISCAL YEAR 99											
LV065 CLDG	1	2,904	NSWC, CARDEROCK	N/A	FFP	VARIOUS	12/98	12/99	YES		
LV066 ICWS	VAR***	VAR***	NAVSEA/NSWC - CRANE/DAHL/CSS	N/A	SS/FFP	VARIOUS	12/98	12/99	YES		
FISCAL YEAR 00											
LV065 CLDG	1	3,050	NSWC, CARDEROCK	N/A	FFP	VARIOUS	12/99	12/00	YES		
LV066 ICWS	VAR***	VAR***	NAVSEA/NSWC - CRANE/DAHL/CSS	N/A	SS/FFP	VARIOUS	12/99	12/00	YES		
LV067 ENG RPLC	14	400.3	NAVSEA	N/A	SS/FFP	ISOTTA FRASCHINI, ITALY	12/99	07/00	YES		
D. REMARKS											
* UNIT PRICE INCLUDES SEVERAL REQUIRED ANCILLARY ITEMS AND ROTATABLE POOL ITEMS IN ADDITION TO THE BATTLE SPACE PROFILER UNIT.											
** IMPROVEMENTS WILL BE IMPLEMENTED IN PHASES. FUNDING IN FY97 AND FY98 IS FOR COLOR CONSOLE UPGRADE AND ASSOCIATED CHANGES.											
FUNDING IN FY99 IS FOR TOWED BODY AND SOFTWARE UPGRADES.											
*** SEE SYSTEM DESCRIPTION ON P-40 FOR MORE DETAILS.											

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 1999																									
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY						Weapon System				P-1 ITEM NOMENCLATURE Minesweeping System Replacement																					
						Production Rate			Procurement Leadtimes																						
Item		Manufacturer's Name and Location				MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																	
LV067 - ENGINE REPLACEMENT		SOUTHWEST MARINE Ingleside, TX				2	7	10	0	3	7	0	10																		
LV065 - CLDG		NSWC, CARDEROCK				1		4			12		12	EACH																	
ITEM / MANUFACTURER						FISCAL YEAR 1998												FISCAL YEAR 1999				BAL									
						FY	SVC	QTY	DEL	BAL	1997	CALENDAR YEAR 1998							CALENDAR YEAR 1999												
											OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
CLDG		99	EA	1	0	1													A											1	
CLDG																															
CLDG																															
CLDG																															
ITEM / MANUFACTURER						FISCAL YEAR 2000												FISCAL YEAR 2001				BAL									
						FY	SVC	QTY	DEL	BAL	1999	CALENDAR YEAR 2000							CALENDAR YEAR 2001												
											OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
CLDG		99	EA	1	0	1																									0
CLDG		00	EA	1	0	1																									0
ENG REPLACEMENT		00	EA	14	0	14																									0
CLDG																															
CLDG																															
ENG REPLACEMENT																															

Remarks:

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: _____ TYPE MODIFICATION: ALT MODIFICATION TITLE: AN/SQQ-32 BACKFIT LV054

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																								0	0.0
<i>PROCUREMENT</i>																									
INSTALLATION KITS																								0	0.0
INSTALLATION KITS NONRECURRING																								0	0.0
EQUIPMENT	8	55.900																						8	55.900
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
PROCUREMENT COST	8	55.900	0	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	55.900
INSTALL COST		0.090	3.0	2.506	2	3.667	2	2.697	1															8	8.960
TOTAL PROGRAM	8	55.990	3	2.506	2	3.667	2	2.697	1				0	0.000	0	0.000	0	0.000	0	0.000	0	0.000			64.860

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AN/SQQ-32 SONAR

MODIFICATION TITLE: AN/SQQ-32 BACKFIT LV054

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: CONTRACTOR

ADMINISTRATIVE LEADTIME: 4 Months

PRODUCTION LEADTIME: 28 Months

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS		0.090	3	2.506	3	4.171	2	3.111															8	9.878
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																							0	0
FY 1999 EQUIPMENT																							0	0
FY 2000 EQUIPMENT																							0	0
FY 2001 EQUIPMENT																							0	0
FY 2002 EQUIPMENT																							0	0
FY 2003 EQUIPMENT																							0	0
FY 2004 EQUIPMENT																							0	0
FY 2005 EQUIPMENT																							0	0
TO COMPLETE																							0	0

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	5	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8			
Out	5	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8				

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: _____ TYPE MODIFICATION: AIT MODIFICATION TITLE: AN/SSN-2 PHASE III BACKFIT LV055

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																								0	0.0
<i>PROCUREMENT</i>																									
INSTALLATION KITS																								0	0.0
INSTALLATION KITS NONRECURRING																								0	0.0
EQUIPMENT	14	18.000																						14	18.000
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
PROCUREMENT COST	14	18.000	0	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	18.000
INSTALL COST	11	2.299	3	0.349	0	0.000	0	0.000																14	2.648
TOTAL PROGRAM	14	20.299	3	0.349	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	20.648

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AN/SSN-2 MODIFICATION TITLE: AN/SSN-2 PHASE III BACKFIT LV055

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT (TIGER TEAM)

ADMINISTRATIVE LEADTIME: 9 Months

PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A FY 2001: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	11	2.299	3	0.349																			14	2.649	
FY 1997 EQUIPMENT																								0	0
FY 1998 EQUIPMENT																								0	0
FY 1999 EQUIPMENT																								0	0
FY 2000 EQUIPMENT																								0	0
FY 2001 EQUIPMENT																								0	0
FY 2002 EQUIPMENT																								0	0
FY 2003 EQUIPMENT																								0	0
FY 2004 EQUIPMENT																								0	0
FY 2005 EQUIPMENT																								0	0
TO COMPLETE																								0	0

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	14	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	14
Out	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: _____ TYPE MODIFICATION: AIT MODIFICATION TITLE: SSQ-94 LV057

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
<i>RDT&E</i>																								0	0.0
<i>PROCUREMENT</i>																									
INSTALLATION KITS																								0	0.0
INSTALLATION KITS NONRECURRING																								0	0.0
EQUIPMENT	V	8.136	V	1.081	V	2.012																	V	11.229	
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
PROCUREMENT COST	V	8.136	V	1.081	V	2.012	0	0.000	0	0.000	0	0	0	0	0	0	0	0	0	0	0	0	V	11.229	
INSTALL COST		2.206	V	0.201	V		0	0.693	0	0.507	V	0.175	0	0.000	0	0.000									3.782
TOTAL PROGRAM	V	10.342	V	1.282	V	2.012	V	0.693	V	0.507	0	0.175	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000			15.011

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: _____ MODIFICATION TITLE: SSQ-94 TRAINER LV057

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: AIT (TIGER TEAM)

ADMINISTRATIVE LEADTIME: VAR

PRODUCTION LEADTIME: VAR

CONTRACT DATES: FY 1999: VAR

FY 2000: VAR FY 2001: VAR

DELIVERY DATE: FY 1999: VAR

FY 2000: VAR FY 2001: VAR

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	V	2.206	v	0.201																			V	2.407
FY 1997 EQUIPMENT							V	0.693															V	0.693
FY 1998 EQUIPMENT									0.507	0.175													V	0.682
FY 1999 EQUIPMENT																							0	0
FY 2000 EQUIPMENT																							0	0
FY 2001 EQUIPMENT																							0	0
FY 2002 EQUIPMENT																							0	0
FY 2003 EQUIPMENT																							0	0
FY 2004 EQUIPMENT																							0	0
FY 2005 EQUIPMENT																							0	0
TO COMPLETE																							0	0

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	V	V	A	R	V	A	R		0	0	0	0	V	A	R		0	0	0	0	0	0	0	0	0	0	0	0	V		
Out	V	V	A	R	V	A	R		0	0	0	0	V	A	R		0	0	0	0	0	0	0	0	0	0	0	0	V		

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: _____ TYPE MODIFICATION: AIT MODIFICATION TITLE: AN/SQQ-32 UPGRADE LV060

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$			
FINANCIAL PLAN (IN MILLIONS)																											
<i>RDT&E</i>																									0	0.0	
<i>PROCUREMENT</i>																											
INSTALLATION KITS																									0	0.0	
INSTALLATION KITS NONRECURRING																									0	0.0	
EQUIPMENT			V	9.134	V	9.148																			VAR	18.282	
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	
PROCUREMENT COST	0	0.000	V	9.134	V	9.148	0	0.000	0	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	V	18.282	
INSTALL COST									V	0.302																	0.302
TOTAL PROGRAM	0	0.000	0	0.000	0	0.000	0	0.000	V	0.302	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0		18.584	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

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

MODELS OF SYSTEMS AFFECTED: _____ MODIFICATION TITLE: AN/SQQ-32 UPGRADE LV060

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: AIT (TIGER TEAM)

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 12-15 Months

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																							0	0	
FY 1997 EQUIPMENT																								0	0
FY 1998 EQUIPMENT																								0	0
FY 1999 EQUIPMENT									V	0.151													V	0.151	
FY 2000 EQUIPMENT									V	0.151													V	0.151	
FY 2001 EQUIPMENT																								0	0
FY 2002 EQUIPMENT																								0	0
FY 2003 EQUIPMENT																								0	0
FY 2004 EQUIPMENT																								0	0
FY 2005 EQUIPMENT																								0	0
TO COMPLETE																								0	0

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL VAR VAR
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Out	0	0	0	0	0	0	0	0	0	V	A	R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: _____ TYPE MODIFICATION: ALT MODIFICATION TITLE: HM&E ENGINEERING CHANGES LV063

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
<i>RDT&E</i>																								0	0.0
<i>PROCUREMENT</i>																									
INSTALLATION KITS																								0	0.0
INSTALLATION KITS NONRECURRING																								0	0.0
EQUIPMENT			V	4.845																				V	4.845
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
PROCUREMENT COST	0	0.000	V	4.845	0	0	0	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	V	4.845
INSTALL COST	V	0.006	V	0.009	v	0.109	V	0.237	0	0.000	0	0.000													0.361
TOTAL PROGRAM	V	0.006	0	4.854	v	0.109	V	0.237	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000			5.206

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: _____ MODIFICATION TITLE: HM&E ENGINEERING CHANGES LV063

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: ALT

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 12-15 Months

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																							0	0
FY 1997 EQUIPMENT	v	0.015	v	0.109	v	0.237																	v	0.361
FY 1998 EQUIPMENT																							0	0
FY 1999 EQUIPMENT																							0	0
FY 2000 EQUIPMENT																							0	0
FY 2001 EQUIPMENT																							0	0
FY 2002 EQUIPMENT																							0	0
FY 2003 EQUIPMENT																							0	0
FY 2004 EQUIPMENT																							0	0
FY 2005 EQUIPMENT																							0	0
TO COMPLETE																							0	0

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL VAR VAR
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	V	V	A	R	V	A	R	V	A	R	V	A	R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Out	V	V	A	R	V	A	R	V	A	R	V	A	R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: _____ TYPE MODIFICATION: ALT MODIFICATION TITLE: ENGINE REPLACEMENT LV067

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																										
<i>RDT&E</i>																								0	0.0	
<i>PROCUREMENT</i>																										
INSTALLATION KITS																								0	0.0	
INSTALLATION KITS NONRECURRING																								0	0.0	
EQUIPMENT									14	5.604														14	5.604	
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	
PROCUREMENT COST	0	0.000	0	0.000	0	0.000	0	0.000	14	5.604	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	14	5.604
INSTALL COST							0.402		0.189	14	5.087															5.678
TOTAL PROGRAM	0	0.000	0	0.000	0	0.000	0	0.402	14	5.793	14	5.087	0		0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	14	11.282

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

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

MODELS OF SYSTEMS AFFECTED: _____ MODIFICATION TITLE: ENGINE REPLACEMENT LV067

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: ALT

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

FY 2001: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS																								0	0	
FY 1997 EQUIPMENT																									0	0
FY 1998 EQUIPMENT																									0	0
FY 1999 EQUIPMENT								0.204																	0	0.204
FY 2000 EQUIPMENT								0.198	14	5.604															14	5.802
FY 2001 EQUIPMENT											14	5.087													14	5.067
FY 2002 EQUIPMENT																									0	0
FY 2003 EQUIPMENT																									0	0
FY 2004 EQUIPMENT																									0	0
FY 2005 EQUIPMENT																									0	0
TO COMPLETE																									0	0

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Out	0	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14

P-3A

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40						DATE: February 1999						
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS / ELECTRONICS						P-1 ITEM NOMENCLATURE/LINE ITEM # SHALLOW WATER MCM / 262400						
Program Element for Code B Items:						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												\$0.0
EQUIPMENT COST (In Millions)	N/A	A	\$7.5	\$8.9	\$18.8	\$18.9	\$29.1	\$20.5	\$13.9	\$8.7	N/A	\$126.3
SPARES COST (In Millions)	N/A	A	\$0.0	\$0.6	\$0.2	\$0.6	\$0.5	\$1.0	\$0.0	\$0.0	N/A	\$2.9
PROGRAM DESCRIPTION/JUSTIFICATION:												
Shallow Water Mine Countermeasures (SWMCM) equipment is being developed to enable the US Navy to clear mines and obstacles from the very shallow water and surf zones in preparation for an amphibious assault by the US Marines. Development of the equipment was mandated with a RDT&E Plus-up by the US Congress after the Persian Gulf War. Each of the equipments below is necessary to complete a "toolbox" for the Combat Engineer to perform this task.												
SHALLOW WATER ASSAULT BREACHING SYSTEM (SABRE) - SW021: A linear demolition charge deployed into the deep end of the surf zone (10' - 3') to clear anti-invasion mines from the assault lanes.												
NON-RECURRING (SABRE) -SW0210: Explosives facility rehabilitation/upgrades and qualification as well as tooling essential to begin production.												
FULL SCALE INERT TRAINERS - SW022: A full size inert version of the explosive SABRE system, to be used for mission training during operational exercises.												
SUB-CALIBER TRAINERS - SW023: An inert, small scale version of the explosive SABRE system, to be used for school and unit training.												
LAUNCH CONTROLLERS - SW024: An electrical control box for centralized initiation and status check of the SABRE and DET systems on board the LCAC mission platform												
FULL MISSION TRAINER - SW025: An upgrade to the existing LCAC Full Mission Trainer (FMT) to incorporate essential Assault Breaching Systems functionality.												
DISTRIBUTED EXPLOSIVE TECHNOLOGY (DET) - SW031: An array of detonating cord deployed into the shallow end of the surf zone (3' - 0') to clear anti-invasion and land mines from the assault lane.												
FULL SCALE INERT TRAINERS - SW032: A full size inert version of the explosive DET system, to be used for mission training during operational exercises.												
SUB-CALIBER TRAINERS - SW033: An inert small scale version of the explosive DET system, to be used for school and unit training.												
AUTOPILOT - SW061: An integrated improvement to the LCAC navigation system for craft control that allows precise movement and hovering within the breached lane during the deployment of DET and SABRE, and precise navigation of breached lanes.												
SWIMS - A high speed magnetic influence mine sweeping system that can be carried within the helicopter platform to facilitate over-the-horizon operation by allowing extended range and high transit speed.												
Estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.												
PE #0603502N	SLS	SABRE	DET	SKIPPER								
DT	JUN 95	AUG 98	JAN 97	N/A								
OT	N/A	JUN 99	JUN 99	N/A								
TDP	AUG 95	JUL 98	MAY 99	N/A								
PRODUCTION DECISION	SEP 95	SEP 99	SEP 99	N/A								

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS						Weapon System			DATE:					
P-5									Feb-99					
APPROPRIATION/BUDGET ACTIVITY						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD							
OTHER PROCUREMENT, NAVY						A	SHALLOW WATER MCM (72SW)							
BA-2: COMMUNICATION / ELECTRONICS														
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLAR:											
			FY 1998			FY 1999			FY 2000					
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	TOTAL COST	
SW021	SABRE TACTICAL SYSTEM	A				12	145.0	1740	38	145.0	5,510			
SW0210	SABRE NON-RECURRING				0		920				1,365			
SW022	FULL SCALE INERT TRAINERS				0		0	8	75.3	603				
SW023	SUB-CALIBER TRAINERS				0		0	50	17.3	865				
SW024	LAUNCH CONTROLLERS	A			0	14	12.0	168	25	12.0	300			
SW025	FULL MISSION TRAINER				0	1	1,000.0	1,000			0			
SW031	DET TACTICAL SYSTEMS				0		0	12	363.0	4,356				
SW032	FULL SCALE INERT TRAINERS				0		0	5	221.0	1,105				
SW033	SUB-CALIBER TRAINERS				0		0	18	20.0	360				
SW061	AUTOPILOT				0	12	342.0	4,104	8	330.0	2,640			
SW830	PRODUCTION ENGINEERING	A			0		601				971			
SW0900	CONSULTING SERVICES	A			0		343				738			
SW070	SWIMS	A	5	1,500.0	7500			0			0			
TOTAL					7,500			8,876			18,813			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS / ELECTRONICS					C. P-1 ITEM NOMENCLATURE SHALLOW WATER MCM				SUBHEAD 72SW	
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
<u>FISCAL YEAR 1998</u>										
SW070 SWIMS	5	1,500	NAVSEA	02/98	SS/FFP	EDO	06/98	07/99	YES	
<u>FISCAL YEAR 1999</u>										
SW021	12	145.0	NAVSEA	03/99	C/FFP	UNKNOWN	06/99	06/00	YES	
SW024	14	12.0	N/A	N/A	Work Request	NSWC-IH	N/A	09/00	YES	
SW025	1	1,000.0	NAWC, TSD	N/A	OPTION	Raytheon	05/99	09/00	NO	01/99
SW061	12	342.0	N/A	N/A	WR	NSWC,CSS	N/A	09/00	NO	01/99
<u>FISCAL YEAR 2000</u>										
SW021	38	145.0	NAVSEA	N/A	OPTION	UNKNOWN	03/00	03/01	YES	
SW022	8	75.3	NAVSEA	N/A	OPTION	UNKNOWN	03/00	03/01	YES	
SW023	50	17.3	NAVSEA	N/A	OPTION	UNKNOWN	03/00	03/01	YES	
SW024	25	12.0	N/A	N/A	Work Request	NSWC-IH	N/A	11/00	YES	
SW031	12	363.0	NAVSEA	10/98	C/FFP	UNKNOWN	11/99	06/01	YES	
SW032	5	221.0	NAVSEA	10/98	C/FFP	UNKNOWN	11/99	08/01	YES	
SW033	18	20.0	NAVSEA	10/98	C/FFP	UNKNOWN	11/99	03/01	YES	
SW061	8	330.0	N/A	N/A	WR	NSWC, CSS	N/A	11/00	YES	
D. REMARKS										
SW022 and SW023 Options to SW021 contract from FY99										
SW025 - Option to PMS 377 contract #N61339-96-C-0109 (Raytheon)										

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE NAVSTAR GPS BLI 2657			SUBHEAD 521R	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$4.8	\$9.5	\$8.5	\$10.0	\$9.3	\$9.4	\$9.6	\$9.3	Continuing	Continuing

PROGRAM COVERAGE: Navigation Sensor System Interface (NAVSSI) is a surface and submarine based system that accepts and processes navigation inputs and distributes the processed output to user systems. NAVSSI provides position, velocity, time and almanac data to onboard command and control systems in real time with Global Positioning System (GPS) as the primary source of navigation data. The navigation team uses an automated work station that includes automated planning functions and the use of Digital Nautical Charts (DNC). NAVSSI uses Non-Developmental Item (NDI) hardware and a combination of off the shelf and newly developed software. The GPS VME Receiver Card (GVRC) replaces the 13 card GPS receiver with a single card and is hosted within NAVSSI.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: Procurement and installation of Navigation Sensor System Interface (NAVSSI) is required to provide Global Positioning System (GPS) and other navigation sensor data to ship-board C4ISR, Combat, and Weapons Systems. NAVSSI enables utilization and display of electronic chart products. NAVSSI is the only available system that performs the full functions of collection, integration, and distribution of navigation data. Common charting and precision navigation data is required to allow a common and correlated ship-to-ship tactical and operational picture. NAVSSI ensures precise Strike and Theater Ballistic Missile Defense (TBMD) weapons systems to have the necessary navigational data. Failure to procure and install NAVSSI on the above platforms would result in loss of critical navigation data distribution to Combat and Weapons Systems.

FY98 funding procures 25 RTS retrofit kits, installation of 19 NAVSSI systems and install of 17 RTS.

FY99 funding procures 12 NAVSSI systems, 11 retrofit kits, installations of 12 NAVSSI systems & 19 RTS..

FY00 funding procures 11 NAVSSI systems, 2 RTS retrofit kits, installation of 11 NAVSSI systems and install of 2 RTS.

Installations are being done for each class/ship through the preparation of ship alteration proposals and ship alteration records.

Installation Agent: Installation teams and/or overhaul - to be determined for each ship during execution.

INDENT CODE: A

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CLASSIFICATION

COST ANALYSIS													DATE February 1999		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE NAVSTAR GPS BLI 2657					SUBHEAD 521R			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS												
			PY			FY 1998			FY 1999			FY 2000			
			QTY	TOTAL COST		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
1R005	Production Support	A						311				385			93
1R009	*NAVSSI	A					487	12	440.0	5,280	11	400.1	4,401		
1R011	NAVSSI - Retrofit	A				25	33.4	836	11	30.0	330	2	380.0	760	
	Installation							3,190			3,507			3,264	
1R777	Install - FMP	A						2,260			2,200			2,200	
	Install - Retrofit	A						619			570			400	
	Install - Design Service Agent	A						311			737			664	
	1/ Various														
	*BLOCK 2 ASSEMBLY ONLY														
	TOTAL CONTROL							4,824			9,502			8,518	

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P-1 SHOPPING LIST
 ITEM NO. PAGE NO.
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UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						NAVSTAR GPS BLI 2657					521R	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1R009	NAVSSI	99 00	Various Various	WX/RCP WX/RCP	Various Various	Various Various	Nov-98 Nov-99	May-99 Dec-99	12 11	440,000 409,800	Yes Yes	
D. REMARKS												

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MODIFICATION TITLE:
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION /JUSTIFICATION:

NAVSTAR Global Positioning System (GPS) (521R) NAVSSI (1R009)
 All models of ships will have NAVSTAR GPS

February-99

The NAVSTAR Global Positioning System (GPS) is a joint Service Program which will provide advance satellite positioning. The ultimate system will consist of a constellation of satellites, control/tracking network, and user equipment installed aboard a variety of airborne, shipborne and land-based platforms. With the advent of OTH-T, it is imperative that all ships continuously know their geographic position to correlate sensor data and prevent escort ships from becoming unwilling targets. To meet this need, the Navigation Sensor System Interface (NAVSSI) program was initiated. NAVSSI will distribute position, velocity, time and almanac data to onboard command and control and combat systems in real time with GPS as the primary source of navigation data.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NAVSTAR GPS reached full rate production 30 Jan 92. NAVSSI received MSIIIA in May 94. Full Production Approval received in May 1995.

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	65	10.7	0		0		12	5.3	11	4.4	12	4.9	12	4.8	12	4.9	12	5.0	11	4.6			147	44.6	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	25	7.5	21	2.8	19	2.3	12	2.2	11	2.2	12	2.4	12	2.4	12	2.4	12	2.4	11	2.1	0	0.0	147	28.7	
PRIOR YR EQUIP	25	7.5	21	2.8	19	2.3																	65	12.6	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP							12	2.2															12	2.2	
FY 00 EQUIP									11	2.2													11	2.2	
FY 01 EQUIP											12	2.4											12	2.4	
FY 02 EQUIP													12	2.4									12	2.4	
FY 03 EQUIP															12	2.4							12	2.4	
FY 04 EQUIP																	12	2.4					12	2.4	
FY 05 EQUIP																			11	2.1			11	2.1	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		7.5		2.8		2.3		2.2		2.2		2.4		2.4		2.4		2.4		2.1		0.0		28.7	
TOTAL PROCUREMENT COST		18.2		2.8		2.3		7.5		6.6		7.3		7.2		7.3		7.4		6.7		0.0		73.3	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1 PROCUREMENT LEADTIME: 6

CONTRACT DATES:

FY 1998: FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES:

FY 1998: FY 1999: May-99 FY 2000: Dec-99

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	65	0	0	5	7	0	4	4	3	0	4	4	4
OUTPUT	65	0	0	5	7	0	4	4	3	0	4	4	4

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	0	4	4	4	0	4	4	4	0	4	4	4	0	4	4	3		147
OUTPUT	0	4	4	4	0	4	4	4	0	4	4	4	0	4	4	3		147

Notes/Comments

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OPN, BA-2 Communications and Electronic Equipment								P-1 ITEM NOMENCLATURE/LINE ITEM # Armed Forces Radio and Television/BLI: 266600					
Program Element for Code B Items:								OTHER RELATED PROGRAM 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)				\$14.6	\$16.0	\$4.2	\$4.3	\$4.3	\$4.4	\$4.5	\$4.6		\$56.9
SPARES COST (In Millions)													0
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>PUC K0001: AFRTS Program - AFRTS shipboard entertainmentsystems provide improved quality of life at sea and at overseas shore bases. These systems contribute significantly to the habitability of Navy ships by providing and distributing news, command information, training, and entertainmentprogramming using the latest technology available. These systems improve morale, combat effectiveness and retention rates of deployed personnel. All AFRTS systems use Commercial-Off-the-Shelf (COTS) equipment. Naval Media Center (NAVMEDIACEN) Fleet Support Detachments (FSDs) are the Installing agents for these systems. Each system installation is made based on ship availability. The AFRTS program consists of the following systems:</p> <p>(a) SITE CCTV (Upgrade) - Engineering changes to the current SITE 200, 300, and 400 systems. The upgrades use COTS equipment to enhance the capabilities and to replace older unsupported components of the current SITE systems in order to play all formats of programming distributed by AFRTS and the Navy Motion Picture Service (NMPS). A total of 196 units is required through FY 98.</p> <p>(b) SITE 2000/500 - This SITE system is designed for aircraft carriers (CV/CVN). It is used to playback videocassettes and compact discs distributed by AFRTS and NMPS over four channels on a cable distribution system. System also allows for the production of training tapes and command information programs. Systems are designed to interface with pierside cable systems where available. Requires manpower of two dedicated technicians and three operators. SITE 2000/500 is the next generation of the SITE 501 project. A total of seven systems required at an estimated unit cost of \$390K. One unit will be procured in FY 99 and FY 00. Each system requires five to ten months lead time to procure and install. SITE 2000 includes Television Direct-to-Sailor (TV-DTS) equipment upgrades.</p> <p>(c) SITE 2000/400 - This SITE system is designed for large amphibious and auxiliary ship classes (AOE/LHA/LHD/LPD/LSD). Same as SITE 2000/500 system, with the exception of studio production capability and lesser editing capability. Requires manpower of one dedicated technician and operator. Total of 33 systems required at an estimated unit cost of \$205K. Six units will be procured in FY 99. Seven units will be procured in FY 00. Each system requires four to eight months lead time to be procured and installed. SITE 2000 includes TV-DTS equipment upgrades.</p> <p>(d) SITE 2000/300 - This SITE system is designed for smaller combatants ship classes (CG/DD/DDG/FFG). This system is used primarily for playback of AFRTS and NMPS cassettes over two channels. Capable of producing simple local programs for training and command information. Requires manpower of one dedicated technician who also serves as operator. Total of 124 systems required at an estimated unit cost of \$84K. Ten units will be procured in FY 99 and fourteen units will be procured in both FY 00. Each system requires four to eight months lead time to procure and install. SITE 2000 includes TV-DTS equipment upgrades.</p>													

P-1 SHOPPING LIST

CLASSIFICATION:

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATIC		DATE: February 1999
APPROPRIATION/BUDGET ACTIVITY OPN, BA-2 Communications and Electronic Equipment	P-1 ITEM NOMENCLATURE/LINE ITEM # <i>Armed Forces Radio and Television/BLI: 266600</i>	
<p>(e) SITE 2000/200 - Compact system used to playback AFRTS and NMPS cassettes over two channels on submarines (SSN/SSBN). Capable of making simple recordings for training and command information. Requires no dedicated technician or operator. A total of 54 systems are required at an estimated unit cost of \$58K. Eight units will be procured in FY 99. Seven units will be procured in both FY 00. Each system requires four to eight months lead time to procure and install.</p> <p>(f) SAES - Shipboard Audio Entertainment System (SAES) upgrade is an assemblage of COTS items providing a standard/reliable means to play audio program material distributed by the AFRTS. A total of 84 systems are required at an estimated unit cost of \$29K. In prior years 63 units have been procured. In FY99 14, units will be procured, leaving 4 units to be procured in FY 00. Each system requires three to eight months lead time to procure and install. The following ship classes require the total of 84 SAES Units: CG, DD, DDG, FFG.</p> <p>(g) IRFDS - Integrated Radio Frequency Distribution System (IRFDS) provides ship-wide transmission of command information, training and entertainment television programming. The IRFDS receives television signals from the ship's SITE system or antenna and distributes the signals to all installed TV receivers. This system replaces the unsupportable Circuit 14TV. IRFDS is a COTS system. IRFDS procurement also includes the purchase of equipment to integrate all television displays onto one distribution system. Total of 106 systems are required. An average FY 00 unit cost to engineer, furnish and install is \$269K. Cost per unit ranges from \$195K for smaller ships to \$530K for carriers. The unit costs are based on "first-in-the-class" estimates, follow-on ships in the same class will have a lower unit cost. In prior years 13 units have been procured. 4 units will be procured in FY 99 and FY 00. Each system requires a three to ten months lead time to be procured and installed. The following ship classes require the total of 106 IRFDS units: CG, CV/CVN, DD, DDG, FFG.</p> <p>PUC K0INS: This funding supports the installation of SITE, SAES, and IRFDS systems onboard Navy ships.</p> <p>PUC K0002: SPAWAR Program - Television Direct-to-Sailors (TV-DTS) will provide a receive-only television capability to 182 ships in the Fleet. This capability will feature two full-time news and entertainment television channels as well as two stereo audio music channels, one monographic audio radio news and sports channel, one 128Kbps data channel, and an electronic program guide. AFRTS will provide the programming. Satellite transponders, ground based earth stations and leases for terrestrial connectivity will be provided by SPAWAR (via O&MN funding). Each ship will be outfitted with COTS 1.5 meter C-band satellite stabilized antenna terminal for reception of the television signal. Funds were placed on contract for the procurement of hardware with 119 systems bought in FY 98 and an additional 5 systems will be procured in FY 99. (Procurement of five systems is the contract minimum in FY99.) To meet the total inventory objective of 182, procurement of 58 units and installation of 78 units will be required. The Program Office will address this issue in PR-01. This sub-line provides funding for installation.</p>		

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WEAPONS SYSTEM COST ANALYSIS						Weapon System			DATE:					
P-5									February 1999					
APPROPRIATION/BUDGET ACTIVITY						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD							
OPN, BA-2 Communications and Electronic Equipment							Armed Forces Radio and Television/82K0							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
	<u>SUBMARINES (N87)</u>													
K0001	SITE CCTVs (SITE 200 Upgrade)	A	26	13	347									
K0001	SITE CCTVs 2000/200	A				8	53	420	7	58	410			
	<u>SURFACE SHIPS (N86)</u>													
K0001	SITE CCTVs (300/400 Upgrade)	A	40	33	1,317									
K0001	SITE CCTVs 2000/300	A				10	79	793	14	84	1,185			
K0001	SITE CCTVs 2000/400	A				6	200	1,200	7	205	1,438			
K0001	SAES	A	14	27	376	14	28	392	4	29	116			
K0001	IRFDS	A	4	252	1,011	4	259	1,035	2	269	538			
	<u>AIRCRAFT CARRIERS (N88)</u>													
K0001	SITE CCTVs (SITE 501)	A	1	333	333									
K0001	SITE CCTVs 2000/500	A				1	396	396	1	383	383			
KOINS	EQUIPMENT INSTALLATION (NON-FMP)	A			164			166			159			
	TOTAL NAVSEA				3548			4402			4229			
	<u>NAVY SPACE SYSTEM DIVISION (N63)</u>													
K0002	TV-DTS (SPAWAR)	A	119	71	8,399	5	73	367						
K0002	EQUIPMENT INSTALLATION (SPAWAR)	A			2,670			11,234						
	TOTAL SPAWAR				11,069			11,601						
TOTAL					14,617			16,003			4,229			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY OPN, BA-2 Communication and Electronic Equipment					C. P-1 ITEM NOMENCLATURE Armed Forces Radio & Television			February 1999		
								SUBHEAD 82K0		
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										
SITE (200 Upgrade)	26	13	TV Audio Sprt Activity	10/97	MIPR	Various	10/97	12/97	YES	
SITE (300/400 Upgrade)	40	33	TV Audio Sprt Activity	10/97	MIPR	Various	10/97	12/97	YES	
SITE 501	1	333	TV Audio Sprt Activity	10/97	MIPR	Various	11/97	5/98	YES	
SAES	14	27	TV Audio Sprt Activity	1/96	MIPR	Various	12/97	2/98	YES	
IRFDS (Note (1))	4	252	TV Audio Sprt Activity	1/98	MIPR	Various	1/98	3/98	YES	
K0002 TV-DTS (Note (2))	119	71	SPAWAR SYSCEN	7/97	FP	MTN, Miami, FL	3/98	5/98	YES	
FY 99										
SITE 2000/200	8	53	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	5/99	YES	
SITE 2000/300	10	79	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	6/99	YES	
SITE 2000/400	6	200	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	6/99	YES	
SITE 2000/500	1	396	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	7/99	YES	
SAES	14	28	TV Audio Sprt Activity	1/96	MIPR	Various	1/99	3/99	YES	
IRFDS (Note (1))	4	259	TV Audio Sprt Activity	1/99	MIPR	Various	1/99	3/99	YES	
K0002 TV-DTS (Note (2))	5	73	SPAWAR SYSCEN	7/97	FP	MTN, Miami, FL	3/99	5/99	YES	
D. REMARKS										
Note: (1) In addition to hardware, total cost includes \$135K/unit for engineering and installation support.										
Note: (2) Unit installation cost increase due to dual antenna requirement on 15 of 182 platforms. Procurement of five systems is the contract minimum in FY 99. K0002 TV-DTS SPAWAR subhead is 52K0.										

CLASSIFICATION: **UNCLASSIFIED**

B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE			A. DATE		
OPN, BA-2 Communication Electronic Equipment					Armed Forces Radio & Television			February 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
<i>FY 00</i>										
SITE 2000/200	7	58	TV Audio Sprt Activity		MIPR	Various	2/00	4/00	YES	
SITE 2000/300	14	84	TV Audio Sprt Activity		MIPR	Various	2/00	4/00	YES	
SITE 2000/400	7	205	TV Audio Sprt Activity		MIPR	Various	2/00	4/00	YES	
SITE 2000/500	1	383	TV Audio Sprt Activity		MIPR	Various	3/00	4/00	YES	
SAES	4	29	TV Audio Sprt Activity		MIPR	Various	4/00	5/00	YES	
IRFDS (Note (1))	2	269	TV Audio Sprt Activity		MIPR	Various	4/00	5/00	YES	
D. REMARKS										
Note: (1) Unit cost includes production and procurement of ancillary hardware for interface with Navy communication systems.										

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 MODELS OF SYSTEM AFFECTED: SITE 501/400/300/200 & SITE 2000 TYPE MODIFICATION: _____ MODIFICATION TITLE: K0001 - SITE 2000 & SITE CCTV Upgrade

DESCRIPTION/JUSTIFICATION:

SITE 400/300/200 CCTV (upgrade) is an engineering change to the current SITE 200,300, and 400 systems. The SITE 501 is the current Closed Circuit Television System (CCTV) used for aircraft carriers. The SITE 2000 is the latest SITE CCTV system designed to provide and distribute news, command information, training, and entertainment programming using the latest technology. SITE 2000 includes Direct-to-Sailor (DTS) equipment upgrades. SITE 2000/500 - Aircraft carriers, SITE 2000/400 - Large amphibious and auxiliary class ships, SITE 2000/300 - Smaller combatants class ships, SITE 2000/200 - Submarines.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Upgrades will be complete in FY 98. SITE 2000 procurement begins in FY99.

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS	81		55		67		25		29		26		31		29		29		29		20		421		
INSTALLATION KITS NONRECURRING																									
EQUIPMENT	81	3.994	55	1.604	67	1.997	25	2.809	29	3.416	26	2.913	31	3.320	29	3.083	29	3.154	29	3.226	20	2.450	421	31.966	
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT																									
SUPPORT EQUIPMENT																									
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST																									
TOTAL PROCUREMENT																									

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: SITE 501/400/300/200 & SITE 2000 MODIFICATION TITLE: K0001 - SITE 2000 & SITE CCTV Upgrade

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: AIT (NAVMEDIACEN/FSD)

ADMINISTRATIVE LEADTIME: 0 Months

PRODUCTION LEADTIME: 4-10 Months

CONTRACT DATES: FY 1999: 2/99

FY 2000: 2/00

FY 2001: 2/01

DELIVERY DATE: FY 1999: 5/99

FY 2000: 4/00

FY 2001: 4/01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	81	.099																					81	0.099
FY 1997 EQUIPMENT			40	.060	15	.030																	55	0.090
FY 1998 EQUIPMENT					38	.077	29	.062															67	0.139
FY 1999 EQUIPMENT							7	.015	18	.050													25	0.065
FY 2000 EQUIPMENT									29	.083													29	0.083
FY 2001 EQUIPMENT											26	.112											26	0.112
FY 2002 EQUIPMENT													31	.140									31	0.140
FY 2003 EQUIPMENT															29	.131							29	0.131
FY 2004 EQUIPMENT																	29	.134					29	0.134
FY 2005 EQUIPMENT																			29	.134			29	0.134
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	203	0	0	12	13	7	7	8	7	6	6	7	7	8	7	8	8	6	7	8	8	6	7	8	8	6	7	8	8	6	7	8	8	0	401
Out	174	9	9	10	8	12	12	12	11	6	6	7	7	8	7	8	8	6	7	8	8	6	7	8	8	6	7	8	8	6	7	8	8	0	401

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 MODELS OF SYSTEM AFFECTED: SAES TYPE MODIFICATION: _____ MODIFICATION TITLE: K0001 - SAES

DESCRIPTION/JUSTIFICATION:

The Shipboard Audio Entertainment System (SAES) upgrade is an assemblage of COTS items providing a standard/reliable means to play audio program material distributed by the Armed Forces Radio and Television Services (AFRTS).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS	32		17		14		14		4		3													84	
INSTALLATION KITS NONRECURRING																									
EQUIPMENT	32	0.800	17	0.442	14	0.376	14	0.392	4	0.116	3	0.093												84	2.219
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT																									
SUPPORT EQUIPMENT																									
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST																									
TOTAL PROCUREMENT																									

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: SAES MODIFICATION TITLE: K0001 - SAES

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT (NAVMEDIACEN/FSD)

ADMINISTRATIVE LEADTIME: 0 Months

PRODUCTION LEADTIME: 3-8 Months

CONTRACT DATES: FY 1999: 1/99

FY 2000: 4/00

FY 2001: 2/01

DELIVERY DATE: FY 1999: 3/99

FY 2000: 5/00

FY 2001: 3/01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total				
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			
PRIOR YEARS			32	.064																				32	0.064		
FY 1997 EQUIPMENT			6	.012	11	.022																			17	0.034	
FY 1998 EQUIPMENT					6	.012	8	.020																		14	0.032
FY 1999 EQUIPMENT							14	.035																		14	0.035
FY 2000 EQUIPMENT									4	.011																4	0.011
FY 2001 EQUIPMENT											3	.014														3	0.014
FY 2002 EQUIPMENT																										0	0.000
FY 2003 EQUIPMENT																										0	0.000
FY 2004 EQUIPMENT																										0	0.000
FY 2005 EQUIPMENT																										0	0.000
TO COMPLETE																											

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

In Out	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL	
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
	63	3	3	3	5	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
	55	5	6	6	5	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 MODELS OF SYSTEM AFFECTED: IRFDS TYPE MODIFICATION: _____ MODIFICATION TITLE: K0001 - IRFDS

DESCRIPTION/JUSTIFICATION:

The Integrated Radio Frequency Distribution System (IRFDS) provides ship-wide transmission of command information, training and entertainment television programming. The IRFDS receives television signals from the Shipboard Information, Training and Entertainment (SITE) System or the ship's antenna and distributes the signals to all installed TV receivers. This system replaces the unsupported Circuit 14TV. IRFDS uses COTS equipment. IRFDS procurement also includes the purchase of equipment to integrate all television displays onto one distribution system.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Ongoing installation.

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS	5		4		4		4		2		4		3		4		4		4		68		106		
INSTALLATION KITS NONRECURRING																									
EQUIPMENT	5	0.943	4	0.948	4	1.011	4	1.035	2	0.538	4	1.108	3	0.855	4	1.168	4	1.189	4	1.206	68	16.587	106	26.588	
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT																									
SUPPORT EQUIPMENT																									
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST																									
TOTAL PROCUREMENT																									

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: IRFDS MODIFICATION TITLE: K0001 - IRFDS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT (NAVMEDIACEN/FSD)

ADMINISTRATIVE LEADTIME: 0 Months

CONTRACT DATES: FY 1999: 1/99

DELIVERY DATE: FY 1999: 3/99

PRODUCTION LEADTIME: 3-10 Months

FY 2000: 4/00

FY 2000: 5/00

FY 2001: 2/01

FY 2001: 3/01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$				
PRIOR YEARS	5	.026																					5	0.026				
FY 1997 EQUIPMENT			3	.017	1	.006																		4	0.023			
FY 1998 EQUIPMENT					3	.017	1	.007																	4	0.024		
FY 1999 EQUIPMENT							4	.027																	4	0.027		
FY 2000 EQUIPMENT									2	.015															2	0.015		
FY 2001 EQUIPMENT											4	.035														4	0.035	
FY 2002 EQUIPMENT													3	.024												3	0.024	
FY 2003 EQUIPMENT															4	.035											4	0.035
FY 2004 EQUIPMENT																	4	.036									4	0.036
FY 2005 EQUIPMENT																			4	.040							4	0.040
TO COMPLETE																										0	0.000	

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1998	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	13	0	1	2	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	38
Out	12	1	1	1	2	0	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	38

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: TV-DTS TYPE MODIFICATION: _____ MODIFICATION TITLE: K0002 - TV-DTS

DESCRIPTION/JUSTIFICATION:

Procurement and installation 1.5 meter C-band satellite transceivers and enclosed stabilized antenna terminals. Install costs increased in accordance with actual engineering requirements such as NAVSEA-approved locations and dual antenna requirements on 15 platforms.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS																									
INSTALLATION KITS NONRECURRING																									
EQUIPMENT					119	8.399	5	0.367													58	4.253	182	13.019	
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT																									
SUPPORT EQUIPMENT																									
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST					20	2.670	84	11.234													78	10.399	182	24.303	
TOTAL PROCUREMENT																									

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: TV-DTS

MODIFICATION TITLE: K0002 - TV-DTS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 0 Months

PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 1999: 3/99

FY 2000: _____

FY 2001: _____

DELIVERY DATE: FY 1999: 5/99

FY 2000: _____

FY 2001: _____

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																							0	0.000	
FY 1997 EQUIPMENT																							0	0.000	
FY 1998 EQUIPMENT					20	2.67	84	11.23														15	2.00	119	15.903
FY 1999 EQUIPMENT																						5	0.667	5	0.667
FY 2000 EQUIPMENT																							0	0.000	
FY 2001 EQUIPMENT																							0	0.000	
FY 2002 EQUIPMENT																							0	0.000	
FY 2003 EQUIPMENT																							0	0.000	
FY 2004 EQUIPMENT																							0	0.000	
FY 2005 EQUIPMENT																							0	0.000	
TO COMPLETE																							0	0.000	

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	20	21	21	21	21	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	20	124
Out	10	10	21	21	21	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	124				

P-3A

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 2: COMMUNICATIONS & ELECTRONICS EQUIPMENT Program Element for Code B Items:								P-1 ITEM NOMENCLATURE/LINE ITEM # S/H 82P1 <i>Strategic Platform Support Equipment/BLI#267600/#267606</i> OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)		A		\$7.2	\$12.6	\$21.8	\$15.6	\$11.5	\$20.4	\$25.2	\$12.7		\$127.0
SPARES COST (In Millions)													
PROGRAM DESCRIPTION/JUSTIFICATION:													
Funding in this P-1 line provides electronics equipment that will be installed aboard ships and in the TRIDENT Training Facility (TRITRAFAC) and the TRIDENT Refit Facility (TRIREFFAC) located at Naval Submarine Bases (Bangor, WA and Kings Bay, GA) and other TRIDENT shore facilities. The TRIDENT program has shifted from its modernization phase to a program designed to maintain TRIDENT's capability to perform its defined mission. This will be accomplished via the Obsolete Equipment Replacement (OER) Program.													
OBSOLETE EQUIPMENT REPLACEMENT (OER) - Replacement of existing hardware/software that, though functional, has become operationally obsolete, is no longer in production or supportable with spare parts, has a high failure rate, or is no longer cost effective to maintain. OER hardware/software changes would be expected to provide significant cost savings in reduced maintenance costs and would use Commercial-Off-The-Shelf (COTS) technology where ever possible as long as all technical requirements are met.													
INSTALLATION (ELECTRONICS) - Provides funding for electronic equipment installation resulting from the OER Program.													

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 2: COMMUNICATIONS & ELECTRONICS EQUIPMENT					ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD S/H 82P1 Strategic Platform Support Equipment/BLI #267600/#267606								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLAR:											
			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
	<u>N872 Submarines</u>													
P1221	Equipment OER	A			\$6,120			\$12,635			\$9,835			
P11NS	Installation	A			\$1,052			\$0			\$11,985			
	Subtotal				\$7,172			\$12,635			\$21,820			
TOTAL					\$7,172			\$12,635			\$21,820			

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) (Page 1)	Weapon System	A. DATE February 1999
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B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 2: COMMUNICATIONS & ELECTRONICS EQUIPMENT	C. P-1 ITEM NOMENCLATURE Strategic Platform Support Equipment P1221 Obsolete Equipment Replacement	SUBHEAD 82P1
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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
<i>Fiscal Year (98)</i>										
MS Workstation - DPS Support #1	1	\$57.00	NAVSEA	N/A	WR	NUWC Newport, RI	7/98	10/98	Yes	
MS Workstation (P) #1	14	\$111.93	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	7/98	10/98	Yes	
MS Workstation (SS) SSMS/MEMOD #1	1	\$132.00	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	7/98	10/98	Yes	
MS Workstation (SS)	6	\$117.50	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	2/98	10/98	Yes	
DPS Workstation Trainer #2	1	\$85.00	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	7/98	10/98	Yes	
DPS Workstation (OER) (P) #2	1	\$862.30	NAVSEA	N/A	WR	NUWC Newport, RI	2/98	10/98	Yes	
Digital EM Log Perf./Reliability Improv.	1	\$202.00	NAVSEA	N/A	WR	SPAWAR Charleston, SC	2/98	8/98	Yes	
EMSORT Q-Band Modification	2	\$257.50	NAVSEA	N/A	WR	NUWC Newport, RI	7/98	12/98	Yes	
Revision 5.6 Certification/Testing	1	\$728.90	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	10/98	3/99	Yes	
Cable Tester OER (P)	1	\$200.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/98	8/98	Yes	
TSOT ICS Replacement (P)	1	\$177.00	NAVSEA	N/A	WR	NUWC Keyport, WA	2/98	8/98	Yes	
CCS Revision 7.0 Testing/Cert.	1	\$118.80	NAVSEA	N/A	WR	NUWC Newport, RI	12/98	6/99	Yes	
ARCI Phase I/II (TAMPP) TUE	1	\$770.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/98	6/99	Yes	

D. REMARKS

* Unit Cost rounded to nearest thousand (\$000) unless otherwise shown.

Note #1 MS Workstation will replace the existing TRIDENT MS console, supporting commonality, COTS equipment, and open system architecture. Funding controls are based on phased engineering change processes, prototype and hardware procurements, and testing costs, and can not be level funded.

Note #2 DPS Workstation will replace the existing OJ-172(V) Input/Output console. Funding controls are based on phased engineering change processes, prototype and hardware procurements, and testing costs, and can not be level funded.

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) (Page 2)					Weapon System			A. DATE February 1999		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 2: COMMUNICATIONS & ELECTRONICS EQUIPMENT					C. P-1 ITEM NOMENCLATURE Strategic Platform Support Equipment P1221 Obsolete Equipment Replacement				SUBHEAD 82P1	
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
<i>Fiscal Year (99)</i>										
MS Workstation-DWS Rev 5.6 #1	1	\$7.00	NAVSEA	N/A	WR	NUWC Newport, RI	7/98	6/00	Yes	
MS Workstation (P) #1	1	\$117.50	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	7/98	6/00	Yes	
Rev. 7.0 Certification/Testing	1	\$5,379.00	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	2/99	6/00	Yes	
DPS Rev 7.0 TSS	1	\$211.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
DPS Rev 7.0 S/W H/W Changes	1	\$598.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
EMSORT Q-Band Modification	2	\$38.00	NAVSEA	N/A	WR	NUWC Newport, RI	3/99	6/99	Yes	
DPS Chg. MS Rev 7.0 AN/UYK-43 Opt.	1	\$48.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
Rev 7.0 IRR Change	1	\$10.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
MS Rev 7.0 AN/UYK-43 Option	1	\$385.00	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	2/99	6/00	Yes	
Rev 7.0 Certification/Testing	1	\$515.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
ARCI Phase I/II (TAMPP) (P)	1	\$1,659.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas VA	2/99	6/00	Yes	
ARCI/TDR Interface	1	\$311.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
ARCI Phase I/II (TAMPP) ILS	1	\$417.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas VA	2/99	6/00	Yes	
ARCI/SA Remote Display	1	\$579.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas VA	2/99	6/00	Yes	
ARCI Phase I/II (TAMPP) (P)	1	\$1,600.00	NAVSEA	N/A	CPFF	DSR/NUWC Newport, RI	2/99	6/00	Yes	
MANTIS	1	\$9.00	NAVSEA	N/A	TBD	DSR/NUWC Newport, RI	3/99	6/99	Yes	
Digital EMLOG Perf./ Reliab. Imprvmt.	1	\$189.00	NAVSEA	N/A	WR	SPAWAR, Charleston, SC	3/99	6/99	Yes	
Rev 5.5 and 5.6 DPS W/S	1	\$237.00	NAVSEA	N/A	WR	NAWC/TSD Orlando, FL	3/99	6/99	Yes	
Revision 6.3	1	\$287.00	NAVSEA	N/A	WR	NAWC/TSD Orlando, FL	3/99	6/99	Yes	
D. REMARKS										
<p>Note #1 MS Workstation will replace the existing TRIDENT MS console, supporting commonality, COTS equipment, and open system architecture. Funding controls are based on phased engineering change processes, prototype and hardware procurements, and testing costs, and can not be level funded.</p>										

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) (Page 2)	Weapon System	A. DATE February 1999
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B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 2: COMMUNICATIONS & ELECTRONICS EQUIPMENT	C. P-1 ITEM NOMENCLATURE Strategic Platform Support Equipment P1221 Obsolete Equipment Replacement	SUBHEAD 82P1
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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
<i>Fiscal Year (00)</i>										
ARCI Phase I/II (TAMPP) (P)	1	\$3,007.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	12/99	6/01	Yes	
ARCI Phase I/II (TAMPP) (SS)	1	\$776.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	12/99	6/01	Yes	
ARCI Phase I/II (TAMPP) (TUE) #5	1	\$1,980.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	12/99	6/01	Yes	
Rev. 7.0 Certification/Testing	1	\$1,808.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/99	6/01	Yes	
Rev. 7.0 TSS (DPS)	1	\$402.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/99	6/01	Yes	
ARCI/SA Remote Display	1	\$311.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	12/99	6/01	Yes	
Rev. 7.0 Ship Control	1	\$155.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/99	6/01	Yes	
ARCI/TDR Interface	1	\$174.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/99	6/01	Yes	
ARCI Phase I/II (TAMPP) ILS	1	\$227.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	12/99	6/01	Yes	
Rev. 7.0 Ship Design/Material	1	\$34.00	NAVSEA	N/A	CPFF	EB, Corp., Groton, CT	12/99	6/01	Yes	
DPS Rev. 7.0 S/W H/W Changes	1	\$582.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/99	6/01	Yes	
DPS Chg. MS Rev. 70 AN/UYK-43 Opt.	1	\$24.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/99	6/01	Yes	
MS Rev 7.0 AN/UYK-43 Option	1	\$355.00	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	12/99	6/01	Yes	
-										

D. REMARKS

Note #5 ARCI Phase (I/II) TAMPP will support commonality, COTS equipment, and open system architecture. Funding controls are based on phased engineering change processes, prototype and hardware procurements, and Training Unique Equipment costs to support shore based installations and can not be level funded.

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) (Page 1)					Weapon System			A. DATE February 1999		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 2: COMMUNICATIONS & ELECTRONICS EQUIPMENT					C. P-1 ITEM NOMENCLATURE Strategic Platform Support Equipment P1INS Installation				SUBHEAD 82P1	
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
<u>Fiscal Year (98)</u>										
MS Workstation (SS)	6	\$51.00	NAVSEA	N/A	RC/WR	NSWC CD, Bethesda MD.	4/98	6/98	Yes	
Rev. 7.0 Certification/Testing	1	\$709.00	NAVSEA	N/A	WR	NUWC Newport, RI	10/98	12/98	Yes	
Module Test Program	1	\$36.50	NAVSEA	N/A	CPFF	Logitech, Alexandria, VA	9/98	9/98	Yes	
<u>Fiscal Year (99)</u>										
None										
<u>Fiscal Year (00)</u>										
OK-542A TAHS on SSBN 732	1	\$4,898.00	NAVSEA	N/A	WR	PSNS Bremerton, WA	12/99	6/01	Yes	
ARCI Phase I/II (MPP)/Block 1C #1	1	\$800.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	12/99	6/01	Yes	
CCS Rev 7.0 on SSBN 732 #2	1	\$1,386.00	NAVSEA	N/A	CPFF	NUWC Newport, RI	12/99	6/01	Yes	
CCS Engineering Shipyard Costs	1	\$4,901.00	NAVSEA	N/A	WR	PSNS Bremerton, WA	12/99	6/01	Yes	
-										
D. REMARKS										
<p>Note #1 Supports installation of ARCI Phase I/II on SSBN 732 & 733 during D-5 Conversion shipyard period and installation of CCS MK2 Block 1C.</p> <p>Note #2 Rev 5.6/7.0 Certificate/Testing procures and tests miscellaneous installation material to support the installation of Revision Engineering Kits aboard SSBN's 732 and 733 during D-5 Modernization.</p>										

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
TRIDENT Sonar (Replaces AN/BQQ-5E(V))//
 MODELS OF SYSTEM AFFECTED: **AN/BQQ-6 Towed Array Processing) Subsystem** TYPE MODIFICATION: **Obsolete Equipment Replacement** MODIFICATION TITLE: **Acoustic Rapid COTS Insertion (ARCI) Phase I/II Multi-Purpose Processor (MPP)**

DESCRIPTION/JUSTIFICATION:

Acoustic Rapid COTS Insertion (ARCI) (Phase I/II) Multi Purpose Processor (MPP) replaces obsolete AN/BQQ-5E(V)//AN/BQQ-6 Sonar Towed and Hull array processing equipment with a COTS based open system architecture with increased acoustic advantage.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **OPEVAL = 12/97**

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>			1.5		0.8		2.5		0.6																5.4
<i>PROCUREMENT</i>																									
INSTALLATION KITS																									
INSTALLATION KITS NONRECURRING																									
EQUIPMENT						1	3.7	1	3.2															2	6.9
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT								1	0.8															1	0.8
SUPPORT EQUIPMENT																									0.0
OTHER									2.0																2.0
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST								1	0.8																0.8
TOTAL PROCUREMENT						1	3.7	2	6.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0			0			9.7

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: TRIDENT Sonar (Replaces AN/BQQ-5E(V)/AN-BQQ-6 Towed/ Hull Array Processing Subsystem) MODIFICATION TITLE: Acoustic Rapid COTS Insertion (ARCI) Phase I/II Multi-Purpose Processor (MPP)

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: Engineered Overhauls/ERPs
 ADMINISTRATIVE LEADTIME: 3 Months
 CONTRACT DATES: **FY 1998:** _____
 DELIVERY DATE: **FY 1998:** _____

PRODUCTION LEADTIME: 15 Months
 FY 1999: _____ FY 2000: 12/99
 FY 1999: _____ FY 2000: 6/00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																								
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT									1	0.8													1	0.80
FY 2000 EQUIPMENT												1												
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES (Not Applicable To Shore Sites)

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 MODELS OF SYSTEM AFFECTED: Thin Line Towed Array Handling System TYPE MODIFICATION: Obsolete Equipment Replacement (OER) MODIFICATION TITLE: OK-542A Towed Array Handling System on SSBNs 732-733

DESCRIPTION/JUSTIFICATION:

Replaces the SPALT 9080 Thin Line Towed Array Handling System (TLTAHS) with OK-542A TLTAHS on SSBNs 732-733.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS																									
INSTALLATION KITS NONRECURRING																									
EQUIPMENT	2	2.6																						2	2.6
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT																									
SUPPORT EQUIPMENT																									
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST									1	6.3														1	6.3
TOTAL PROCUREMENT	2	2.6																						2	2.6

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: Thin Line Towed Array Handling System MODIFICATION TITLE: OK-542A Towed Array Handling System on 732-733

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: Engineered Overhauls/ERPs

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: **FY 1998:** _____

FY 1999: _____

FY 2000: 12/99

DELIVERY DATE: **FY 1998:** _____

FY 1999: _____

FY 2000: 6/00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS									1	6.3														
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: SHIP AVAILABILITIES [N/A Shore Sites Only]

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 MODELS OF SYSTEM AFFECTED: Various TYPE MODIFICATION: Obsolete Equipment Replacement (OER) MODIFICATION TITLE: Installation of OER and Common Capabilities (SSN (SSBN) Modernizations on OHIO Class Submarines

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: OPEVAL = 12/97

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
<i>RDT&E</i>																									
<i>PROCUREMENT</i>																									
INSTALLATION KITS (SEE NOTE #1)																									
INSTALLATION KITS NONRECURRING																									
EQUIPMENT	2	0.4			1	0.7																		3	1.10
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT																									
SUPPORT EQUIPMENT																									
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST			A	0.17	12	1.05			1	4.90														13	6.12
TOTAL PROCUREMENT	2	0.40			1	0.70																		3	1.10

CLASSIFICATION: **UNCLASSIFIED**

Note #1 The quantity of equipment modifications procured in FY99 and prior being installed on SSBNs 730, 731, 732 and 733 vary. This exhibit covers the installation requirements for the entire program minus ARCI and TAHS installations. Due to many separate requirements being installed, it is not possible to differentiate quantities.

A: Provides Installation design for DPWS, MSWS and 6" CTMSRs.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

Installation of OER Modifications on OHIO Class
Submarine

MODELS OF SYSTEMS AFFECTED: Various

MODIFICATION TITLE: _____

INSTALLATION INFORMATION: _____

METHOD OF IMPLEMENTATION: Various

ADMINISTRATIVE LEADTIME: Various

PRODUCTION LEADTIME: Various

CONTRACT DATES: FY 1998: 4/98

FY 1999: _____

FY 2000: 12/99

DELIVERY DATE: FY 1998: 6/98

FY 1999: _____

FY 2000: 6/00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS					2	0.6																	2	0.6
FY 1995 EQUIPMENT																								
FY 1996 EQUIPMENT																								
FY 1997 EQUIPMENT				0.17																				0.17
FY 1998 EQUIPMENT					12	1.0																	12	1
FY 1999 EQUIPMENT									1	4.9													1	4.9
FY 2000 EQUIPMENT																							0	0
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																							0	0.0
FY 2004 EQUIPMENT																							0	0
TO COMPLETE																								

Note #1 Provides for installation of CCS Revision 5.6 and 7.0 on SSBNs 730-733 during D-5 Shipyard Conversion period. CCS Revision 5.6 and 7.0 are a compilation of hardware and software technical changes (less ARCI & OK-542A TAHS) which are too various to breakout.

INSTALLATION SCHEDULE: SHIP AVAILABILITIES [N/A Shore Sites Only]

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
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			

P-3A

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE BLI 2760 Other SPAWAR Training Equipment			SUBHEAD 52DF	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)	\$0.0	\$0.9	\$1.0	\$1.0	\$1.4	\$1.4	\$1.0	\$0.5	\$0.5	Continuing	Continuing
<p>PROGRAM COVERAGE: This program consolidates OPN P-1 line items: JSIMS (BLI 2762) and ENWGS (BLI 2760) beginning in FY00</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS (WQ009): The Joint Simulation System-Maritime (JSIMS-M) will replace ENWGS and provide expanded functionality. Equipment procurement starts in FY00. One Cost Code from BLI 2762, under NAVSEA, was transferred to SPAWAR and inserted into BLI 2760. JSIMS will provide a readily available, operationally valid synthetic environment for the Commanders-in-Chief (CINCs), their components, other Joint organizations and the Services. This environment will be used to jointly train, educate, develop doctrine and tactics, formulate and assess operational plans, assess warfighting situations, define operation requirements, and provide operational inputs to the acquisition process. JSIMS-M is developing the Maritime Mission Space Objects for the JSIMS Program, as well as selected portions of the core infrastructure and services to be determined when the Joint Object Model is partitioned. This BLI procures the equipment to operate JSIMS on 5 Navy sites (the Naval War College, Tactical Training Groups Atlantic and Pacific, and Expeditionary Warfare Training Groups Atlantic and Pacific).</p> <p>The FY00 Budget: procures selected computer workstation, local area network, computer peripheral equipment and supporting engineering services to begin outfitting JSIMS-M sites.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS (DF002): Enhanced Naval Wargaming System (ENWGS). Prior to FY96, ENWGS funding was provided under BA7, LI 8210 (CAP). ENWGS is the only Navy recognized naval wargaming system. ENWGS supports wargaming for CINCLANTFLT, CINCPACTFLT, Fleet Commanders, Battle Group Commanders, the Naval War College, and tactical training courses conducted at the Tactical Training Groups (Atlantic and Pacific) and the Expeditional Warfare Training Groups (Atlantic and Pacific). ENWGS tests the Battle Group's Operational orders and directives, providing the essential supplement to at-sea operations prior to going to sea. The new equipment will be procured and installed at the ENWGS sites to complete workstation configuration and replace obsolete host hardware.</p> <p>FY98 Budget procurement: Completed replacement of obsolete workstation at ENWGS sites.</p> <p>FY99 Budget procurement: Procure essential peripheral and host hardware to fully equip each workstation configuration. These items include: printers, large screen displays and additional local/wide area network configuration items.</p>											

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COST ANALYSIS													DATE		
													February 1999		
APPROPRIATION ACTIVITY							P-1 ITEM NOMENCLATURE						SUBHEAD		
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							BLI: 2760 OTHER SPAWAR TRNG. EQUIP.						52DF		
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS												
			PY				FY 1998			FY 1999			FY 2000		
			QTY	TOTAL COST				QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST
WQ009	SHORE PROCESSING SYSTEM												55	18	1,011
DF002	ENWGS	A					VAR	911	VAR	1,036					
TOTAL CONTROL								911		1,036					1,011

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						BLI:2760 OTHER SPAWAR TRNG. EQUIP					52DF	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
WQ009	SHORE PROCESSING SYSTEMS	OO	VARIOUS	OPTION	SPAWAR - SD	N/A	Jan-00	Jun-00	55	\$18.38	YES	
D. REMARKS												

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: FEBRUARY 1999			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2 COMMUNICATION AND ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/LINE ITEM # OTHER TRAINING EQUIPMENT LI:2762 82MB					
Program Element for Code B Items:								OTHER RELATED PROGRAM 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				N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		0
EQUIPMENT COST (In Millions)				\$24.5	\$27.1	\$44.2	\$23.2	\$48.6	\$31.1	\$33.6	\$34.4		\$266.7
SPARES COST (In Millions)													0
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>The equipment procured under the Other Training Equipment for NAVSEA line supports various types of Communication and Electronic training requirements: Procures sustaining and training equipment/systems, training aids and logistic support equipment to support Fleet training requirements. Representative training systems include, but are not limited to: Integrated Undersea Surveillance Systems (IUSS) On Board Trainers (OBT), Computer Improved Instructors Training Aid (CIITA), Acoustic Analysis Trainers, Ship Characteristic Demonstrators/Models, Ship Handling System, the Virtual Environment Submarine (VESUB), Submarine Piloting and Navigation Trainer (SPAN), and the Authorizing Instructional Material (AIM) System. Supports training support equipment requirements developed by the Chief of Naval Education and Training (CNET), and approved by CNO.</p> <p><u>(MB032) SUSTAINING TECHNICAL TRAINING EQUIPMENT</u></p> <p>Funds procure Communication and Electronic 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.</p> <p><u>(MB040) BATTLE FORCE TACTICAL TRAINING (BFTT)</u></p> <p>Funds will procure equipment/systems to support the Battle Force Tactical Training (BFTT) Program, which will provide the capability for coordinated shipboard combat system team and Battle Group/Battle Force (BG/BF) training in port. BFTT will provide realistic joint warfare training across the spectrum of armed conflict, realistic unit level team training in all warfare areas, a means to link ships together which are in different homeports for coordinated training, external stimulation of shipboard training systems and simulation of non-shipboard forces such as friendly, neutral, and enemy ships, aircraft and submarines. BFTT will use a distributed architecture in order to integrate existing on-board/embedded trainers, and will utilize Distributed Interactive Simulation (DIS) protocols to provide Battle Group/Force Commanders with the ability to conduct coordinated, realistic, high stress, interactive combat system training.</p> <p>In FY 98 the projected Baseline procurement consists of one full BFTT System LSD 42/46, DDG 80 and DD 991, 6 Rehosted ACTS, 38 Shipboard RF/IF stimulators, Combat Simulation Test System (CSTS)/BFTT System Integration Hardware, and Integrated Logistics Support (IIS)/Spares.</p> <p>In FY 99 the projected BFTT Baseline Procurement consists of one full BFTT System for (4) DDG 51 Class, (2) CG 47 Class and (3) LSD 41 Class Ships, Production Integration, Integrated Logistics Support (IIS)/Spares, 6 Rehosted ACTS, 32 Shipboard RF/IF Stimulators, and CSTS/BFTT Systems Integration Hardware.</p>													

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BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION		DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2 COMMUNICATION AND ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE/LINE ITEM # OTHER TRAINING EQUIPMENT LI:2762
<p>In FY 00 the projected Baseline Procurement consists of one full BFTT system for (1) CVN 68 Class, (6) CG 47 Class, (1) DD 963 Class, (2) LSD 41 Class and (3) DDG 51 Class ships, Production Integration, ILS/Spares, (9) Rehosted ACTS, (32) Shipboard RF/IF Stimulators, and CSTS/BFTT System Integration Hardware.</p> <p><u>(MB041) SUBMARINE SYNTHETIC WARFARE/COMBINED TEAM TRAINER MODE (CTTM)/ELECTRONIC CLASSROOMS</u></p> <p>This line procures the submarine-unique requirements to support the Synthetic Warfare (SW), Combined Team Trainer Mode (CTTM), and Electronic Classroom (EC) Systems. FY 98 funds provided engineering services for software to implement the SW CTTM interface for submarine environment, and Engineering Production Model (EPM) support equipment for submarines. Baseline procurement will also provide submarine training data link capability to the BFTT system. FY 99, FY00 funds procure additional capability for the submarine training sites to support Synthetic Warfare and CTTM requirements identified by TYCOM.</p> <p><u>(MB050) SUBMARINE SONAR EMPLOYMENT TRAINER (SET)</u></p> <p>The SET provides acoustic operator employment training for submarine sonar systems. It uses entirely commercial components to contain contact and environment models, simulations of the sensors and signal processing, simulated operator consoles, and an instructional subsystem including an instructor's console. FY00 procures a SET system for the Naval Submarine School at Groton, Ct.</p> <p>The estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.</p>		

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WEAPONS SYSTEM COST ANALYSIS						Weapon System			DATE:					
P-5									FEBRUARY 1999					
APPROPRIATION/BUDGET ACTIVITY						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD							
Other Procurement, Navy							OTHER TRAINING EQUIPMENT 82MB							
BA-2 COMMUNICATION AND ELECTRONIC EQUIPMENT														
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
MB040	EXPEDITIONARY WARFARE (N85) Battle Force Tactical Training (BFTT)				23			1,973			3,685			
MB032	SURFACE WARFARE (N86) Surface Sustaining/TTE			91			190			98				
MB040	Battle Force Tactical Training (BFTT)			19,391			22,126			27,930				
MB041	SUBMARINE WARFARE (N87) Submarine Synthetic Warfare, CTTM,EC			2,344			931			795				
MB044	Training Support Equipment / Sub			902			1,903			2,411				
	IUSS OBT			(359)			(165)			(260)				
	Computer Imprvd, Instr. Trng. Aid			(240)			(306)			(300)				
	Minor Training Support Equipment			(60)			(0)			(700)				
	TAC III/IV / OBT DS			(243)			(162)			(351)				
	VESUB			(0)	1	1,270	(1270)		1	800	(800)			
	SPAN			(0)			(0)			(0)				
	Acoustic Analysis Trmr			(0)			(0)			(0)				
MB050	SUBMARINE SONAR EMPLOYMENT TRAINER (SET)			0			0			(9300)				
MB043	MANPOWER/TRAINING (N7) Training Support Equipment			23			10			10				
	Authorizing Instructional Material (AIM)													
MB073	OTHER TRAINING EQUIPMENT (N7) Joint Simulation System (JSIMS) Maritime			1,692			0			0				
	Subtotal (N85/N86)			19,505			24,289			31,713				
	Subtotal (N87)			3,246			2,834			12,506				
	Subtotal (N7)			1,715			10			10				
	TOTAL			24,466			27,133			44,229				
TOTAL							24,466			27,133			44,229	0

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN BA-2: COMMUNICATION & ELECTRONIC EQUIP					C. P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT				FEBRUARY 1999 SUBHEAD		
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 NOW	IF NO WHEN AVAILABLE	
FY 1998 MB040 ILS/SPARES	MULTIPLE	1,085	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	01/98	07/98	YES		
REHOSTED ACTS (6)	6	200	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	12/97	04/98	YES		
LSD 42/46 P&I	2	885	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	05/98	08/98	YES		
STIM/SIM P&I (38)	38	250	NAVSEA, ARL, VA	12/97	CPIF	AAI, HUNT VALLEY, MD	03/98	06/99	YES		
CSTS/BFTT P&I (1) SYSTEM	1	2,029	NAVSEA, ARL, VA	04/97	CPFF	LITTON DATA SYSTEMS OCEAN SPRINGS, MD	05/97	05/98	YES		
DD 991 P&I	1	1,163	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	02/98	05/98	YES		
DDG 80 P&I	1	1,175	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	04/98	08/98	YES		
PRODUCTION INTEGRATION	9	166	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	05/98	06/98	YES		
MB044 IUSS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES		
CIITA	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES		
TSE	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES		
TACIII/IV / OBT DS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES		
D. REMARKS											

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE FEBRUARY 1999
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B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN BA-2: COMMUNICATION & ELECTRONIC EQUIP	C. P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT	SUBHEAD
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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 1999 MB040 ILS/SPARES	MULTIPLE	1,016	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	11/98	02/99	YES	
DDG 51 CLASS P&I	4	1,175	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	02/99	05/99	YES	
LSD 41 CLASS P&I	3	952	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	03/99	06/99	YES	
CG 47 CLASS P&I	2	1,200	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	11/98	05/99	YES	
REHOSTED ACTS (6)	6	200	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	12/98	04/99	YES	
STIM/SIM P&I (32)	32	250	NAVSEA ARL, VA	10/97	CPIF	AAI, HUNT VALLEY, MD	03/98	12/99	YES	
CSTS/BFTT P&I (1) SYSTEM	1	1,973	NAVSEA ARL, VA	09/98	TBD	TBD	TBD	TBD	YES	
PRODUCTION INTEGRATION	13	150	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	10/98	04/99	YES	

D. REMARKS	
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CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE FEBRUARY 1999
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B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN BA-2: COMMUNICATION & ELECTRONIC EQUIP	C. P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT	SUBHEAD 82MB
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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 1999 MB044 IUSS CIITA TACIII/IV / OBT DS VESUB	MULTIPLE MULTIPLE MULTIPLE 1	1,270	NAWC/TSD NAWC/TSD NAWC/TSD NAWC/TSD	VARIOUS VARIOUS VARIOUS 09/16/98	VARIOUS VARIOUS VARIOUS C/FFP	VARIOUS VARIOUS VARIOUS TBD	VARIOUS VARIOUS VARIOUS 2/99	VARIOUS VARIOUS VARIOUS 10/00	YES YES YES YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE			A. DATE		
Other Procurement, Navy					OTHER TRAINING EQUIPMENT			FEBRUARY 1999		
OPN BA-2: COMMUNICATION & ELECTRONIC EQUIP								SUBHEAD		
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 MB040										
ILS/SPARES	MULTIPLE	1,136	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	11/99	02/00	YES	
CVN 68 CLASS P&I	1	1,697	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	01/00	07/00	YES	
CG 47 CLASS P&I	6	1,225	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	01/00	04/00	YES	
DDG 51 CLASS P&I	3	1,225	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	02/00	05/00	YES	
LSD 41 CLASS P&I	2	1,002	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	03/00	06/00	YES	
DD 963 CLASS P&I	1	1,213	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	11/99	02/00	YES	
REHOSTED ACTS (9)	9	220	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	12/99	04/00	YES	
STIM/SIM P&I (32)	32	260	NAVSEA ARL, VA	10/97	CPIF	AAI, HUNT VALLEY, MD	03/98	05/00	YES	
CSTS/BFTT P&I (1) SYSTEM PRODUCTION INTEGRATION	1	2,000	NAVSEA ARL, VA	09/98	TBD	TBD	TBD	TBD	YES	
	14	160	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	10/99	02/00	YES	
D. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				A. DATE	
Other Procurement, Navy					OTHER TRAINING EQUIPMENT				FEBRUARY 1999	
OPN BA-2: COMMUNICATION & ELECTRONIC EQUIP									SUBHEAD	
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										
MB044										
IUSS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
CIITA	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
TSE	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
TACIII/IV / OBT DS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
VESUB	1	800	NAWC/TSD	09/16/98	C/FFP(OPTION)	TBD	03/00	02/01	YES	
MB050										
SET	1	9,300	NAVSEA	N/A	WR	NSWC Carderock, MD	01/00	06/02	YES	
D. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy								B. P-1 ITEM NOMENCLATURE AN/USQ-T46 BFTT								C. DATE FEBRUARY 1999				LATER			
					FY 1998				FY 1999				FY 2000				FY 2001				FY 2002					FY 2003		
					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)	20	0	4	0	0	0	9	0	0	1	11	1	0	0	5	0	0	8	7	0	0	0	0	8	0	42	
SCHOOLS/OTHER TRAINING	(P)	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
OTHER	(P)																											
TOTAL PHASED REQ	(C)	28	28	32	32	32	32	41	41	41	42	53	54	54	54	59	59	59	67	74	74	74	74	74	83	83	125	
ASSETS ON HAND	(BP)	28																										
DELIVERY FY 97 & PRIOR	(P)	28																										
FY 97 & PRIOR	(P)	28																										
FY 98	(P)	0	0	4	0																							
FY 99	(P)					0	0	9	0																			
FY 00	(P)								0	1	11	1																
FY 01	(P)												0	0	5	0												
FY 02	(P)																0	8	7	0								
FY 03	(P)																				0	0		9	0			
FY 04	(P)																											
To Complete	(P)	92	92	88	87	87	87	78	78	78	77	66	65	65	65	60	60	60	52	45	45	45	44	37	37	42		
TOTAL ASSETS	(C)	28	28	32	32	32	32	41	41	41	42	53	54	54	54	59	59	59	67	74	74	74	74	83	83			
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
D. REMARKS					E. RQMT (QTY) 120				TOTAL RQMT 120				INSTALLE 120				ON HAND AS OF 01/12/99 32				FY 99 & PRIOR UNDELIVERED 0				UNFUNDED 0			
					1. APPN -																							
					2. APPN -																							
					3. PROCUREMENT LEADTIME				ADMIN				INITIAL ORDER				REORDER											

DD for 2447, JUN 86

CLASSIFICATION:

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT AN/USQ-T46 BFTT								DATE FEBRUARY 1999	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy								Installing Agent N/A									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR			
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY		
FY 1998								FY 1999									
					4								9				
FY 2000								FY 2001									
			1		11		1										

P-1 SHOPPING LIST

CLASSIFICATION:

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							P-1 ITEM NOMENCLATURE MARINE AIR TRAFFIC CONTROL & LANDING SYSTEMS 42MJ					
Program Element for Code B Items:							Other Related Program Elements NOT APPLICABLE					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	\$22.6		\$4.8	\$12.6	\$12.4	\$12.0	\$14.8	\$17.7	\$19.5	\$20.0	Cont	Cont
<p>DESCRIPTION:</p> <p>Marine Air Traffic Control & Landing System (MATCAL) is a fully automated all weather expeditionary terminal Air Traffic Control System that provides arrival/ departure and enroute surveillance control, automated precision approach and landing control for suitably equipped aircraft or Ground Controlled Approach (GCA) to accommodate other aircraft. MATCAL satisfies the operational requirements set forth by Specific Operational Requirements (SOR) 34-22 of 12 July 1973. MATCAL is also comprised of other visual and navigational aids including Pulse Coded Microwave Landing Systems, ATC systems and ancillary equipment. ORD 341-88-93 of 1 Sep 93 also applies.</p> <p>MATCAL, integrated with other Marine Air Command and Control Systems and federal agencies, provides the ability to project air combat power throughout the Amphibious Operations Area (AOA) without regard to the effects of weather. Air traffic control and landing automation reduces air traffic controllers' air traffic handling and management time, allowing more time for mission response and task accomplishment. Thus, it supports a required increase to aircraft sortie rates and directly contributes to extended time on target for aircraft. The system provides for integration of the Air Traffic Control and Landing Systems into the total Marine Air Command and Control System (MACCS) by means of automated transfer.</p> <p>MATCAL has three primary subsystems: (1) Air Traffic Control Subsystem (ATCS) consisting of AN/TPS-73 Airport Surveillance Radar and various peripheral equipment; (2) All-Weather Landing Subsystem (ALS) consisting of an AN/TPN-22 Precision Approach Landing Radar, AN/UYK-44 computer and peripheral equipment; and (3) the Control and Communications Subsystem (CCS) (AN/TSQ-131(V)) with a Communications Control Group (CCG), radios, computer software, multi mode displays and peripherals. Other related MATCAL systems are AN/TSQ-120 Towers, AN/TRN-44 TACAN, AN/TPN-30 Marine Remote Area Approach & Landing Set (MRAALS), the Remote Landing Site Tower (RLST) and various support items which contribute towards achieving the entire mission of providing for the safe and expeditious flow of air traffic at expeditionary airfields and remote area landing sites.</p> <p>Total requirement is for 17 subsystems: 12 dedicated to Marine Air Traffic Control Squadrons (MATCS); 1 dedicated to the Aviation Ground Support Element at 29 Palms, CA; 1 for operational contingencies/ISEA Test Bed at San Diego, CA; 2 for the NATTC in Pensacola, FL; and 1 for NAWCAD Landing Systems Test Facility, Patuxent River, MD.</p> <p>FY98 funding procured 25 MATCAL Radio Upgrades, 10 AN/UYQ-42 Upgrades, various maintainability/reliability improvements and related installation. FY99 funding procures 70 MATCAL Radio Upgrades, 7 RLSTs, maintainability/reliability improvements, and related installation. FY00 funding procures 98 MATCAL Radio Upgrades, 5 RLSTs, 36 Manpack Radios, various maintainability/reliability improvements and related installation.</p> <p>INSTALLATION AGENT: SPAWARSCEN, SD Facilities that are to receive the equipment: Marine Corps air traffic control facilities, expeditionary airfields, and remote landing sites.</p>												

P-1 SHOPPING LIST

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS										DATE:		
P-40a										February 1999		
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE					
OTHER PROCUREMENT, NAVY							MARINE AIR TRAFFIC CONTROL & LANDING SYSTEMS 42MJ					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
MJ413 AN/TPN-30 MOD	A											
QTY		75										75
FUNDING		5.479										5.479
MJ429 AN/TRC-131REPL (RLST)	A											
QTY		1		7	5							13
FUNDING		3.140	0.796	5.475	3.924							13.335
MJ430 MATCALC RADIO UPGRADE	A											
QTY		0	25	70	98	98	12	64	29	38	28	462
FUNDING		0	1.648	4.060	5.684	5.684	0.696	3.712	1.682	2.204	1.624	26.994
MJ437 AN/UYQ-42 UPGRD	A											
QTY		24	10									34
FUNDING		1.037	0.429									1.466
MJ439 AN/TSQ-120 UPRGD	A											
QTY		4										4
FUNDING		1.786										1.786
MJTBD MANPACK RADIOS	A											
QTY		0			36	12						48
FUNDING		0			0.890	0.310						1.200
MJTBD NEXT GEN SYSTEM	A											
QTY		0				1	3	3	4	4		15
FUNDING		0				4.282	12.600	12.825	17.128	17.128		63.963
MJ425 AN/TPN-20 SSM	A											
QTY		17										17
FUNDING		8.115										8.115
OTHER COSTS		3.089	1.915	3.047	1.914	1.758	1.540	1.124	0.715	0.625	CONT	CONT
TOTAL FUNDING		22.646	4.788	12.582	12.412	12.034	14.836	17.661	19.525	19.957	CONT	CONT

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

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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-2 COMMUNICATIONS AND ELECTRON									MARINE AIR TRAFFIC CONTROL & LANDING SYSTEMS			
				42MJ												
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years	FY 1998			FY 1999			FY 2000			FY 2001			
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
MJ413	AN/TPN-30 MOD	A	5,479													
MJ427	MAINT/RELIABILITY IMPROVEMENT	A	1,757	VAR		608	VAR		478	VAR		20				
MJ429	AN/TRC-131 REPL (RLST)	A	3,140			796	7	782	5,475	5	785	3,924				
MJ430	MATCALC RADIO UPGRADE	A	0	25	66	1,648	70	58	4,060	98	58	5,684				
MJ437	AN/UYQ-42 UPGRADE	A	1,037	10	43	429										
MJ439	AN/TSQ-120 UPGRADE	A	1,786													
MJ800	INTEGRATED LOGISTICS SUPPORT	N/A	94			130			385			371				
MJ830	PRODUCTION ENGINEERING	N/A	54			667			978			680				
MJ831	PRODUCTION SUPPORT	N/A	618													
MJ860	ACCEPTANCE TEST & EVALUATION	N/A	114			30			372			214				
MJ900	NON-FMP INSTALLATION	N/A	411			441			734			546				
MJ990	INITIAL TRAINING	N/A	41			39			100			83				
MJTBD	MANPACK RADIOS	A	0							36	25	890				
MJTBD	NEXT GENERATION SYSTEM	A	0													
MJ425	AN/TPN-22 SOLID STATE MODULATOR	A	8,115													
			22,646			4,788			12,582			12,412				0

UNCLASSIFIED

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD		
Other Procurement, Navy					MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM				42MJ		
BA2 - Communications and Electronic Equipment											
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
MJ429 RLST											
FY - 99	7	782.1	NAVAIR	Nov-97	C/OPTION	SNC, SPARK, NV	Dec-98	Oct-99	YES		
FY - 00	5	784.8	NAVAIR	Nov-98	C/OPTION	SNC, SPARK, NV	Nov-99	Oct-00	YES		
MJ430 MATCALC RADIO UPGRADE											
FY - 98	25	65.9	NAVAIR	Nov-97	SS/FP	COLLINS RADIO	May-98	Nov-98	YES		
FY - 99	70	58.0	NAVAIR	Nov-98	SS/OPTION	CEDAR RAPIDS, IA	Jan-99	Jul-99	YES		
FY - 00	98	58.0	NAVAIR	Nov-99	SS/OPTION	CEDAR RAPIDS, IA	Jan-00	Jul-00	YES		
MJ437 AN/UYQ-42 UPGRADE											
FY - 98	10	42.9	SPAWAR SYS CEN, SD	Nov-98	SS/OPTION	LORAL, ST PAUL, MN	Jan-98	Apr-98	YES		
MJTBD MANPACK RADIO *											
FY - 00	36	24.7	TBD	TBD	TBD	TBD	TBD	TBD	NO		
D. REMARKS											
* CONTRACTOR NOT YET DETERMINED											

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Expeditionary airfield and remote area TYPE MODIFICATION: Maintenance/Capability MODIFICATION TITLE: MATCALs Radio Upgrade (MJ430)

DESCRIPTION/JUSTIFICATION:

Replaces obsolete radio in MATCALs, improves maintainability, provides capability for Havequick, Singcars, CRYPTO, GPS, and SATCOM communications with A/C and other C3I Agencies. Consolidates all communications traffic through one communications device.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COTS/GOTS Radios to be fully developed FY98.

	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	\$	
FINANCIAL PLAN (IN MILLIONS)																							
<i>RD&E</i>																						0	0.000
<i>PROCUREMENT</i>																						0	0.000
INSTALLATION KITS																						0	0.000
INSTALLATION KITS - UNIT COST																						0	0.000
INSTALLATION KITS NONRECURRING																						0	0.000
EQUIPMENT			25	1.648	70	4.060	98	5.684	98	5.684	12	0.696	64	3.712	29	1.682	38	2.204	28	1.624	462	26.994	
EQUIPMENT NONRECURRING																						0	0.000
ENGINEERING CHANGE ORDERS																						0	0.000
DATA																						0	0.000
TRAINING EQUIPMENT																						0	0.000
SUPPORT EQUIPMENT																						0	0.000
OTHER																						0	0.000
OTHER																						0	0.000
OTHER																						0	0.000
INTERIM CONTRACTOR SUPPORT																						0	0.000
INSTALL COST			0	0.000	65	0.325	62	0.310	75	0.375	89	0.445	68	0.340	29	0.145	28	0.140	46	0.230	462	2.310	
TOTAL PROCUREMENT				1.648		4.385		5.994		6.059		1.141		4.052		1.827		2.344		1.854			29.304

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: UNCLASSIFIED

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

MODELS OF SYSTEMS AFFECTED: Expeditionary airfield and remote area landing sites. MODIFICATION TITLE: MATCAL'S RADIO UPGRADE (MJ430)

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: AIT
 ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 6 Months
 CONTRACT DATES: FY 1999: Jan-99 FY 2000: Jan-00
 DELIVERY DATE: FY 1999: Jul-99 FY 2000: Jul-00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total							
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$						
PRIOR YEARS																									0	0.000				
FY 1997 EQUIPMENT																										0	0.000			
FY 1998 EQUIPMENT							25	0.125																		25	0.125			
FY 1999 EQUIPMENT							40	0.200	30	0.150																70	0.350			
FY 2000 EQUIPMENT									32	0.160	66	0.330														98	0.490			
FY 2001 EQUIPMENT											9	0.045	89	0.445													98	0.490		
FY 2002 EQUIPMENT															12	0.060											12	0.060		
FY 2003 EQUIPMENT															56	0.280	8	0.040									64	0.320		
FY 2004 EQUIPMENT																	21	0.105	8	0.040							29	0.145		
FY 2005 EQUIPMENT																				20	0.100							18	0.090	
TO COMPLETE																													28	0.140
																													28	0.140

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	25	0	0	40	30	0	0	32	36	30	0	9	30	30	29	0	12	0	30	26	8	0	0	21	8	0	0	20	46	462
Out	0	25	0	0	40	30	0	0	32	36	30	0	9	30	30	29	0	12	0	30	26	8	0	0	21	8	0	0	20	46	462

P-3A

CLASSIFICATION:

UNCLASSIFIED

Exhibit P-20, Requirements Study			APPROPRIATION/BUDGET ACTIVITY BA-2 COMMUNICATIONS Other Procurement Navy AND ELECTRONIC EQUIPMENT				DATE: February 1999	
P-1 ITEM NOMENCLATURE MJ-429 AN/TRC-131 (Replacement (RLST))			Admin Leadtime (after Oct1): 4 MONTHS			Prod Leadtime : 4 MONTHS		
	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary		7	5					
Unit Cost		782.000	784.000					
Total Cost	796.000	5,475.000	3,924.000					
Asset Dynamics								
Beginning Asset Position			1	8	13	13	13	13
Deliveries from all prior year funding		1						
Deliveries from FY 1999 funding			7					
Deliveries from FY 2000 funding				5				
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		1	8	13	13	13	13	13
Inventory Objective or Current Authorized Allowance		13	13	13	13	13	13	13
Inventory Objective 13	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for FY 2000 Replacement:		Aircraft: TOAI:
Assets Rqd For Combat Loads:	FY 1998 thru XXXXX:	FY 1998 thru XXXXX:		FY 1998 thru XXXXX:		Vehicles Eligible for FY 2001 Replacement:		PAA: TAI
WRM Rqmt:	FY 1997:	FY 1997:		FY 1997:		Vehicle Augment:		Attrition Res:
Pipeline:	FY 1996:	FY 1996:		FY 1996:				BAI
Other:	FY 1995:	FY 1995:		FY 1995:				Inactive Inv:
TOTAL:								Storage:
Remarks:								

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

Exhibit P-20, Requirements Study		APPROPRIATION/BUDGET ACTIVITY				BA-2 COMMUNICATIONS		DATE:	
P-1 ITEM NOMENCLATURE		Other Procurement Navy				AND ELECTRONIC EQUIPMENT		February 1999	
MJ430 MATCALs RADIO UPGRADE		Admin Leadtime (after Oct1):				Prod Leadtime :			
		4 MONTHS				6 MONTHS			
	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	
Buy Summary	25	70	98	98	12	64	29	38	
Unit Cost	66	58	58	58	58	58	58	58	
Total Cost	1648	4060	5684	5684	696	3712	1682	2204	
Asset Dynamics									
Beginning Asset Position			65	127	202	291	359	388	
Deliveries from all prior year funding		25							
Deliveries from FY 1999 funding		40	30						
Deliveries from FY 2000 funding			32	66					
Deliveries from FY 2001 funding				9	89				
Deliveries from subsequent years' funding						68	29	28	
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position	0	65	127	202	291	359	388	416	
Inventory Objective or Current Authorized Allowance	462	462	462	462	462	462	462	462	
Inventory Objective 462	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for FY 2000 Replacement:	Aircraft: TOAI:				
Assets Rqd For Comb Loads:	FY 1998 thru XXXXX:	FY 1998 thru XXXXX:	FY 1998 thru XXXXX:	Vehicles Eligible for FY 2001 Replacement:	PAA: TAI				
WRM Rqmt:	FY 1997:	FY 1997:	FY 1997:	Vehicle Augment:	Attrition Res:				
Pipeline:	FY 1996:	FY 1996:	FY 1996:		BAI				
Other:	FY 1995:	FY 1995:	FY 1995:		Inactive Inv:				
TOTAL:					Storage:				
Remarks:									

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET							DATE:					
P-40							February 1999					
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE					
OTHER PROCUREMENT, NAVY							Shipboard Air Traffic Control (SATC) NARM #283100					
Program Element for Code B Items:							Other Related Program Elements					
Not Applicable							0604504N					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	58.8	A	\$3.6	\$8.6	\$7.5	\$8.1	\$8.4	\$8.4	\$8.6	\$8.8	CONT	CONT
<p>DESCRIPTION:</p> <p>Shipboard Air Traffic Control (SATC) systems are responsible for safe and expeditious control of air traffic within 50 NM of a ship. SATC systems include the air traffic surveillance radar, AN/SPN-43, and the air traffic central tracking and control system which has two major configurations: Carrier Air Traffic Control Center-Direct Altitude and Identity Readout (CATCC-DAIR) and Amphibious Air Traffic Control-Direct Altitude and Identity Readout (AATC-DAIR). The DAIR systems use AN/SPN-43 and Identification Friend or Foe (IFF) inputs to track and control aircraft. Obsolescence problems are being addressed through various upgrades. The major upgrades include AN/SPN-43C, CATCC-to-AATC field change, and AN/TPX-42 display upgrade.</p> <p>Funding in FY 1998 through FY 2001 provides for procurement and installation of the following:</p> <p>FY 1998 funded the installation of SATC modification kits and AN/SPN-43C upgrades.</p> <p>FY 1999 funds the procurement of two CATCC-to-AATC field change kits and various SATC modification kits. It also funds the installation of CATCC-to-AATC field change kits.</p> <p>FY 2000 funds the procurement of two CATCC-to-AATC field change kits and various SATC modification kits.</p> <p>Installing Agent: Shipyards and Alteration Installation Teams When installation to be made: ROH/SRA/RAV Ships or facilities to receive the equipment: CV/CVNs, LHD/LHAs, Software Support Activity (NAWCAD, St Inigoes), ICSTF San Diego, and training sites.</p>												

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS									DATE: February 1999			
P-40a												
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE						
OTHER PROCUREMENT, NAVY						Shipboard Air Traffic Control (SATC)						
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
AN/TPX-42A(V)13	A											
QTY		5										5
FUNDING		19.557										19.557
CATCC to AATC KIT	N/A											
QTY		8		2	2							19
FUNDING		8.556		4.876	4.822							35.399
AN/TPX-42 ADS UPG	N/A											
QTY											7	12
FUNDING											6.803	11.438
OTHER COST	N/A	30.726	3.605	3.676	2.721						CONT	CONT
TOTAL P-1 FUNDING		58.839	3.605	8.552	7.543	8.095	8.360	8.415	8.625	8.802	CONT	CONT

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CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5				Weapon System				DATE: February 1999							
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy				ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD Shipboard Air Traffic Control 42MP										
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
MP023	SATC MOD KITS	N/A	427				VAR		171	VAR		72			
MP040	AATC-DAIR SYSTEM AN/TPX-42(V)13	A	19,557												
MP042	CATCC TO AATC F/C KITS	N/A	8,556				2	2,438	4,876	2	2,411	4,822			
MP043	AN/TPX-42 ADS UPGRADE	N/A													
MP800	INTEGRATED LOGISTICS SUPPORT	N/A	120			104			140			49			
MP830	PRODUCTION ENGINEERING SPT	N/A	454			193			275			169			
MP840	QUALITY ASSURANCE	N/A	20			17			106			79			
MP860	ACCEPTANCE TEST & EVALUATION	N/A							314			256			
MP900	NON-FMP INSTALLATION	N/A	621			70			69			8			
MP910	FMP INSTALLATION	N/A	11,893			3,221			2,601			2,088			
	VARIOUS 1/	N/A	17,191												
			58,839			3,605			8,552			7,543			

1/ Prior year funding associated with cost elements not financed after FY 1994.

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CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE					
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD			
Other Procurement, Navy					BA2-Communications and Electronics Equipment				Shipboard Air Traffic Control (SATC)			
									42MP			
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE		
MP042 CATTTC to AATC-DAIR F/C Kits												
FY97	3	\$2,294	NAVAIR		PX	NAWCAD St. Inigoes	7/97	1/99	YES			
FY99	2	\$2,438	NAVAIR		PX	NAWCAD St. Inigoes	1/99	7/00	YES			
FY00	2	\$2,411	NAVAIR		PX	NAWCAD St. Inigoes	1/00	7/01	YES			
D. REMARKS												
1. System integration and assembly will be accomplished by the field activity, NAWCAD, after procuring individual components through existing contractual vehicles.												
2. CATTTC to AATC F/C-FY99 unit cost is higher because in FY97 (and prior) there were components of the conversion kit available from decommissioned ships. No reusable components will be available for the FY99 through FY03 conversion kits.												

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs, LHDs, LHAs, and selected shore sites. TYPE MODIFICATION: R&M MODIFICATION TITLE: SATC Modification Kit Summary (MP023)

DESCRIPTION/JUSTIFICATION:
 SATC MODIFICATION KIT SUMMARY

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
<i>RDT&E</i>																									0.000
<i>PROCUREMENT</i>																									
INSTALLATION KITS		0.002		0.425				0.171		0.072		0.157		0.484		0.524		0.293		0.461		CONT	CONT	CONT	
INSTALLATION KITS - UNIT COST																								0.000	
INSTALLATION KITS NONRECURRING																								0.000	
EQUIPMENT																								0.000	
EQUIPMENT NONRECURRING																								0.000	
ENGINEERING CHANGE ORDERS																								0.000	
DATA																								0.000	
TRAINING EQUIPMENT																								0.000	
SUPPORT EQUIPMENT																								0.000	
OTHER																								0.000	
OTHER																								0.000	
OTHER																								0.000	
INTERIM CONTRACTOR SUPPORT																								0.000	
INSTALL COST	0	0.612	0	0.117	0	0.070	0	0.069	0	0.008	0	0.305	0	0.236	0	0.048	0	0.038	0	0.052	0	CONT	CONT	CONT	
TOTAL PROCUREMENT		0.614		0.542		0.070		0.240		0.080		0.462		0.720		0.572		0.331		0.513				CONT	

The equipment and installation costs represented on this P-3a are for individual modification programs that do not exceed \$5 million in either budget year or \$10 million in all years.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CVs, CVNs, LHDs, LHAs, and selected shore sites. MODIFICATION TITLE: SATC Modification Kit Summary (MP023)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: _____

ADMINISTRATIVE LEADTIME: _____ N/A

PRODUCTION LEADTIME: _____ N/A

CONTRACT DATES: FY 1999: _____ N/A

FY 2000: _____ N/A

DELIVERY DATE: FY 1999: _____ N/A

FY 2000: _____ N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS		0.612																							0.612
FY 1997 EQUIPMENT				0.117																					0.117
FY 1998 EQUIPMENT						0.070																			0.070
FY 1999 EQUIPMENT								0.069																	0.069
FY 2000 EQUIPMENT									0.008																0.008
FY 2001 EQUIPMENT										0.305															0.305
FY 2002 EQUIPMENT												0.236													0.236
FY 2003 EQUIPMENT														0.048											0.048
FY 2004 EQUIPMENT																0.038									0.038
FY 2005 EQUIPMENT																		0.052							0.052
TO COMPLETE																							CONT		CONT

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs, LHDs, LHAs and selected shore sites. TYPE MODIFICATION: Production ECP 6/99 MODIFICATION TITLE: MTI Mod Kits (MP023)

DESCRIPTION/JUSTIFICATION:
 Adds digital signal processing to the AN/SPN-43C receiver to provide increased clutter reduction, allowing detection of targets in heavy weather.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Production ECP

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RD&E</i>																								0	0.000
<i>PROCUREMENT</i>																									0.000
INSTALLATION KITS										1	0.631			2	1.311	2	1.339	2	1.369	20	13.996	27		18.646	
INSTALLATION KITS - UNIT COST											0.631				0.656		0.670		0.685		0.700			0.000	
INSTALLATION KITS NONRECURRING EQUIPMENT																								0.000	
EQUIPMENT NONRECURRING																								0.000	
ENGINEERING CHANGE ORDERS																								0.000	
DATA																								0.000	
TRAINING EQUIPMENT																								0.000	
SUPPORT EQUIPMENT																								0.000	
OTHER																								0.000	
OTHER																								0.000	
OTHER																								0.000	
INTERIM CONTRACTOR SUPPORT																								0.000	
INSTALL COST				0.000	0	0.000	AP	0.023	AP	0.090	1	0.487	AP	0.210	2	1.136	2	1.180	2	1.184	20	10.304	27	14.614	
TOTAL PROCUREMENT				0.000	0	0.000	0	0.023	0	0.090	0	1.118		0.210		2.447		2.519		2.553		24.300		33.260	

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CVs, CVNs, LHDs, LHAs and selected shore sites. MODIFICATION TITLE: MTI MOD KITS (MP023)

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: AIT
 ADMINISTRATIVE LEADTIME: 4 Months. PRODUCTION LEADTIME: 6 Months.
 CONTRACT DATES: FY 1999: N/A FY 2000: N/A
 DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									0.000
FY 1997 EQUIPMENT																									0.000
FY 1998 EQUIPMENT																									0.000
FY 1999 EQUIPMENT																									0.000
FY 2000 EQUIPMENT																									0.000
FY 2001 EQUIPMENT								AP	0.023	AP	0.090	1	0.459												0.572
FY 2002 EQUIPMENT																									0.000
FY 2003 EQUIPMENT											AP	0.038	AP	0.210	2	0.942									1.190
FY 2004 EQUIPMENT															AP	0.194	2	0.980							1.174
FY 2005 EQUIPMENT																	AP	0.200	2	0.986					1.186
TO COMPLETE																			AP	0.208	20	10.304			10.512

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	20	27
Out	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	20	27

The total inventory objective for this modification kit is twenty-eight, of which twenty-seven will be OPN funded and one RDT&EN funded. This item is an in-house build by NAWCAD Patuxent River, MD (St. Ingoes Annex).

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs, LHDs, LHAs and selected shore sites. TYPE MODIFICATION: R & M Upgrade MODIFICATION TITLE: AN/SPN-43C Upgrade (MP031)

DESCRIPTION/JUSTIFICATION:
 This kit replaces the obsolete and unprocureable AN/SPN-43B receiver and transmitter units with a dual channel receiver/transmitter using state-of-the-art solid state circuitry.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Fielded

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RD&E</i>																							0.000	
<i>PROCUREMENT</i>																							0.000	
INSTALLATION KITS	22	4.980																				22	4.980	
INSTALLATION KITS - UNIT COST		0.226																					0.000	
INSTALLATION KITS NONRECURRING EQUIPMENT																							0.000	
EQUIPMENT NONRECURRING																							0.000	
ENGINEERING CHANGE ORDERS																							0.000	
DATA																							0.000	
TRAINING EQUIPMENT																							0.000	
SUPPORT EQUIPMENT																							0.000	
OTHER																							0.000	
OTHER																							0.000	
OTHER																							0.000	
INTERIM CONTRACTOR SUPPORT																							0.000	
INSTALL COST	12	11.648	6	4.434	3	2.542	AP	0.127	1	1.008	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	22	19.759
TOTAL PROCUREMENT		16.628		4.434		2.542		0.127		1.008		0.000		0.000		0.000		0.000		0.000		0.000		24.739

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CVs, CVNs, LHDs, LHAs and selected shore sites. MODIFICATION TITLE: AN/SPN-43C Upgrade (MP031)

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: AIT
 ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
 CONTRACT DATES: FY 1999: N/A FY 2000: N/A
 DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	12	11.648	6	4.434	3	2.542	AP	0.127	1	1.008													22	19.759	
FY 1997 EQUIPMENT																									0.000
FY 1998 EQUIPMENT																									0.000
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																									0.000
FY 2005 EQUIPMENT																									0.000
TO COMPLETE																									

INSTALLATION SCHEDULE:

	FY 1998	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	22	0	0	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	22
Out	21	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	0	0	0	0	22

The total inventory objective is 28 units. 6 units are SCN funded and 22 OPN funded.

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVNs, LHDs, and LHAs TYPE MODIFICATION: SAFETY MODIFICATION TITLE: AN/TPX-42(V)13 (MP040)

DESCRIPTION/JUSTIFICATION:

Interrogator used to control air traffic on amphibious ships is required to support the increased air traffic density due to deployment of the AV-8B.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Full Production 1/90

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RDT&E</i>																									0.000	
<i>PROCUREMENT</i>																									0.000	
INSTALLATION KITS																									0.000	
INSTALLATION KITS - UNIT COST																									0.000	
INSTALLATION KITS NONRECURRING																									0.000	
EQUIPMENT	5	16.127																						5	16.127	
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	3	4.678	1	1.614	AP	0.679	1	1.685	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	5	8.656
TOTAL PROCUREMENT		20.805		1.614		0.679		1.685		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		24.783

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: CVNs, LHDs, LHAs MODIFICATION TITLE: AN/TPX-42(V)13 (MP040)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FMP
 ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 22 Months
 CONTRACT DATES: FY 1999: N/A FY 2000: N/A
 DELIVERY DATE: FY 1999: Mar-99 FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	3	4.678	1	1.614	AP	0.679	1	1.685															5	8.656	
FY 1997 EQUIPMENT																									0.000
FY 1998 EQUIPMENT																									0.000
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																									0.000
FY 2005 EQUIPMENT																									0.000
TO COMPLETE																									0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Out	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	

NOTE: FY 1999 installation is on an LHA-1 class ship.

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs, LHDs, LHAs, TYPE MODIFICATION: SAFETY ENHANCEMENT MODIFICATION TITLE: CATCC to AATC F/C Kits (MP042)
and selected shore sites.

DESCRIPTION/JUSTIFICATION:
 Backfit CV/CVN with improvements from AATC-DAIR. Prior to this, CATCC-to-AATC kits were being procured without the Advanced Display System (AN/UYQ-70) ECP. In FY99 and beyond kits with ADS are being procured.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Production ECP 1/97 (configuration with ADS)

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																								
<i>RDT&E</i>																							0.000	
<i>PROCUREMENT</i>																							0.000	
INSTALLATION KITS	6	5.103	2	3.453			2	4.876	2	4.822	2	4.862	2	4.865	1	2.429	1	2.481	1	2.508		19	35.399	
INSTALLATION KITS - UNIT COST		0.851		1.727				2.438		2.411		2.431		2.433		2.429		2.481		2.508			0.000	
INSTALLATION KITS NONRECURRING																							0.000	
EQUIPMENT																							0.000	
EQUIPMENT NONRECURRING																							0.000	
ENGINEERING CHANGE ORDERS																							0.000	
DATA																							0.000	
TRAINING EQUIPMENT																							0.000	
SUPPORT EQUIPMENT																							0.000	
OTHER																							0.000	
OTHER																							0.000	
OTHER																							0.000	
INTERIM CONTRACTOR SUPPORT																							0.000	
INSTALL COST	6	1.682	0	0.000	0	0.000	1	0.766	2	0.990	2	1.033	2	0.941	2	1.031	2	1.219	1	0.542	1	0.408	19	8.612
TOTAL PROCUREMENT		6.785		3.453		0.000		5.642		5.812		5.895		5.806		3.460		3.700		3.050		0.408		44.011

The total quantity reflects the inventory objective for this item.

FY94 and prior unit cost is lower because these units did not include the ADS upgrade.

The FY99 unit cost is higher because in FY97 (and prior) assets from decommissioned ships were used, but no additional assets will be available for the FY99 through FY03 units.

Total quantity of 19 represents the OPN inventory objective for this item. An additional 2 units have been purchased with SCN funds.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CVs, CVNs, LHDs, LHAs, _____
and selected shore sites.

MODIFICATION TITLE: CATCC to AATC F/C Kits (MP042)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: _____ AIT _____

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 18 Months for first unit on contract (every 4 months afterward for subsequent units.)

CONTRACT DATES: FY 1999: Jan-99

FY 2000: Jan-00

DELIVERY DATE: FY 1999: Jan-99

FY 2000: Jul-00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$				
PRIOR YEARS	6	1.682																						6	1.682			
FY 1997 EQUIPMENT							1	0.766	1	0.487															2	1.253		
FY 1998 EQUIPMENT																												
FY 1999 EQUIPMENT									1	0.503	1	0.743														2	1.246	
FY 2000 EQUIPMENT											1	0.290	1	0.468												2	0.758	
FY 2001 EQUIPMENT													1	0.473	1	0.538											2	1.011
FY 2002 EQUIPMENT															1	0.493	1	0.634									2	1.127
FY 2003 EQUIPMENT																	1	0.585									1	0.585
FY 2004 EQUIPMENT																			1	0.542							1	0.542
FY 2005 EQUIPMENT																											1	0.408
TO COMPLETE																							1	0.408	1	0.408		

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL	
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
In	6	0	1	1	0	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	0	1	1	1	19
Out	6	0	0	1	0	1	0	1	0	0	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	1	1	1	19	

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CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							P-1 ITEM NOMENCLATURE Automatic Carrier Landing System (ACLS) 42PN					
Program Element for Code B Items: Not Applicable							Other Related Program Elements NARM# 283200 0604504N					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	\$153.5	A	11.0	10.1	19.4	18.8	16.8	18.5	18.9	19.3	CONT	CONT
<p>The Automatic Carrier Landing System (ACLS) provides the primary precision electronic guidance for landing aircraft under all weather conditions on CVs, CVNs, LHAs, LHDs and at selected Naval Air Stations. Many of the components in the system have been in service for more than twenty years. This program funds maintainability, reliability and supportability improvements to existing equipment components that can no longer be maintained and supported, as well as items providing upgraded operational capability.</p> <p>Due to design engineering and maintenance deficiencies, and length of time in service, the AN/SPN-42A landing system was replaced with the AN/SPN-46(V)1 on CVs and CVNs.</p> <p>FY98-Procures one AN/SPN-41 ILM, various ACLS Modification Kits, and associated installation efforts.</p> <p>FY99-Procures one AN/SPN-41 ILM, various ACLS Modification Kits, and associated installation efforts.</p> <p>FY00-Procures three AN/SPN-41 ILMs, various ACLS Modification Kits, and associated installation efforts.</p> <p>Installing Agent: Shipyards and Alteration Installation Teams (AITs). Ships or facilities to receive equipment: CV/CVNs, LHAs, LHDs, selected LPHs, the In-Service Engineering Agent (ISEA-NAWCAD, St. Inigoes), selected shore sites and the training site.</p>												

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System						DATE: February 1999			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy							ID Code A		P-1 ITEM NOMENCLATURE/SUBHEAD Automatic Carrier Landing System (ACLS) 42PN							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years	FY 1998			FY 1999			FY 2000						
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
PN403	AN/SPN-46(V)	A	71,440													
PN404	AN/SPN-41 Ind Landing Monitor (ILM)	A	19,866	1	2,317	2,317	1	2,327	2,327	3	2,268	6,804				
PN408	ACLS Mod Kits	N/A	2,836	VAR		6,000	VAR		5,328	VAR		8,195				
PN800	Integrated Logistics Support	N/A	225			162			144			195				
PN830	Production Engineering Support	N/A	762			337			318			282				
PN840	Quality Assurance	N/A	251			270			241			312				
PN900	Non-FMP Installation	N/A	917			488			560			946				
PN910	FMP Installation	N/A	45,820			1,446			1,135			2,706				
	Various 2/		11,340													
	1/ GFE purchases that were part of the cancelled AN/SPN-46(V)2 procurement															
	2/ The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY95 and beyond.															
			153,457			11,020			10,053			19,440				

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CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					SUBHEAD	
Other Procurement, Navy					Automatic Carrier Landing Systems (ACLS)					42PN	
BA-2-Communications and Electronics Equipment											
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
PN404 AN/SPN-41 ILM											
FY97	1	2266	NAVAIR		PX	NAWCAD St. Inigoes	11/96	1/98	YES		
FY98	1	2317	NAVAIR		PX	NAWCAD St. Inigoes	11/97	1/99	YES		
FY99	1	2327	NAVAIR		PX	NAWCAD St. Inigoes	11/98	1/00	YES		
FY00	3	2268	NAVAIR		PX	NAWCAD St. Inigoes	11/99	1/01	YES		
D. REMARKS											
System integration and assembly will be accomplished by the field activity, NAWCAD, after procuring individual components through existing contractual vehicles. Some components will be reused assets refurbished and modified by NAWCAD.											

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs and selected shore sites. TYPE MODIFICATION: Flight Safety MODIFICATION TITLE: AN/SPN-46(V) (PN403)

DESCRIPTION/JUSTIFICATION:

Provide safe, reliable final guidance for CV/CVN based aircraft in all weather conditions.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: IOC 1991

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
<i>RDT&E</i>																									0.000
<i>PROCUREMENT</i>																									0.000
INSTALLATION KITS																									0.000
INSTALLATION KITS - UNIT COST																									0.000
INSTALLATION KITS NONRECURRING																									0.000
EQUIPMENT	8	70.722		0.718																			8	71.440	
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	6	15.431	2	2.549	0	0.790	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	8	18.770	
TOTAL PROCUREMENT		86.153		3.267		0.790		0.000		0.000		0.000		0.000		0.000		0.000		0.000				90.210	

The total program quantity for this item is fifteen, of which eight were OPN funded and seven SCN funded. Equipment cost of \$718K in FY97 represents GFE purchased to support the AN/SPN-46(V)2 PAR program, which was cancelled

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CVs, CVNs and selected shore sites. MODIFICATION TITLE: AN/SPN-46(V) (PN403)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A

CONTRACT DATES: FY 1999: N/A FY 2000: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	6	15.431	2	2.549		0.790																	8	18.770
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 SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	8	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	8
Out	8	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	8

FY 1998 installation is a continuation of efforts from FY 1997 on CVN-71. Due to nondelivery of SPN-46(V)3 software in time to meet ship's schedule, the (V)3 configuration had to be converted back to a (V)1.

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs/CVNs, LHAs, LHDs and selected shore sites. TYPE MODIFICATION: Flight Safety MODIFICATION TITLE: AN/SPN-41 (PN404)

DESCRIPTION/JUSTIFICATION:

Provides independent landing monitor capability for carriers and amphibious classes.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: IOC 1994

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RDT&E</i>																									0.000	
<i>PROCUREMENT</i>																									0.000	
INSTALLATION KITS																									0.000	
INSTALLATION KITS - UNIT COST																									0.000	
INSTALLATION KITS NONRECURRING																									0.000	
EQUIPMENT	7	17.600	1	2.266	1	2.317	1	2.327	3	6.804	3	6.933	1	2.355										17	40.602	
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	7	13.273	AP	0.559	1	1.074	1	0.114	1	1.880	3	3.493	3	3.154	1	0.711	0	0.000	0	0.000	0	0.000	0	0.000	17	24.258
TOTAL PROCUREMENT		30.873		2.825		3.391		2.441		8.684		10.426		5.509		0.711		0.000		0.000		0.000		0.000		64.860

The total program quantity for this item is twenty-nine, of which seventeen are OPN funded and twelve SCN funded.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: CVs/CVNs, LHAs, LHDs and selected shore sites. MODIFICATION TITLE: AN/SPN-41 (PN404)

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: AIT
 ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 14 Months
 CONTRACT DATES: FY 1999: 11-98 FY 2000: 11-99
 DELIVERY DATE: FY 1999: 1-00 FY 2000: 1-01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	7	12.700																					7	12.700
FY 1997 EQUIPMENT	AP	0.573	AP	0.559	1	0.656																	1	1.788
FY 1998 EQUIPMENT					AP	0.418	1	0.114															1	0.532
FY 1999 EQUIPMENT									1	1.242													1	1.242
FY 2000 EQUIPMENT									AP	0.638	3	3.051											3	3.689
FY 2001 EQUIPMENT										AP	0.442	3	3.024										3	3.466
FY 2002 EQUIPMENT												AP	0.130	1	0.711								1	0.841
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	8	0	1	0	0	0	1	0	0	0	1	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	17
Out	8	0	1	0	0	0	1	0	0	0	0	2	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	17

This is an in house build by NAWCAD St. Inigoes.

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CV/CVN, LHAs, LHDs and selected shore sites. TYPE MODIFICATION: Flight Safety MODIFICATION TITLE: ACLS Mod Kits Summary (PN408)

DESCRIPTION/JUSTIFICATION:
Summary

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
<i>RDT&E</i>																									0.000
<i>PROCUREMENT</i>																									0.000
INSTALLATION KITS		3.249				0.891		1.365		1.840		2.259		2.648		10.399		13.807		10.995		CONT.		CONT.	
INSTALLATION KITS - UNIT COST																								0.000	
INSTALLATION KITS NONRECURRING																								0.000	
EQUIPMENT																								0.000	
EQUIPMENT NONRECURRING																								0.000	
ENGINEERING CHANGE ORDERS																								0.000	
DATA																								0.000	
TRAINING EQUIPMENT																								0.000	
SUPPORT EQUIPMENT																								0.000	
OTHER																								0.000	
OTHER																								0.000	
OTHER																								0.000	
INTERIM CONTRACTOR SUPPORT																								0.000	
INSTALL COST	0	1.516	0	0.063	0	0.070	0	0.309	0	0.441	0	0.226	0	0.271	0	0.199	0	0.338	0	4.794	0	CONT.		CONT.	
TOTAL PROCUREMENT		4.765		0.063		0.961		1.674		2.281		2.485		2.919		10.598		14.145		15.789		CONT.		CONT.	

The equipment and installation costs represented on this P-3a are for individual modification programs that do not exceed \$5 million in either budget year or \$10 million in all years. Outyears include Mod Kits not differentiated on the P-3A exhibits that follow. These include: AN/SPN-46 Moving Target Detector (MTD), AN/SPN-42T upgrade, and Passive Point Source.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs and selected shore sites. TYPE MODIFICATION: Flight Safety MODIFICATION TITLE: AN/SPN-46(V)3 Field Change Kit (PIP) (PN408)

DESCRIPTION/JUSTIFICATION:
 The field change corrects parts obsolescence problems, as well as enhancing maintainability.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Production ECP 9/96

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		IC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																								
<i>RDT&E</i>																							0.000	
<i>PROCUREMENT</i>																							0.000	
INSTALLATION KITS	1	0.890	AP	1.709	3	5.109	2	3.963	2	4.030	1	2.051	2	4.176	1	2.130					1	2.274	13	26.332
INSTALLATION KITS - UNIT COST		0.890				1.703		1.982		2.015		2.051		2.088		2.130							2.274	
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT																								0.000
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER																								0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST	1	0.953	AP	0.600	0	0.000	2	1.272	3	1.331	2	0.977	1	0.562	2	1.000	1	0.561	AP	0.103	1	0.733	13	8.092
TOTAL PROCUREMENT		1.843		2.309		5.109		5.235		5.361		3.028		4.738		3.130		0.561		0.103		3.007		34.424

The total program quantity for this item is fourteen, of which thirteen are OPN funded and one SCN funded.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CV/CVN, LHAs, LHDs and selected shore sites. MODIFICATION TITLE: AN/SPN-46(V)3 Field Change Kit (PIP) (PN408)

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: AIT
 ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 15 Months *
 CONTRACT DATES: FY 1999: N/A FY 2000: N/A
 DELIVERY DATE: FY 1999: 6-00, 9-00 FY 2000: 6/01, 9/01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	1	0.953																					1	0.953	
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT			AP	0.600			2	1.272	1	0.443													2	1.872	
FY 1999 EQUIPMENT									2	0.888													2	0.888	
FY 2000 EQUIPMENT											2	0.977											2	0.977	
FY 2001 EQUIPMENT												1	0.562										1	0.562	
FY 2002 EQUIPMENT														2	1.000								2	1.000	
FY 2003 EQUIPMENT																1	0.561						1	0.561	
FY 2004 EQUIPMENT																		AP	0.103					0.103	
FY 2005 EQUIPMENT																						1	0.733	1	0.733
TO COMPLETE																									

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1	0	0	1	1	1	0	1	1	0	0	1	1	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	13
Out	1	0	0	1	1	1	0	1	1	0	0	1	1	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	1	13

Installation costs are ship dependent.
 * For first unit on a given contract award - 3 months for each unit afterward.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: LHAs, LHDs, MCS-12 and selected shore sites. TYPE MODIFICATION: Flight Safety MODIFICATION TITLE: AN/SPN-35B R/T Upgrade (PN408)

DESCRIPTION/JUSTIFICATION:
 This modification improves reliability and maintainability in a system baseline that is many years old.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Production ECP 9/99

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
<i>RD&E</i>																									0.000
<i>PROCUREMENT</i>																									0.000
INSTALLATION KITS			AP	0.237					3	2.325	2	1.576	3	2.409	3	2.457	3	2.513	2	1.712				16	13.229
INSTALLATION KITS - UNIT COST										0.775		0.788		0.803		0.819		0.838		0.856					
INSTALLATION KITS NONRECURRING																									0.000
EQUIPMENT																									0.000
EQUIPMENT NONRECURRING																									0.000
ENGINEERING CHANGE ORDERS																									0.000
DATA																									0.000
TRAINING EQUIPMENT																									0.000
SUPPORT EQUIPMENT																									0.000
OTHER																									0.000
OTHER																									0.000
OTHER																									0.000
INTERIM CONTRACTOR SUPPORT																									0.000
INSTALL COST	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	0.514	2	0.450	3	0.776	3	0.913	3	0.919	2	0.490		16	4.062
TOTAL PROCUREMENT		0.000		0.237		0.000		0.000		0.000		2.325		2.090		2.859		3.233		3.426		2.631		0.490	17.291

The total program quantity reflects the inventory objective for this item. This mod kit consolidates modifications previously identified as AN/SPN-35B Mod Kit (Transmitter), AN/SPN-35B Mod Kit (Receiver) and AN/SPN-35B Mod Kit (STC Card). One R/T Upgrade consists of 2 ea. transmitters, 2 ea. Receivers and 2 ea. STC Cards, which incorporate state-of-the-art components and Moving Target Detection capability.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: LHAs, LHDs and selected shore sites. MODIFICATION TITLE: AN/SPN-35B R/T Upgrade (PN408)

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: AIT
 ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 8 Months
 CONTRACT DATES: FY 1999: N/A FY 2000: N/A
 DELIVERY DATE: FY 1999: N/A FY 2000: 8/00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT																									
FY 1999 EQUIPMENT																									
FY 2000 EQUIPMENT										3	0.514														
FY 2001 EQUIPMENT												2	0.450												
FY 2002 EQUIPMENT														3	0.776										
FY 2003 EQUIPMENT																	3	0.913							
FY 2004 EQUIPMENT																			3	0.919					
FY 2005 EQUIPMENT																						2	0.490		
TO COMPLETE																									

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0	2	0	16
Out	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	0	0	1	1	1	0	1	1	1	0	1	1	1	0	2	16

This is an in house build by NAWCAD Patuxent River (St. Inigoes Annex).

CLASSIFICATION:

UNCLASSIFIED

**BUDGET ITEM JUSTIFICATION SHEET
P-40**

DATE:

February 1999

APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT	P-1 ITEM NOMENCLATURE NATIONAL AIRSPACE SYSTEM (NAS)	NARM# 284000
--	--	------------------------

Program Element for Code B Items: 0204696N	Other Related Program Elements 0604504N
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	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	\$0.0	B	\$2.2	\$8.0	\$35.1	\$36.7	\$52.3	\$37.8	\$38.8	\$22.7	CONT	CONT

DESCRIPTION:

The National Airspace System (NAS) modernization project upgrades the Navy's Air Traffic Control systems at approach control facilities to coincide with the Federal Aviation Administration's (FAA) upgrade of the Civil Air Traffic Control System. Since the existing Department of Defense Air Traffic Control facilities will interface with the FAA's facilities, the military must maintain interoperability and retain vital special-use airspace for combat readiness training. These funds will procure Air Traffic Control hardware for the Joint Program.

The Air Force is the DoD lead activity for the Joint Acquisition Program. The Joint Program Office (JPO) is located at Hanscom AFB, MA.

FY98 provided funding to procure: 1 DOD Advanced Automation System (DAAS) operational support facility.

FY99 provides funding to procure: 3 Tower Automation Systems; and 1 Military Air Space Management System (MAMS).

FY00 provides funding to procure: 4 DAAS; 9 Digital Airport Surveillance Radar (DASR); and 9 Tower Automation Systems.

Installing Agent: Alteration Installation Teams (AIT)
When installation to be made: N/A
Activities to receive equipment: Navy Core National Airspace System (NAS) sites.

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System						DATE: February 1999			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							ID Code B		P-1 ITEM NOMENCLATURE/SUBHEAD NATIONAL AIRSPACE SYSTEM (NAS) 42CB							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years	FY 1998			FY 1999			FY 2000						
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
CB010	DOD ADVANCED AUTOMATION SYS	B		1	875	875					4	961	3,842			
CB020	MAMS	B					1	2,066	2,066							
CB030	RADAR (DASR)	B								9	2,383	21,446				
CB040	TOWER AUTOMATION	B					3	419	1,256	9	296	2,667				
CB800	INTEGRATED LOGISTICS SUPPORT	N/A				450			490			888				
CB830	PRODUCTION ENGINEERING	N/A				875			3,482			3,121				
CB900	INSTALLATION (NON-FMP)	N/A							691			3,151				
NAS RDT&E entirely funded by Air Force Unit cost vary per site.																
			0			2,200			7,985			35,115				

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY					C. P-1 ITEM NOMENCLATURE NATIONAL AIRSPACE SYSTEM (NAS)			SUBHEAD 42CB		
BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT										
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
CB010 DOD ADVANCED AUTOMATION SYSTEM 1/										
FY98	1	875	FAA, WASH DC	03/96	IPR/C/FFP IPR/OPTION	RAYTHEON, MA RAYTHEON, MA	7/98	7/99	YES	
FY00	4	961	FAA, WASH DC	03/96			7/99	12/00	YES	
CB020 MAMS										
FY99	1	2066	SPAWAR, CHASN	01/98	C/FFP	SPAWAR, CHASN	3/99	8/99	YES	
CB030 RADAR (DASR) 3/										
FY00	9	2383	USAF,Hanscom, MA	02/96	C/FFP	RAYTHEON, MA	12/99	12/01	YES	
CB040 TOWER AUTOMATION 2/										
FY99	3	419	SPAWAR, CHASN	N/A	PX	SPAWAR, CHASN	12/98	12/99	YES	
FY00	9	296	SPAWAR, CHASN	N/A	PX	SPAWAR, CHASN	12/99	12/00	YES	
D. REMARKS										
1/DOD Advanced Automation System (DAAS) unit cost vary per site. P-5 page unit cost is only average of sites each year.										
2/ Tower Automation is a Government propriety system and unit costs vary per site.										
3/ RADAR is Digital Airport Surveillance Radar (DASR).										

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: NAS TYPE MODIFICATION: SAFETY MODIFICATION TITLE: DOD ADVANCED AUTOMATION SYSTEMS (CB010)

DESCRIPTION/JUSTIFICATION:

The DOD Advanced Automation System (DAAS) is being developed as part of a joint DOD/FAA program to modernize and standardize Air Traffic Control equipment in the National Air Traffic Control System. The systems will be installed at Navy Air Traffic Control facilities to replace aging, obsolete equipment and comply with the joint DOD/FAA modernization program agreements. DAAS provides for processors and display tower and approach controls.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MILESTONE III (MARCH 2000)

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		IC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																							
<i>RDT&E</i>																						0	0.000
<i>PROCUREMENT</i>																							
INSTALLATION KITS																						0	0.000
INSTALLATION KITS - UNIT COST																							0.000
INSTALLATION KITS NONRECURRING																							0.000
EQUIPMENT			1	0.875			4	3.842	7	6.696	7	6.353	5	4.779	8	6.587	6	4.680	9	8.280	47	42.092	
EQUIPMENT NONRECURRING																							0.000
ENGINEERING CHANGE ORDERS																							0.000
DATA																							0.000
TRAINING EQUIPMENT																							0.000
SUPPORT EQUIPMENT																							0.000
OTHER																							0.000
OTHER																							0.000
OTHER																							0.000
INTERIM CONTRACTOR SUPPORT																							0.000
INSTALL COST	0	0.000	0	0.000	1	0.676	0	2.633	4	3.347	7	4.957	7	3.901	5	4.388	11	7.115	12	6.724	47	33.741	
TOTAL PROCUREMENT		0.000		0.875		0.676		6.475		10.043		11.310		8.680		10.975		11.795		15.004		75.833	

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: NAS MODIFICATION TITLE: DOD ADVANCED AUTOMATION SYSTEMS (CB010)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: _____

FY 2000: 12/99

DELIVERY DATE: FY 1999: _____

FY 2000: 12/00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS																								0	0.000	
FY 1997 EQUIPMENT																									0	0.000
FY 1998 EQUIPMENT							1	0.676																	1	0.676
FY 1999 EQUIPMENT									AP	2.633															0	2.633
FY 2000 EQUIPMENT											4	3.347													4	3.347
FY 2001 EQUIPMENT													7	4.957											7	4.957
FY 2002 EQUIPMENT															7	3.901									7	3.901
FY 2003 EQUIPMENT																	5	4.388							5	4.388
FY 2004 EQUIPMENT																			11	7.115					11	7.115
FY 2005 EQUIPMENT																					7	4.867			7	4.867
TO COMPLETE																					5	1.857			5	1.857

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	1	0	0	0	0	4	0	0	0	7	0	0	0	7	0	0	0	5	0	0	0	11	0	0	0	12	47
Out	0	0	0	0	1	0	0	0	0	0	0	2	2	0	0	4	3	0	0	3	4	0	0	3	2	0	3	3	5	12	47

Note: FY 99 is pre-production support facility system.

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: NAS TYPE MODIFICATION: SAFETY MODIFICATION TITLE: MAMS CB020

DESCRIPTION/JUSTIFICATION:

The Military Air space Management system is being developed as part of a joint DOD/FAA program to standardize air traffic control scheduling across the National Air Traffic Control System. MAMS will comply with Joint DOD/FAA modernization program agreements.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	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	\$		
<i>RD&E</i>																						0	0.0	
<i>PROCUREMENT</i>																								
INSTALLATION KITS																						0	0.000	
INSTALLATION KITS - UNIT COST																							0.000	
INSTALLATION KITS NONRECURRING																							0.000	
EQUIPMENT					1	2.066																1	2.066	
EQUIPMENT NONRECURRING																							0.000	
ENGINEERING CHANGE ORDERS																							0.000	
DATA																							0.000	
TRAINING EQUIPMENT																							0.000	
SUPPORT EQUIPMENT																							0.000	
OTHER																							0.000	
OTHER																							0.000	
OTHER																							0.000	
INTERIM CONTRACTOR SUPPORT																							0.000	
INSTALL COST	0	0.000	0	0.000	0	0.000	1	0.108	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1	0.108
TOTAL PROCUREMENT		0.0		0.000		2.066		0.108		0.000		0.000		0.000		0.000		0.000		0.000		0.000		2.174

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: NAS MODIFICATION TITLE: MAMS (CB020)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 2 Months

PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 1999: 11/98

FY 2000: N/A

DELIVERY DATE: FY 1999: 8/99

FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT																									
FY 1999 EQUIPMENT									1	0.108														1	0.108
FY 2000 EQUIPMENT																									
FY 2001 EQUIPMENT																									
FY 2002 EQUIPMENT																									
FY 2003 EQUIPMENT																									
FY 2004 EQUIPMENT																									
FY 2005 EQUIPMENT																									
TO COMPLETE																									

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Out	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	0	0	1			

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: NAS TYPE MODIFICATION: SAFETY MODIFICATION TITLE: RADAR (DASR) (CB030)

DESCRIPTION/JUSTIFICATION:

The Digital Airport Surveillance Radar (DASR) is being developed as part of a joint DOD/FAA program to modernize and standardize air traffic control equipment in the National Air Traffic Control System. The DASR will be installed at Navy air traffic control facilities to replace aging, obsolete approach control radars and comply with the joint DOD/FAA modernization program agreeem

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MILESTONES III (MARCH 2000)

	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	\$	
FINANCIAL PLAN (IN MILLIONS)																							
<i>RD&E</i>																						0	0.000
<i>PROCUREMENT</i>																							
INSTALLATION KITS																						0	0.000
INSTALLATION KITS - UNIT COST																							0.000
INSTALLATION KITS NONRECURRING																							0.000
EQUIPMENT							9	21.446	6	14.649	10	26.538	7	18.055	6	15.908			1	3.016	39	99.612	
EQUIPMENT NONRECURRING																							0.000
ENGINEERING CHANGE ORDERS																							0.000
DATA																							0.000
TRAINING EQUIPMENT																							0.000
SUPPORT EQUIPMENT																							0.000
OTHER																							0.000
OTHER																							0.000
OTHER																							0.000
INTERIM CONTRACTOR SUPPORT																							0.000
INSTALL COST	0	0.000	0	0.000	0	0.000	0	0.000	AP	3.573	9	5.128	6	3.997	10	4.497	7	5.086	7	2.256		24.537	
TOTAL PROCUREMENT		0.000		0.000		0.000		21.446		18.222		31.666		22.052		20.405		5.086		5.272		124.149	

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: NAS MODIFICATION TITLE: RADAR (DASR) (CB030)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 1999: 12/98

FY 2000: 12/99

DELIVERY DATE: FY 1999: 12/00

FY 2000: 12/01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS																								0	0.000	
FY 1997 EQUIPMENT																									0	0.000
FY 1998 EQUIPMENT																									0	0.000
FY 1999 EQUIPMENT											AP	3.573												AP	3.573	
FY 2000 EQUIPMENT													9	5.128											9	5.128
FY 2001 EQUIPMENT															6	3.997									6	3.997
FY 2002 EQUIPMENT																	10	4.497							10	4.497
FY 2003 EQUIPMENT																				7	5.086				7	5.086
FY 2004 EQUIPMENT																						7	2.256		7	2.256
FY 2005 EQUIPMENT																									0	0.000
TO COMPLETE																									0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	9	0	0	0	6	0	0	0	10	0	0	0	7	0	0	0	7	39				
Out	0	0	0	0	0	0	0	0	0	0	0	4	5	0	0	3	3	0	0	5	5	0	0	3	4	7	39				

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: NAS TYPE MODIFICATION: SAFETY MODIFICATION TITLE: TOWER AUTOMATION (CB040)

DESCRIPTION/JUSTIFICATION:

The Tower Automation is being developed as part of a joint DOD/FAA program to modernize and standardize air traffic control equipment in the National Air Traffic Control System. The Tower Automation will be installed at Navy air traffic control facilities to replace aging, obsolete equipment and comply with the joint DOD/FAA modernization program agreements.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MILESTONE III (MARCH 2000)

FINANCIAL PLAN (IN MILLIONS)	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	\$	
<i>RD&E</i>																						0	0.000
<i>PROCUREMENT</i>																							
INSTALLATION KITS																						0	0.000
INSTALLATION KITS - UNIT COST																							
INSTALLATION KITS NONRECURRING																							0.000
EQUIPMENT					3	1.256	9	2.667	7	2.288	9	2.557	4	1.304	7	1.941	7	1.934	11	3.520	57	17.467	
EQUIPMENT NONRECURRING																							0.000
ENGINEERING CHANGE ORDERS																							0.000
DATA																							0.000
TRAINING EQUIPMENT																							0.000
SUPPORT EQUIPMENT																							0.000
OTHER																							0.000
OTHER																							0.000
OTHER																							0.000
INTERIM CONTRACTOR SUPPORT																							0.000
INSTALL COST	0	0.000	0	0.000	AP	0.015	3	0.410	9	1.172	8	1.076	9	1.212	5	0.709	9	0.972	14	2.058	57	7.624	
TOTAL PROCUREMENT		0.000		0.000		1.271		3.077		3.460		3.633		2.516		2.650		2.906		5.578		25.091	

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: NAS MODIFICATION TITLE TOWER AUTOMATION (CB040)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: 12/98 FY 2000: 12/99

DELIVERY DATE: FY 1999: 12/99 FY 2000: 12/00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS																								0	0.000	
FY 1997 EQUIPMENT																									0	0.000
FY 1998 EQUIPMENT							AP	0.015																AP	0.015	
FY 1999 EQUIPMENT									3	0.410															3	0.410
FY 2000 EQUIPMENT											9	1.172													9	1.172
FY 2001 EQUIPMENT													8	1.076											8	1.076
FY 2002 EQUIPMENT															9	1.212									9	1.212
FY 2003 EQUIPMENT																	5	0.709							5	0.709
FY 2004 EQUIPMENT																			9	0.972					9	0.972
FY 2005 EQUIPMENT																							14	2.058	14	2.058
TO COMPLETE																									0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	3	0	0	0	9	0	0	0	8	0	0	0	9	0	0	0	5	0	0	0	9	0	0	0	14	57
Out	0	0	0	0	0	0	2	1	0	0	2	4	3	0	2	3	3	0	2	4	3	0	0	2	3	0	2	4	3	14	

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CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONIC EC							P-1 ITEM NOMENCLATURE NARM# 284500 AIR STATION SUPPORT EQUIPMENT					
Program Element for Code B Items: Not Applicable							Other Related Program Elements 0204696N					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
(In Millions)	\$88.8		\$9.2	\$6.7	\$7.3	\$7.4	\$7.6	\$7.7	\$7.9	\$8.1	CONT	CONT
<p>DESCRIPTION:</p> <p>The Naval Air Systems Command (NAVAIR) has an established requirement to provide shore based Air Traffic Control (ATC) terminal facilities and equipments, many of which interface through automated means with the Federal Aviation Administration (FAA), which is required in joint efforts to efficiently and safely monitor and direct military and commercial air traffic in national and international air space. Additionally, NAVAIR has material support responsibility for Air Navigation Aid Systems, Tactical Communications, Mobile Air Traffic Control Equipments, Special Instrumentation Systems, and Ancillary Equipment used at Naval and Marine Corps Aviation Shore activities in the continental United States and overseas.</p> <p>(1) Communications Systems Upgrade-Advanced Commercial-Digital technology voice switching and recording/reproduction equipment which replaces existing AN/FSA-58 and OJ-314 voice communications switching systems and RD-379/379A/390 and RP-214 recorder/reproducers. The existing equipment uses 1960's analog technology, no longer in production, antiquated and encountering numerous logistics supportability problems due to parts obsolescence.</p> <p>(2) Integrated Voice Communications Switching System (IVCSS)-Advanced Commercial-Digital technology voice switching equipment which replaces the existing AN/FSA-52 Voice Communication Switching Systems. The existing equipment uses 1950's analog technology, no longer in production, antiquated and encountering numerous logistics supportability problems due to parts obsolescence.</p> <p>(3) UHF/VHF radios and antenna systems provide critical Air Traffic Control communications. New radios, antenna systems and antenna cables are required to replace existing aged and deteriorated radios, antennas, and cables. For dependable and logistically supportable ATC communications, replacement of the existing radios and antenna systems is imperative.</p> <p>(4) Operational Capability Improvement Request (OCIR) modernization: The OCIR program provides for the procurement of critically needed communications, radar, displays, data processors, and other electronic systems/equipment needed at Navy/Marine Corps Air Traffic Control facilities worldwide. OCIR procurements replace and modernize economically unmaintainable systems and equipments in order to increase Air Traffic Control efficiency and safety.</p> <p>FY 98 through FY 00 funds procured or install:</p> <p>FY 98 provided funding to procure: 3 UHF/VHF Antenna Upgrades (MR404); 40 UHF/VHF Radio Replacements (MR407); 6 Communication System Upgrades (MR408); miscellaneous enhancements for selected sites (OCIRs/ECPs) (MR069).</p> <p>FY 99 provides funding to procure: 42 UHF/VHF Radio Replacements (MR407); 6 Communication System Upgrades (MR408); miscellaneous enhancements for selected sites (OCIRs/ECPs) (MR069).</p> <p>FY 00 provides funding to procure: 191 UHF/VHF Radio Replacements (MR407); 9 Communication System Upgrades (MR408); miscellaneous enhancements for selected sites (OCIRs/ECPs) (MR069).</p>												

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE AIR STATION SUPPORT EQUIPMENT					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
MR404 UHF/VHF ANTENNA UPGRADE	N/A											
QTY		31	3									34
FUNDING		3.875	0.460									4.335
MR405 RATCF/DAIR UPGRADE	N/A											
QTY		17										17
FUNDING		1.188										1.188
MR407 UHF/VHF RADIO REPLACEMENT	N/A											
QTY		767	40	42	191	235	315	254	406	626	1591	4467
FUNDING		3.608	0.190	0.203	0.935	1.176	1.604	1.321	2.153	3.379	8.751	23.320
MR408 COMM SYS UPGRADE	N/A											
QTY		0	6	6	9	8	7	9	4			49
FUNDING		0.096	2.065	2.165	3.220	2.844	2.370	2.200	1.300			16.260
MRTBD FIBER OPTIC INTERSITE UPGRADE	N/A											
QTY									1	5	16	22
FUNDING									0.300	1.500	4.800	6.600
OTHER COST	N/A	80.030	6.486	4.380	3.122	3.393	3.587	4.176	4.136	3.172	CONT	CONT
TOTAL FUNDING		88.797	9.201	6.748	7.277	7.413	7.561	7.697	7.889	8.051	CONT	CONT

P-1 SHOPPING LIST

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5				Weapon System				DATE: February 1999							
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY				ID Code				P-1 ITEM NOMENCLATURE/SUBHEAD							
BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT				AIR STATION SUPPORT EQUIPMENT				42MR							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
MR069	ECPS/OCIRS	N/A	4,192	VAR		1,068	VAR		332	VAR		209			
MR404	UHF/VHF ANTENNA UPGRADE	N/A	3,875	3	153	460									
MR405	RATCF/DAIR UPGRADE	N/A	1,188												
MR407	UHF/VHF RADIO REPLACEMENT	N/A	3,608	40	5	190	42	5	203	191	5	935			
MR408	COMMUNICATION SYSTEM UPGRADE	N/A	96	6	344	2,065	6	361	2,165	9	358	3,220			
MR800	INTEGRATED LOGISTICS SUPPORT	N/A	4,401			287			270			225			
MR830	PRODUCTION ENGINEERING	N/A	10,202			1,558			706			567			
MR900	INSTALLATION OF EQUIPMENT (NON-FMP)	N/A	16,238			3,306			2,902			1,966			
MR990	INITIAL TRAINING	N/A	200			267			170			155			
	VARIOUS 1/		44,797												
			88,797			9,201			6,748			7,277			

1/ the amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1997 and beyond.

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System		A. DATE February 1999		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT					C. P-1 ITEM NOMENCLATURE AIR STATION SUPPORT EQUIPMENT				SUBHEAD 42MR	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
MR404 UHF/VHF ANTENNA UPGRADE										
FY97	7	146	SPAWAR CHASN	08/95	SS/CPFF	RCI, INC. VIENNA, VA	01/97	07/97	YES	
FY98	3	153	SPAWAR CHASN	08/95	SS/CPFF	RCI, INC. VIENNA, VA	01/98	07/98	YES	
MR407 UHF/VHF RADIO REPLACEMENT										
FY97	597	5	FAA, WASH.,D.C.	03/94	IPR/FFP	MOTOROLA, PHOENIX, AZ	12/96	06/97	YES	
FY98	40	5	FAA, WASH.,D.C.	03/94	IPR/FFP	MOTOROLA, PHOENIX, AZ	10/97	04/98	YES	
FY99	42	5	SPAWAR CHASN	07/98	SS/FFP	MOTOROLA, PHOENIX, AZ	11/98	04/99	YES	
FY00	191	5	SPAWAR CHASN	07/98	RX/OPTION	MOTOROLA, PHOENIX, AZ	11/99	04/00	YES	
MR408 COMM SYSTEM UPGRADE										
FY98	6	344	FAA, WASH.,D.C.	02/95	IPR/OPTION	DENRO, GAITHERSBURG, MD	12/97	06/98	YES	
FY99	6	361	FAA, WASH.,D.C.	02/95	IPR/OPTION	DENRO, GAITHERSBURG, MD	12/98	06/99	YES	
FY00	9	358	FAA, WASH.,D.C.	02/95	IPR/OPTION	DENRO, GAITHERSBURG, MD	12/99	06/00	YES	
D. REMARKS										
MR408- Equipment costs vary from site to site, therefore unit costs are not consistent.										

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AIR STATION TYPE MODIFICATION: CAPABILITY IMPROVEMENT MODIFICATION TITLE: ECP/OCIR SUMMARY (MR069)

DESCRIPTION/JUSTIFICATION:
 The OCIR program provides for the procurement of critically needed communications, radar, displays, data processors, and other electronic systems/equipment needed at Navy/Marine Corps Air Traffic Control facilities worldwide. OCIR procurements replace and modernize economically unmaintainable systems and equipments in order to increase Air Traffic Control efficiency and safety.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																									
PROCUREMENT																									
INSTALLATION KITS																									
INSTALLATION KITS - UNIT COST																									
INSTALLATION KITS NONRECURRING EQUIPMENT		3.812		0.380		1.068		0.332		0.209		0.205		0.350		0.350		0.486		0.752	CONT	CONT	CONT	CONT	
EQUIPMENT NONRECURRING																									
ENGINEERING CHANGE ORDERS																									
DATA																									
TRAINING EQUIPMENT																									
SUPPORT EQUIPMENT																									
OTHER																									
OTHER																									
OTHER																									
INTERIM CONTRACTOR SUPPORT																									
INSTALL COST		2.417		0.472		1.043		0.352		0.066		0.061		0.108		0.095		0.149		0.268	CONT	CONT	CONT	CONT	
TOTAL PROCUREMENT		6.229		0.852		2.111		0.684		0.275		0.266		0.458		0.445		0.635		1.020	CONT	CONT	CONT	CONT	

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AIR STATION MODIFICATION TITLE: ECP/OCIR SUMMARY (MR069)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT
 ADMINISTRATIVE LEADTIME: Months
 CONTRACT DATES: FY 1999: N/A
 DELIVERY DATE: FY 1999: N/A

PRODUCTION LEADTIME: Months
 FY 2000: N/A
 FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS		2.417																						0	2.417
FY 1997 EQUIPMENT				0.472																				0	0.472
FY 1998 EQUIPMENT						1.043																		0	1.043
FY 1999 EQUIPMENT									0.352															0	0.352
FY 2000 EQUIPMENT									0.066															0	0.066
FY 2001 EQUIPMENT										0.061														0	0.061
FY 2002 EQUIPMENT													0.108											0	0.108
FY 2003 EQUIPMENT															0.095									0	0.095
FY 2004 EQUIPMENT																	0.149							0	0.149
FY 2005 EQUIPMENT																			0.268					0	0.268
TO COMPLETE																						CONT	0	CONT	

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
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		

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CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AIR STATION TYPE MODIFICATION: RELIABILITY/MAINTAINABILITY MODIFICATION TITLE: UHF/VHF ANTENNA UPGRADE (MR404)

DESCRIPTION/JUSTIFICATION:
 UHF/VHF antenna systems are needed for ground-to-air and air-to-ground Air Traffic Control communications. New antenna systems are required to replace existing, aged and deteriorated antennas and cables for dependable communications.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NDI

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																										
RDT&E																									0.000	
PROCUREMENT																									0.000	
INSTALLATION KITS																									0.000	
INSTALLATION KITS - UNIT COST																									0.000	
INSTALLATION KITS NONRECURRING																									0.000	
EQUIPMENT	24	2.850	7	1.025	3	0.460																		34	4.335	
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	16	2.425	8	1.000	7	0.950	3	0.610	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	34	4.985
TOTAL PROCUREMENT		5.275		2.025		1.410		0.610		0.000		0.000		0.000		0.000		0.000		0.000				0.000	9.320	

The total Quantity reflects the inventory objective for this item. ITEM 84 PAGE 5B CLASSIFICATION: UNCLASSIFIED
 MR404 - Equipment costs vary from site to site, therefore unit cost are not consistent.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AIR STATION

MODIFICATION TITLE: UHF/VHF ANTENNA UPGRADE (MR404)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 4 MONTHS

PRODUCTION LEADTIME: 6 MONTHS

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	16	2.425	8	1.000																				24	3.425
FY 1997 EQUIPMENT					7	0.950																		7	0.950
FY 1998 EQUIPMENT							3	0.610																3	0.610
FY 1999 EQUIPMENT																								0	0.000
FY 2000 EQUIPMENT																								0	0.000
FY 2001 EQUIPMENT																								0	0.000
FY 2002 EQUIPMENT																								0	0.000
FY 2003 EQUIPMENT																								0	0.000
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																								0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	34	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	34
Out	31	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	

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CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: **AIR STATION** TYPE MODIFICATION: MODERNIZATION MODIFICATION TITLE: IVCSS (MR047)

DESCRIPTION/JUSTIFICATION:

The Integrated Voice Communications Switching System (IVCSS) is a Commercial acquisition to replace the obsolete AN/FSA-52 communications switch.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

COTS

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
RDT&E																									0.000	
PROCUREMENT																									0.000	
INSTALLATION KITS																									0.000	
INSTALLATION KITS - UNIT COST																									0.000	
INSTALLATION KITS NONRECURRING																									0.000	
EQUIPMENT	15	10.125																						15	10.125	
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	9	2.920	1	0.200	3	0.716	2	0.595	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	15	4.431
TOTAL PROCUREMENT		13.045		0.200		0.716		0.595		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		14.556

The total Quantity reflects the inventory objective for this item.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AIR STATION

MODIFICATION TITLE: IVCSS (MR047)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: N/A

PRODUCTION LEADTIME: N/A

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	9	2.920	1	0.200	3	0.716	2	0.595																15	4.431
FY 1997 EQUIPMENT																								0	0.000
FY 1998 EQUIPMENT																								0	0.000
FY 1999 EQUIPMENT																								0	0.000
FY 2000 EQUIPMENT																								0	0.000
FY 2001 EQUIPMENT																								0	0.000
FY 2002 EQUIPMENT																								0	0.000
FY 2003 EQUIPMENT																								0	0.000
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																								0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	15	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	15			
Out	13	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15			

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AIR STATION TYPE MODIFICATION: MODERNIZATION MODIFICATION TITLE: UHF/VHF RADIO REPLACEMENT (MR407)

DESCRIPTION/JUSTIFICATION:
 UHF/VHF Radio Transmitters, linear power amplifiers, and receivers provide ground-to-air and air-to-ground ATC communications. New radios are required to replace existing aged (1960's Technology) and deteriorated radios. For dependabable ATC communication, replacement of the existing radios is imperative. Radio requirements exceed the quantities shown and are limited because of funding availability.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COTS

FINANCIAL PLAN (IN MILLIONS)	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		IC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																									0.000
PROCUREMENT																									0.000
INSTALLATION KITS																									0.000
INSTALLATION KITS - UNIT COST																									0.000
INSTALLATION KITS NONRECURRING																									0.000
EQUIPMENT	170	0.815	597	2.793	40	0.190	42	0.203	191	0.935	235	1.176	315	1.604	254	1.321	406	2.153	626	3.379	1591	8.751	4467	23.320	
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	35	0.023	535	0.300	237	0.154	42	0.025	191	0.115	235	0.140	315	0.175	254	0.150	406	0.270	626	0.425	1591	1.105	4467	2.882	
TOTAL PROCUREMENT		0.838		3.093		0.344		0.228		1.050		1.316		1.779		1.471		2.423		3.804		9.856		26.202	

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AIR STATION

MODIFICATION TITLE: UHF/VHF RADIO REPLACEMENT (MR407)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 2 MONTHS

PRODUCTION LEADTIME: 6 MONTHS

CONTRACT DATES: FY 1999: 11/98

FY 2000: 11/99

DELIVERY DATE: FY 1999: 4/99

FY 2000: 4/00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total								
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$							
PRIOR YEARS	35	0.023	135	0.075	197	0.110																	170	0.098							
FY 1997 EQUIPMENT			400	0.225	40	0.044																		597	0.335						
FY 1998 EQUIPMENT							42	0.025																	40	0.044					
FY 1999 EQUIPMENT									191	0.115															42	0.025					
FY 2000 EQUIPMENT											235	0.140														191	0.115				
FY 2001 EQUIPMENT													315	0.175												235	0.140				
FY 2002 EQUIPMENT															254	0.150											315	0.175			
FY 2003 EQUIPMENT																	406	0.270									254	0.150			
FY 2004 EQUIPMENT																			626	0.425							406	0.270			
FY 2005 EQUIPMENT																												626	0.425		
TO COMPLETE																												1591	1.105	1591	1.105

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	807	0	0	42	0	0	0	191	0	0	0	235	0	0	0	315	0	0	0	254	0	0	0	406	0	0	0	626	0	1591	4467
Out	807	0	0	20	22	0	0	94	97	0	0	120	115	0	0	160	155	0	0	132	122	0	0	206	200	0	0	301	325	1591	4467

CLASSIFICATION: **UNCLASSIFIED**

P3A

INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: AIR STATION TYPE MODIFICATION: MODERNIZATION MODIFICATION TITLE: COMMUNICATION SYSTEM UPGRADE (MR408)

DESCRIPTION/JUSTIFICATION:

Communications Systems Upgrade - Advanced technology voice switching and recording/reproducing equipment which replaces existing AN/FSA-58 and OJ-314 voice communications switching systems and RD-379/379A/390 and RP-214 recorder/reproducers. The existing equipment is obsolete and beyond useful service life.
 Note - New recorder/reproducers will be procured and installed at all Navy/Marine Corps Air Stations, two new recorder/reproducers will be required per communications switching system.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																										
RDT&E																									0.000	
PROCUREMENT																									0.000	
INSTALLATION KITS																									0.000	
INSTALLATION KITS - UNIT COST																									0.000	
INSTALLATION KITS NONRECURRING																									0.000	
EQUIPMENT			0	0.096	6	2.065	6	2.165	9	3.220	8	2.844	7	2.370	9	2.200	4	1.300						49	16.260	
EQUIPMENT NONRECURRING																									0.000	
ENGINEERING CHANGE ORDERS																									0.000	
DATA																									0.000	
TRAINING EQUIPMENT																									0.000	
SUPPORT EQUIPMENT																									0.000	
OTHER																									0.000	
OTHER																									0.000	
OTHER																									0.000	
INTERIM CONTRACTOR SUPPORT																									0.000	
INSTALL COST	0	0.000	0	0.209	0	0.443	6	1.320	8	1.785	9	1.966	9	1.961	11	2.470	6	1.842	0	0.000	0	0.000	0	0.000	49	11.979
TOTAL PROCUREMENT		0.000		0.305		2.508		3.485		5.005		4.810		4.331		4.670		3.142		0.000		0.000		0.000	28.239	

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CLASSIFICATION: UNCLASSIFIED

The total Quantity reflects the inventory objective for this item.

MR408 Equipment cost may vary from site to site, therefore equipment and installation costs are not consistent.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AIR STATION MODIFICATION TITLE: COMMUNICATION SYSTEM UPGRADE (MR408)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 3 MONTHS

PRODUCTION LEADTIME: 6 MONTHS

CONTRACT DATES: FY 1999: 12/98

FY 2000: 12/99

DELIVERY DATE: FY 1999: 6/99

FY 2000: 6/00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																								0	0.000
FY 1997 EQUIPMENT																								0	0.000
FY 1998 EQUIPMENT				0.209		0.443	6	1.320																6	1.972
FY 1999 EQUIPMENT									8	1.785														8	1.785
FY 2000 EQUIPMENT										9	1.966													9	1.966
FY 2001 EQUIPMENT												9	1.961											9	1.961
FY 2002 EQUIPMENT														11	2.470									11	2.470
FY 2003 EQUIPMENT																6	1.842							6	1.842
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																								0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	6	0	0	0	6	0	0	9	0	0	0	8	0	0	0	7	0	0	0	9	0	0	0	4	0	0	0	0	0	0	49
Out	0	1	2	3	0	2	2	2	2	2	3	2	2	2	2	2	3	2	2	4	3	2	0	2	2	0	0	0	0	0	49

NOTE: FY 97 & FY 98 funds for install preparation and site surveys. Equipment costs and install effort varies from site to site. Funding for voice switching systems must be provided 6 months in advance of system delivery and installation.

P-3A

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONIC EQUIPME							P-1 ITEM NOMENCLATURE LANDING SYSTEMS (LS) NARM# 284600					
Program Element for Code B Items:							Other Related Program Elements NOT APPLICABLE					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	\$13.8		\$5.1	\$5.2	\$5.3	\$5.4	\$5.5	\$5.6	\$5.7	\$5.9	CONT	CONT
<p>DESCRIPTION: The Joint Precision Approach and Landing System (JPALS) is a joint DOD program which will produce a future Precision Landing System for all users. It will replace the Instrument Landing System (ILS) and Precision Approach Radar (PAR) as a standard Navy landing system and will fulfill interservice precision landing system interoperability requirements in the National Airspace System Plan (NASP), the Federal Radio Navigation Plan (FRNP), and the Joint Chiefs of Staff (JCS) master navigation plan. The AN/URN-25 TACAN and AN/FPN-63 (PARS) radar systems are required to remain in service for at least another 15 years, until the JAPAL System is deployed to Navy Airfields. Scheduled ECPs and OCIRs will assure operation availability until replacement.</p> <p>Funding in FY 98 through FY 01 provides for the procurement and installation of the following: FY 98 provided funding to: Procure 10 Environmental Shelters for the AN/FPN-63 and procure miscellaneous mission enhancements for selected sites.</p> <p>FY 99 provides funding to: Procure 10 Environmental Shelters for the AN/FPN-63 and procure miscellaneous mission enhancements for selected sites.</p> <p>FY 00 provides funding to: Procure 5 Environmental Shelters and support selected Preliminary ECPs for the AN/URN-25 TACAN and AN/FPN-63 radar systems.</p> <p>Installing agent: SPAWAR San Diego When installation is to be made: On delivery Facilities that are to receive the equipment: Navy and Marine Corps air traffic control facilities</p>												

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE						
OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONICS EQUIPM						LANDING SYSTEMS (LS)						
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
ENVIRON SHELTER	N/A											
QTY		17	10	10	5							42
FUNDING		2.208	1.378	1.407	0.742							5.735
SHORE JPALS												
QTY										4	33	37
FUNDING										2.160	19.810	21.970
Other Costs		11.637	3.755	3.821	4.576	5.420	5.518	5.601	5.741	3.699	CONT	CONT
Total Funding		13.845	5.133	5.228	5.318	5.420	5.518	5.601	5.741	5.859	CONT	CONT

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

WEAPONS SYSTEM COST ANALYSIS P-5				Weapon System						DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY				ID Code		P-1 ITEM NOMENCLATURE/SUBHEAD									
OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT				LANDING SYSTEMS (LS)						42X1					
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
X1017	OCIR/ECP	N/A	679	VAR		12	VAR		586	VAR		1,592			
X1020	ENVIRONMENTAL SHELTERS	N/A	2,208	10	138	1,378	10	141	1,407	5	148	742			
X1800	INTEGRATED LOGISTICS SUPPORT		254			257			64			387			
X1830	PRODUCTION ENGINEERING		429			673			338			393			
X1840	QUALITY ASSURANCE		41			57			50			128			
X1900	INSTALLATION (NON-FMP)		4,050			2,756			2,783			2,076			
	**VARIOUS		6,184												
			13,845			5,133			5,228			5,318			
			<p>*The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1996 and beyond.</p>												

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY					C. P-1 ITEM NOMENCLATURE					SUBHEAD	
BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT					LANDING SYSTEMS (LS)					42X1	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
X1020 ENVIRONMENTAL SHELTERS FY97	7	135	SPAWARSYSCEN SAN DIEGO, CA	Feb-98	RX/FFP	Santa Barbara Applied Research Santa Barbara, CA	9/98	11/98	Yes		
FY98	10	138	SPAWARSYSCEN SAN DIEGO, CA	Feb-98	RX/CPFF	Santa Barbara Applied Research Santa Barbara, CA	1/98	6/98	Yes		
FY99	10	141	SPAWARSYSCEN SAN DIEGO, CA	Nov-98	RX/C OPTION	Santa Barbara Applied Research Santa Barbara, CA	11/98	3/99	Yes		
FY00	5	148	SPAWARSYSCEN SAN DIEGO, CA	Nov-99	RX/C OPTION	Santa Barbara Applied Research Santa Barbara, CA	11/99	1/00	Yes		
D. REMARKS											
Previous contractor, C/Systems of Amesbury, Mass., filed a bankruptcy claim in December 1997.											

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Landing Systems TYPE MODIFICATION: Operational Capability Improvement MODIFICATION TITLE: OCIR/ECP SUMMARY (X1017)

DESCRIPTION/JUSTIFICATION:

Purchase preplanned improvements to Navy Shore Precision Approach Radar and TACAN until replacement system can be fielded.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN (IN MILLIONS)	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		IC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																						0	0.000
<i>PROCUREMENT</i>																						0	0.000
INSTALLATION KITS																						0	0.000
INSTALLATION KITS - UNIT COST																						0	0.000
INSTALLATION KITS NONRECURRING																						0	0.000
EQUIPMENT		0.679		0.012		0.586		1.592		2.135		2.769		2.529		2.224		0.540				0	13.066
EQUIPMENT NONRECURRING																						0	0.000
ENGINEERING CHANGE ORDERS																						0	0.000
DATA																						0	0.000
TRAINING EQUIPMENT																						0	0.000
SUPPORT EQUIPMENT																						0	0.000
OTHER																						0	0.000
OTHER																						0	0.000
OTHER																						0	0.000
INTERIM CONTRACTOR SUPPORT																						0	0.000
INSTALL COST		0.000	0	0.757	0	1.236	0	0.690	0	1.908	0	1.479	0	1.813	0	2.113	0	1.826	0	0.000		0	11.822
TOTAL PROCUREMENT		0.679		0.769		1.822		2.282		4.043		4.248		4.342		4.337		2.366		0.000		0	24.888

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: LANDING SYSTEMS MODIFICATION TITLE: OCIR/ECP SUMMARY (X1017)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: Months

PRODUCTION LEADTIME: Months

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																							0	0.000
FY 1996 EQUIPMENT																							0	0.000
FY 1997 EQUIPMENT						0.757																	0	0.757
FY 1998 EQUIPMENT								1.236															0	1.236
FY 1999 EQUIPMENT									0.690														0	0.690
FY 2000 EQUIPMENT										1.908													0	1.908
FY 2001 EQUIPMENT											1.479												0	1.479
FY 2002 EQUIPMENT												1.813											0	1.813
FY 2003 EQUIPMENT													2.113										0	2.113
FY 2004 EQUIPMENT															1.826								0	1.826
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
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		

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CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Landing Systems TYPE MODIFICATION: Reliability MODIFICATION TITLE: AN FPN-63 UPGRADE (X1015)

DESCRIPTION/JUSTIFICATION:

Extending the AN FPN-63 service life.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Fielded

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		IC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
<i>RDT&E</i>																					0	0.000
<i>PROCUREMENT</i>																					0	0.000
INSTALLATION KITS	43	4.300																			43	4.300
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT																					0	0.000
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	43	1.968	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	43	1.968
TOTAL PROCUREMENT		6.268		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	0	6.268

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: LANDING SYSTEMS MODIFICATION TITLE: AN FPN-63 UPGRADE (X1015)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 8 Months

PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	33	1.583	10	0.385																			43	1.968
FY 1996 EQUIPMENT																							0	0.000
FY 1997 EQUIPMENT																							8	0.000
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	43	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	43			
Out	43	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	43			

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Landing Systems TYPE MODIFICATION: Operational Capability Improvement MODIFICATION TITLE: Instrument Landing System (X1102)

DESCRIPTION/JUSTIFICATION:

The precision approach and landing system is being procured for shore-based multi-engine aircraft pipeline training facilities and home bases. The operational employment of multi-engine aircraft requires a total familiarity with ILS type approaches through pipeline and home based training.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Fielded

FINANCIAL PLAN (IN MILLIONS)	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		IC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.000
<i>PROCUREMENT</i>																					0	0.000
INSTALLATION KITS																					0	0.000
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT	12	3.025																			12	3.025
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	7	3.438	5	1.095	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	12	4.533
TOTAL PROCUREMENT		6.463		1.095		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	0	7.558

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: LANDING SYSTEMS MODIFICATION TITLE: Instrument Landing System (X1102)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	4	1.804																					4	1.804
FY 1996 EQUIPMENT			3	1.634	5	1.095																	8	2.729
FY 1997 EQUIPMENT																							0	0.000
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12			
Out	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12				

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Landing Systems TYPE MODIFICATION: Reliability/Maintainability MODIFICATION TITLE: Environmental Shelters (X1020)

DESCRIPTION/JUSTIFICATION:

Environmental Shelters to protect current Precision Approach Radar until DGPS can be fully deployed.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN (IN MILLIONS)	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	\$			
<i>RD&E</i>																					0	0.000	
<i>PROCUREMENT</i>																						0	0.000
INSTALLATION KITS	17	2.208	10	1.378	10	1.407	5	0.742													42	5.735	
INSTALLATION KITS - UNIT COST				0.138		0.141		0.144														0	0.000
INSTALLATION KITS NONRECURRING																						0	0.000
EQUIPMENT																						0	0.000
EQUIPMENT NONRECURRING																						0	0.000
ENGINEERING CHANGE ORDERS																						0	0.000
DATA																						0	0.000
TRAINING EQUIPMENT																						0	0.000
SUPPORT EQUIPMENT																						0	0.000
OTHER																						0	0.000
OTHER																						0	0.000
OTHER																						0	0.000
INTERIM CONTRACTOR SUPPORT																						0	0.000
INSTALL COST	4	0.448	8	0.904	13	1.547	11	1.386	6	0.774	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	42	5.059	
TOTAL PROCUREMENT		2.656		2.282		2.954		2.128		0.774		0.000		0.000		0.000		0.000		0.000	0	10.794	

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: Landing Systems MODIFICATION TITLE: Environmental Shelters (X1020)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 2 Months

PRODUCTION LEADTIME: 5 Months/Varying Delivery

CONTRACT DATES: FY 1999: 11/98

FY 2000: 11/99

DELIVERY DATE: FY 1999: 3/99

FY 2000: 1/00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																								0	0.000
FY 1997 EQUIPMENT			4	0.448																				4	0.448
FY 1998 EQUIPMENT					8	0.904																		8	0.904
FY 1999 EQUIPMENT							13	1.547																13	1.547
FY 2000 EQUIPMENT									11	1.386														11	1.386
FY 2001 EQUIPMENT											6	0.774												6	0.774
FY 2002 EQUIPMENT																								0	0.000
FY 2003 EQUIPMENT																								0	0.000
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																								0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	14	3	3	3	3	3	3	3	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Out	12	3	3	3	4	2	3	3	3	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42

2 FY97 units required additional installation costs not required of FY98 units.

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT							P-1 ITEM NOMENCLATURE Fleet Area Control and Surveillance Facility (FACSFAC) NARM # 284700					
Program Element for Code B Items: Not Applicable							Other Related Program Elements Not Applicable					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	\$130.5		\$6.6	\$4.6	\$4.5	\$4.6	\$4.7	\$4.7	\$4.9	\$5.0	CONT	CONT
DESCRIPTION:												
<p>Fleet Area Control and Surveillance Facilities (FACSFAC) are established to provide a multi-mission service related to the Naval Air Traffic Control and Landing Systems (ATCLS) program. This service includes scheduling of surface, subsurface, and air operations in off-shore operating areas, surveillance control of air operations and related training evolutions such as Ground Control Intercept and Air Combat Maneuvers. The basic purpose of FACSFAC is to prevent mid-air collisions between military and civilian aircraft and to guard against restrictions caused by the increasing encroachment of commercial interest.</p> <p>Eight FACSFAC system supported sites have been established as follows: FACSFAC Virginia Capes, FACSFAC Jacksonville, FACSFAC Caribbean, FACSFAC Pensacola, FACSFAC San Diego, FACSFAC Pearl Harbor, NAS Fallon and NAWCAD St. Inigoes. In order to accommodate mission expansion and maintain a required interoperability with the FAA National Air Traffic Control System, FACSFACs must be periodically provided with new or upgraded capabilities.</p> <p>Funding in FY 98 through FY 01 provides for procurement and installation of the following:</p> <p>FY 98 provided funding to: procure 8 Radar Beacon Digitizer Replacements (TT175); procure 22 Display Replacements (TT176); procure miscellaneous enhancements for selected sites (OCIRs/ECPs) (TT145).</p> <p>FY 99 provides funding to: procure 14 Display Replacements (TT176); procure miscellaneous enhancements for selected sites (OCIRs/ECPs) (TT145).</p> <p>FY 00 provides funding to: procure 13 Display Replacements (TT176); procure 2 FACTS 3200 Radar Input Capacity Upgrades (TT177); procure miscellaneous enhancements for selected sites (OCIRs/ECPs) (TT145).</p> <p>Items must be procured in single inclusive lots to ensure commonality for logistics support and for component inter-changeability. This is especially important, since these are Non-development Item (NDI) units with limited model production runs. Economic benefits are also realized by single lot purchase.</p>												

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS

DATE:

P-40a

February 1999

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

OTHER PROCUREMENT, NAVY BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT

Fleet Area Control and Surveillance Facility (FACSFAC)

Procurement Items	ID Code	Prior Year	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
TT171 MODE S INTERFACE	N/A											
QTY								3	5			8
FUNDING								0.800	1.365			2.165
TT175 RADAR BEACON DIGITIZER	N/A											
QTY		2	8									10
FUNDING		0.595	1.000									1.595
TT176 DISPLAY REPLACEMENTS	N/A											
QTY		2	22	14	13	12	10					73
FUNDING		2.631	2.574	1.708	1.612	1.518	1.320					11.363
TT177 FACTS 3200 RADAR INPUT CAPACITY	N/A											
QTY					2	2	2	2				8
FUNDING					0.862	0.874	0.900	0.920				3.556
TT179 GLOBAL POS SYSTEM INTERFACE	N/A											
QTY								4	4			8
FUNDING								0.736	0.752			1.488
TT180 COMM UPGRADE	N/A											
QTY										2	4	6
FUNDING										2.000	3.850	5.850
TT181 FLIGHT PLAN INTE	N/A											
QTY									4	2	2	8
FUNDING									0.500	0.250	0.250	1.000

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA2-COMMUNICATIONS AND ELECTRONICS EQUIPME							P-1 ITEM NOMENCLATURE Fleet Area Control and Surveillance Facility (FACSFAC)					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
TT182 PROCESSOR UPG	N/A											
QTY										2	6	8
FUNDING										0.500	1.500	2.000
VARIOUS 1/	N/A	1.669										1.669
OTHER COSTS	N/A	125.651	3.031	2.906	2.040	2.201	2.460	2.293	2.250	2.218	CONT.	CONT.
TOTAL FUNDING		130.546	6.605	4.614	4.514	4.593	4.680	4.749	4.867	4.968	CONT.	CONT.
1/ The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1997 and beyond.												

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CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS P-5				Weapon System				DATE: February 1999							
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT				ID Code P-1 ITEM NOMENCLATURE/SUBHEAD Fleet Area Control and Surveillance Facility (FACSFAC)				42TT							
COST CODE	ELEMENT OF COST	ID Code	Prior Years	FY 1998			FY 1999			FY 2000					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
			TT145	FACSFAC ECPs AND OCIRs	N/A	7,419	VAR		418	VAR		879	VAR		543
TT168	PORT RADAR RECORDER	N/A	218												
TT173	RADAR INPUT UNIT REPLACEMENTS	N/A	800												
TT174	LINK 11 SECURITY FILTER	N/A	651												
TT175	RADAR BEACON DIGITIZER (RBD) REPLACEMENTS	N/A	595	8	125	1,000									
TT176	DISPLAY REPLACEMENTS	N/A	2,631	22	117	2,574	14	122	1,708	13	124	1,612			
TT177	FACTS 3200 RADAR INPUT CAPACITY UPGRADE	N/A								2	431	862			
TT300	JARCC/CARIBROC UPGRADE	N/A	71,594												
TT800	INTEGRATED LOGISTICS SUPPORT	N/A	2,421			558			531			430			
TT830	PRODUCTION ENGINEERING	N/A	6,533			964			626			450			
TT880	INTERIM CONTRACTOR	N/A													
TT900	INSTALLATION (NON-FMP) VARIOUS 1/	N/A	7,814			1,091			870			617			
			29,870												
			130,546			6,605			4,614			4,514			

1/The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1997 and beyond.
 2/ FY 97 TT176 Display Replacement includes \$2131K of Non-Recurring integration, software adaptation, system interface costs to establish a Baseline Display.

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 1999		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT					C. P-1 ITEM NOMENCLATURE Fleet Area Control and Surveillance Facility				SUBHEAD 42TT	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
TT175 RADAR BEACON DIGITIZER REP FY 98	8	125	NAWCAD ST INIGOES	11/97	C/OPTION	SENSIS MANASSAS, VA.	12/97	3/98	YES	
TT176 DISPLAY REPLACEMENT FY 98	22	117	NAVSEA	11/97	C/OPTION	LOCKHEED MARTIN MINNEAPOLIS ST PAUL	12/97	3/99	YES	
FY99	14	122	NAWCAD ST INIGOES	11/98	C/FFP	TBD	2/99	2/00	YES	
FY00	13	124	NAWCAD ST INIGOES	11/99	C/OPTION	TBD	2/00	2/01	YES	
TT177 FACTS 3200 RADAR INPUT CAPACITY UPGRADE FY 00	2	431	NAWCAD ST INIGOES	11/99	C/FFP	TBD	2/00	2/01	NO	6/99
D. REMARKS FY99 TT176 DISPLAY REPLACEMENT LOCKHEED MARTIN EFFORTS TERMINATED. FUTURE FABRICATION WILL BE DONE AT NAWCAD. CONTRACTOR WILL BE DETERMINED UNDER COMPETITIVE BID PROCESS.										

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FACSFAC TYPE MODIFICATION: CAPABILITY UPGRADE MODIFICATION TITLE: OCIRS/ECPS SUMMARY (TT145)

DESCRIPTION/JUSTIFICATION:
 SUMMARY

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	\$	
FINANCIAL PLAN (IN MILLIONS)																							
<i>RD&E</i>																						0	0.000
<i>PROCUREMENT</i>																						0	
INSTALLATION KITS		7.419		0.418		0.879		0.543		0.401		0.889		0.544		0.559		0.537				0	12.189
INSTALLATION KITS - UNIT COST																						0	0.000
INSTALLATION KITS NONRECURRING																						0	0.000
EQUIPMENT																						0	0.000
EQUIPMENT NONRECURRING																						0	0.000
ENGINEERING CHANGE ORDERS																						0	0.000
DATA																						0	0.000
TRAINING EQUIPMENT																						0	0.000
SUPPORT EQUIPMENT																						0	0.000
OTHER																						0	0.000
OTHER																						0	0.000
OTHER																						0	0.000
INTERIM CONTRACTOR SUPPORT																						0	0.000
INSTALL COST	0	1.123	0	0.879	0	0.539	0	0.331	0	0.546	0	0.446	0	0.496	0	0.392	0	0.660	0	0.000	0	5.412	
TOTAL PROCUREMENT		8.542		1.297		1.418		0.874		0.947		1.335		1.040		0.951		1.197		0.000			17.601

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: FACSFAC MODIFICATION TITLE: OCIRS/ECPS SUMMARY (TT145)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: N/A

PRODUCTION LEADTIME: N/A

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS		0.767																							0.767
FY 1997 EQUIPMENT				0.356																					0.356
FY 1998 EQUIPMENT						0.879																			0.879
FY 1999 EQUIPMENT								0.539																	0.539
FY 2000 EQUIPMENT									0.331																0.331
FY 2001 EQUIPMENT										0.546															0.546
FY 2002 EQUIPMENT											0.446														0.446
FY 2003 EQUIPMENT												0.496													0.496
FY 2004 EQUIPMENT													0.392												0.392
FY 2005 EQUIPMENT																	0.660								0.660
TO COMPLETE																									0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
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		

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FACSFAC TYPE MODIFICATION: RELIABILITY/MAINTAINABILITY MODIFICATION TITLE: RADAR BEACON DIGITIZER REPLACEMENT (TT175)

DESCRIPTION/JUSTIFICATION:
 Replacement for current Radar Beacon Digitizers that are obsolete and do not work with the new radars.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COTS

FINANCIAL PLAN (IN MILLIONS)	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	\$		
<i>RD&E</i>																					0.000	
<i>PROCUREMENT</i>																						
INSTALLATION KITS																					0.000	
INSTALLATION KITS - UNIT COST																					0.000	
INSTALLATION KITS NONRECURRING																					0.000	
EQUIPMENT	2	0.595	8	1.000																10	1.595	
EQUIPMENT NONRECURRING																					0.000	
ENGINEERING CHANGE ORDERS																					0.000	
DATA																					0.000	
TRAINING EQUIPMENT																					0.000	
SUPPORT EQUIPMENT																					0.000	
OTHER																					0.000	
OTHER																					0.000	
OTHER																					0.000	
INTERIM CONTRACTOR SUPPORT																					0.000	
INSTALL COST	0	0.130	8	0.162	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	10	0.162
TOTAL PROCUREMENT		0.725		1.162		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		1.757

The total Quantity reflects the inventory objective for this item.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: FACSFAC MODIFICATION TITLE: RADAR BEACON DIGITIZER REPLACEMENT (TT175)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 2 MONTHS

PRODUCTION LEADTIME: 4 MONTHS

CONTRACT DATES: FY 1999: N/A

FY 2000: N/A

DELIVERY DATE: FY 1999: N/A

FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																								0	0.000
FY 1997 EQUIPMENT			2	0.130																				2	0.130
FY 1998 EQUIPMENT					8	0.162																		8	0.162
FY 1999 EQUIPMENT																								0	0.000
FY 2000 EQUIPMENT																								0	0.000
FY 2001 EQUIPMENT																								0	0.000
FY 2002 EQUIPMENT																								0	0.000
FY 2003 EQUIPMENT																								0	0.000
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																								0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	10	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	10			
Out	10	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	10			

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FACSFAC TYPE MODIFICATION: CAPABILITY/MAINTAINABILITY MODIFICATION TITLE: DISPLAY REPLACEMENT (TT176)

DESCRIPTION/JUSTIFICATION:

Provides visual air traffic control display to controllers. Advance technology display to replace obsolete out of production display units.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COTS

	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	\$		
FINANCIAL PLAN (IN MILLIONS)																						
<i>RD&E</i>																					0.000	
<i>PROCUREMENT</i>																					0.000	
INSTALLATION KITS																					0.000	
INSTALLATION KITS - UNIT COST																					0.000	
INSTALLATION KITS NONRECURRING																					0.000	
EQUIPMENT	2	0.500	22	2.574	14	1.708	13	1.612	12	1.518	10	1.320								73	9.232	
EQUIPMENT NONRECURRING		2.131																			2.131	
ENGINEERING CHANGE ORDERS																					0.000	
DATA																					0.000	
TRAINING EQUIPMENT																					0.000	
SUPPORT EQUIPMENT																					0.000	
OTHER																					0.000	
OTHER																					0.000	
OTHER																					0.000	
INTERIM CONTRACTOR SUPPORT																					0.000	
INSTALL COST	0	0.000	2	0.050	22	0.331	14	0.286	13	0.234	12	0.220	10	0.187	0	0.000	0	0.000	0	0.000	73	1.308
TOTAL PROCUREMENT		2.631		2.624		2.039		1.898		1.752		1.540		0.187		0.000		0.000		0.000		12.671

The total Quantity reflects the inventory objective for this item.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: FACSFAC MODIFICATION TITLE: DISPLAY REPLACEMENT (TT176)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 5 MONTHS

PRODUCTION LEADTIME: 12 MONTHS

CONTRACT DATES: FY 1999: 2/99

FY 2000: 2/00

DELIVERY DATE: FY 1999: 2/00

FY 2000: 2/01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																								0	0.000
FY 1997 EQUIPMENT					2	0.050																		2	0.050
FY 1998 EQUIPMENT							22	0.331																22	0.331
FY 1999 EQUIPMENT									14	0.286														14	0.286
FY 2000 EQUIPMENT											13	0.234												13	0.234
FY 2001 EQUIPMENT													12	0.220										12	0.220
FY 2002 EQUIPMENT															10	0.187								10	0.187
FY 2003 EQUIPMENT																								0	0.000
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																								0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	2	0	7	8	7	0	4	5	5	0	5	5	3	0	4	4	4	0	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	73
Out	2	0	7	8	7	0	4	5	5	0	5	5	3	0	4	4	4	0	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	73

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FACSFAC TYPE MODIFICATION: CAPABILITY UPGRADE MODIFICATION TITLE: FACTS 3200 CAPACITY UPGRADE

TT177

DESCRIPTION/JUSTIFICATION:

Upgrade Facts 3200 Radar Capacity from 10 to 30 sensors.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COTS

FINANCIAL PLAN (IN MILLIONS)	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	\$		
<i>RD&E</i>																					0.000	
<i>PROCUREMENT</i>																						
INSTALLATION KITS							2	0.862	2	0.874	2	0.900	2	0.920							8	3.556
INSTALLATION KITS - UNIT COST																						0.000
INSTALLATION KITS NONRECURRING																						0.000
EQUIPMENT																						0.000
EQUIPMENT NONRECURRING																						0.000
ENGINEERING CHANGE ORDERS																						0.000
DATA																						0.000
TRAINING EQUIPMENT																						0.000
SUPPORT EQUIPMENT																						0.000
OTHER																						0.000
OTHER																						0.000
OTHER																						0.000
INTERIM CONTRACTOR SUPPORT																						0.000
INSTALL COST	0	0.000	0	0.000	0	0.000	0	0.000	2	0.124	2	0.125	2	0.121	2	0.126	0	0.000	0	0.000	8	0.496
TOTAL PROCUREMENT		0.000		0.000		0.000		0.862		0.998		1.025		1.041		0.126		0.000		0.000		K

The total Quantity reflects the inventory objective for this item.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: FACSFAC MODIFICATION TITLE: FACTS 3200 CAPACITY UPGRADE (TT177)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Navy Field Activity/Government Software

ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: 2/99 FY 2000: 2/00

DELIVERY DATE: FY 1999: 2/00 FY 2000: 2/01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS																								0	0.000	
FY 1997 EQUIPMENT																									0	0.000
FY 1998 EQUIPMENT																									0	0.000
FY 1999 EQUIPMENT																									0	0.000
FY 2000 EQUIPMENT										2	0.124														2	0.124
FY 2001 EQUIPMENT												2	0.125												2	0.125
FY 2002 EQUIPMENT														2	0.121										2	0.121
FY 2003 EQUIPMENT																2	0.126								2	0.126
FY 2004 EQUIPMENT																									0	0.000
FY 2005 EQUIPMENT																									0	0.000
TO COMPLETE																									0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	8
Out	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	2	0	0	0	2	0	0	0	0	0	0	0	8

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET

P-40

DATE:

February 1999

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT, NAVY

P-1 ITEM NOMENCLATURE

IDENTIFICATION SYSTEMS NAVAIRSYSCOM 42MT

Program Element for Code B Items:

Other Related Program Elements

NOT APPLICABLE

	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	\$104.3		\$6.0	\$18.0	\$9.2	\$13.8	\$12.9	\$13.6	\$15.1	\$15.5	Cont	Cont

DESCRIPTION:

The ID System funds the following procurements: MK XII Digital Interrogator (DI), Digital Transponder (DT), Combat Information Center (CIC), AN/UPX-29 Improvements, AN/UPM-155 Radar Test Set, and Shipboard Advanced Radar Target Identification Systems (SARTIS).

The Air Traffic Control System, Identification Friend or Foe, MK XII System (AIMS) is a DOD directed tri-service program designated to provide a universal air traffic control radar beacon system compatible with the National Airspace Program. It provides a secure identification system for military use on all major combatant ships, selected auxiliaries, patrol craft, and selected Coast Guard ships by allowing all friendly forces to identify each other and neutral forces. The Air Traffic Control Radar System supports several missions such as Anti-Airwarfare, Aerial Bombardment, and Naval Attack.

The purpose of the new MK XII Digital Interrogator, Digital Transponder, and Combat Information Center is to replace 20-25 year old equipment with a Reliability and Maintenance enhancement through the use of COTS/NDI form/fit/function equipment. These new systems will be enhanced with state-of-the-art technology and open systems architecture, and will be purchased with existing MK XII Improvements funding. The DI, DT, and CIC systems have been included in the POM, and changes in FY99 realign funding to support the new systems.

The AN/UPX-29 Improvements program provides field changes to the AN/UPX-29 for improved reliability and maintenance.

The AN/UPM-155 Radar Test Set replaces the aging AN/UPM-136 and the AN/UPM-137A test sets as the prime support equipment for the MK-XII system in all services. It is intended to give the Fleet modern equipment that will allow more accurate alignments in less time to increase the system's operational availability and reduce down time.

The purpose of the SARTIS is to provide non-cooperative target recognition of hostile and neutral aircraft in addition to cooperative military aircraft for air defense.

FY 98 funded the procurement of 10 First Article MK XII Digital Interrogators.
 FY99 funds the procurement of 60 Digital Interrogators in FY99 and 71 Digital Interrogators in FY00.
 FY00 funds the procurement of 5 Digital Transponders.

Installing Agent: Shipyard, Alteration Teams (AIT)
 When installation to be made: ROH/RAV/SRA
 Type Ship to receive equipment: An IFF system is on every ship in the fleet. SARTIS will be installed on CG-47 class.

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a							DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							P-1 ITEM NOMENCLATURE IDENTIFICATION SYSTEMS NAVAIRSYSCOM 42MT					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
MT031 MK XII DIGITAL INTERROGATOR 2/	A											
QTY			10	131	0							
FUNDING			2,775	9,181	0							
MTTBD MK XII DIGITAL TRANSPONDER	A											
QTY					5							
FUNDING					1,500							
MTTBD MK XII CIC UPGRADE	A											
QTY												
FUNDING												
VARIOUS 1/		51,795										
OTHER COSTS		52,576	3,190	8,811	7,722	7,757	5,444	5,150	5,218	5,399	CONT	CONT
TOTAL FUNDING		104,371	5,965	17,992	9,222	7,757	5,444	5,150	5,218	5,399	CONT	CONT

UNCLASSIFIED

1/ THE AMOUNT IDENTIFIED AGAINST THIS COST ELEMENT REFLECTS TOTAL PRIOR YEAR FUNDING ASSOCIATED WITH COST ELEMENTS NO LONGER FINANCED IN FY97 AND BEYOND.
 2/ FY99 FUNDS THE PROCUREMENT OF 60 DIGITAL INTERROGATORS IN FY99 AND 71 DIGITAL INTERROGATORS IN FY00 FOR A GRAND TOTAL OF 131 UNITS.

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System			DATE: February 1999						
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							ID Code		P-1 ITEM NOMENCLATURE/SUBHEAD IDENTIFICATION SYSTEMS NAVAIRSYSCOM 42MT							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years	FY 1998			FY 1999			FY 2000						
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
MT003	AN/UPM-155 MK XII RADAR TEST SET	A	23,693													
MT016	MK XII AIMS IMPROVEMENTS	A	16,679													
MT024	AN/UPX-25 INTERROGATOR SET (USCG)	A	2,716													
MT027	AN/UPX-27 HARDWARE	A	150													
MT031	MK XII DIGITAL INTERROGATOR	A		10	278	2,775	131	70	9,181							
MT110	SARTIS	B	7,767													
MT700	AN/UPX-29 IMPROVEMENTS (OP-N865)	A	17,619													
MTTBD	MK XII DIGITAL TRANSPONDER	A								5	300	1,500				
MTTBD	MK XII CIC UPGRADE	A														
MT800	INTEGRATED LOGISTICS SUPPORT	N/A	5,079			990			1,623			1,005				
MT830	PRODUCTION ENGINEERING	N/A	12,342			1,330			1,584			1,720				
MT840	QUALITY ASSURANCE	N/A	60													
MT850	PRODUCT IMPROVEMENT	N/A	398						1,980			595				
MT860	ACCEPTANCE TEST & EVALUATION	N/A	3,931			365			975			469				
MT870	DEPOT	N/A	633													
MT900	INSTALLATION OF EQUIPMENT (NON-FMP)	N/A	4,976			505			2,284			2,074				
MT910	INSTALLATION OF EQUIPMENT (FMP)	N/A							250			998				
MT990	INITIAL TRAINING	N/A	306						115			861				
	VARIOUS <u>1</u>		8,022													
			104,371			5,965			17,992			9,222				0

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 1999			
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY					C. P-1 ITEM NOMENCLATURE IDENTIFICATION SYSTEMS NAVAIRSYSCOM					SUBHEAD 42MT	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
MT003 AN/UPM-155 RTS											
FY-96	6	133.0	NAVAIR	Dec-96	SS/FP	NAVCOM EL MONTE CA	Oct-97	Dec-98	YES		
FY-97	8	133.0	NAVAIR	Dec-96	SS/FP	NAVCOM EL MONTE CA	Oct-97	Dec-98	YES		
MT031 MK XII DI											
FY-98	10	278.0	NAVAIR	Feb-97	FPI	HAZELTINE, GREENLAWN, NY	Jul-98	Mar-99	YES		
FY-99	60	68.8	NAVAIR	Jan-98	C/FP	HAZELTINE, GREENLAWN, NY	Mar-99	Feb-00	YES		
FY-99	71	71.0	NAVAIR	Oct-99	C/FP	HAZELTINE, GREENLAWN, NY	Mar-00		YES		
MT110 SARTIS											
FY-97	25	312.0	NAVAIR	Jun-97	C/FPI	CONDOR SYS., STERLING VA	Jan-98	Sep-98	YES		
MTTBD MK XII DT											
FY-00	5	300.0	NAVAIR	Oct-99	C/FPI	TBD	Mar-00		NO		
D. REMARKS											
MT031 FY98 FIRST ARTICLE TESTING PROCUREMENT LEADTIME WILL BE EIGHT MONTHS VERSUS CONTRACTUAL LEADTIME OF ELEVEN MONTHS.											

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UPX-27 TYPE MODIFICATION: Reliability MODIFICATION TITLE: MK XII IMPROVEMENTS AN/UPX-27 FC 10 (MT016)

DESCRIPTION/JUSTIFICATION:

This modification enables the system to interface with new ships systems required for fleet operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Fielded

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																								
<i>RDT&E</i>																							0	0.000
<i>PROCUREMENT</i>																							0	0.000
INSTALLATION KITS	674	0.860																					674	0.860
INSTALLATION KITS - UNIT COST																							0	0.000
INSTALLATION KITS NONRECURRING																							0	0.000
EQUIPMENT																							0	0.000
EQUIPMENT NONRECURRING																							0	0.000
ENGINEERING CHANGE ORDERS																							0	0.000
DATA																							0	0.000
TRAINING EQUIPMENT																							0	0.000
SUPPORT EQUIPMENT																							0	0.000
OTHER																							0	0.000
OTHER																							0	0.000
OTHER																							0	0.000
INTERIM CONTRACTOR SUPPORT																							0	0.000
INSTALL COST	456	0.456	85	0.085	67	0.067	66	0.066	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	674	0.674
TOTAL PROCUREMENT		1.316		0.085		0.067		0.066		0.000		0.000		0.000		0.000		0.000		0.000		0.000		1.534

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AN/UPX-27 MODIFICATION TITLE: MK XII IMPROVEMENTS AN/UPX-27 FC 10 (MT016)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: N/A FY 2000: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	456	0.456	85	0.085	67	0.067	66	0.066																674	0.674
FY 1997 EQUIPMENT																								0	0.000
FY 1998 EQUIPMENT																								0	0.000
FY 1999 EQUIPMENT																								0	0.000
FY 2000 EQUIPMENT																								0	0.000
FY 2001 EQUIPMENT																								0	0.000
FY 2002 EQUIPMENT																								0	0.000
FY 2003 EQUIPMENT																								0	0.000
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																								0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	674	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	674
Out	608	17	17	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	674	

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UPA-59B TYPE MODIFICATION: Reliability MODIFICATION TITLE: MK XII IMPROVEMENT AN/UPA-59B FC3 (MT016)

DESCRIPTION/JUSTIFICATION:

This field change modifies decoder group AN/UPA-59B to use the gated range strobe from indicator group AN/SPA-25E and G indicators.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Fielded

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																										
<i>RDT&E</i>																									0	0.000
<i>PROCUREMENT</i>																									0	0.000
INSTALLATION KITS	769	5.383	69	0.489																				838	5.872	
INSTALLATION KITS - UNIT COST																								0	0.000	
INSTALLATION KITS NONRECURRING																								0	0.000	
EQUIPMENT																								0	0.000	
EQUIPMENT NONRECURRING																								0	0.000	
ENGINEERING CHANGE ORDERS																								0	0.000	
DATA																								0	0.000	
TRAINING EQUIPMENT																								0	0.000	
SUPPORT EQUIPMENT																								0	0.000	
OTHER																								0	0.000	
OTHER																								0	0.000	
OTHER																								0	0.000	
INTERIM CONTRACTOR SUPPORT																								0	0.000	
INSTALL COST	406	0.203	134	0.067	205	0.103	93	0.046	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	838	0.419		
TOTAL PROCUREMENT		5.586		0.556		0.103		0.046		0.000		0.000		0.000		0.000		0.000		0.000		0.000		838	6.291	

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AN/UPA-59B MODIFICATION TITLE: MK XII IMPROVEMENTS AN/UPA-59B FC 3 (MT016)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 7 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: N/A FY 2000: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	406	0.203	134	0.067	205	0.103	24	0.011															769	0.384
FY 1997 EQUIPMENT							69	0.035															69	0.035
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	838	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	838
Out	745	23	23	23	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	838	

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UPA-59A TYPE MODIFICATION: Reliability MODIFICATION TITLE: MK XII IMPROVEMENT AN/UPA-59A FC 8 (MT016)

DESCRIPTION/JUSTIFICATION:

This change is required for the decoder group AN/UPA-59A to properly interface with the AN/SPA-25E and G indicators.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Fielded

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																								
<i>RD&E</i>																							0	0.000
<i>PROCUREMENT</i>																							0	0.000
INSTALLATION KITS	1149	7.469																					1149	7.469
INSTALLATION KITS - UNIT COST																							0	0.000
INSTALLATION KITS NONRECURRING																							0	0.000
EQUIPMENT																							0	0.000
EQUIPMENT NONRECURRING																							0	0.000
ENGINEERING CHANGE ORDERS																							0	0.000
DATA																							0	0.000
TRAINING EQUIPMENT																							0	0.000
SUPPORT EQUIPMENT																							0	0.000
OTHER																							0	0.000
OTHER																							0	0.000
OTHER																							0	0.000
INTERIM CONTRACTOR SUPPORT																							0	0.000
INSTALL COST	607	3.339	31	0.169	61	0.335	120	0.583	170	0.853	160	0.880	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1149	6.159
TOTAL PROCUREMENT		10.808		0.169		0.335		0.583		0.853		0.880		0.000		0.000		0.000		0.000		0.000		13.628

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: UNCLASSIFIED

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

MODELS OF SYSTEMS AFFECTED: AN/UPA-59A MODIFICATION TITLE: MK XII IMPROVEMENTS AN/UPA-59A FC 8 (MT016)

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: AIT
 ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 6 Months
 CONTRACT DATES: FY 1999: N/A FY 2000: N/A
 DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS	607	3.339	31	0.169	61	0.335	120	0.583	170	0.853	160	0.880												1149	6.159	
FY 1997 EQUIPMENT																									0	0.000
FY 1998 EQUIPMENT																									0	0.000
FY 1999 EQUIPMENT																									0	0.000
FY 2000 EQUIPMENT																									0	0.000
FY 2001 EQUIPMENT																									0	0.000
FY 2002 EQUIPMENT																									0	0.000
FY 2003 EQUIPMENT																									0	0.000
FY 2004 EQUIPMENT																									0	0.000
FY 2005 EQUIPMENT																									0	0.000
TO COMPLETE																									0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1149	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	1149
Out	699	30	30	30	30	43	43	42	42	40	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1149

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UPX-27 TYPE MODIFICATION: Reliability MODIFICATION TITLE: MK XII DIGITAL INTERROGATOR (MT031)

DESCRIPTION/JUSTIFICATION:

Current AN/UPX-27 is late 60's technology and no longer meets operational availability requirements due to use beyond its intended life cycle. High cost of ownership due to parts obsolescence, frequent labor intensive alignments and poor reliability continue to be problems associated with the current system. Further, the current system suffers upgrade integration problems due to its dated architecture and offers no growth capabilities. A more reliable system with the same functionality is required.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Milestone III decision September 1998.

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																								0	0.000
<i>PROCUREMENT</i>																								0	0.000
INSTALLATION KITS																								0	0.000
INSTALLATION KITS - UNIT COST																								0	0.000
INSTALLATION KITS NONRECURRING																								0	0.000
EQUIPMENT					10	2.775	131	9.181	0	0.000	61	4.392	60	4.440	73	5.548	75	5.850	88	7.040	101	8.080	599	47.306	
EQUIPMENT NONRECURRING																								0	0.000
ENGINEERING CHANGE ORDERS																								0	0.000
DATA																								0	0.000
TRAINING EQUIPMENT																								0	0.000
SUPPORT EQUIPMENT																								0	0.000
OTHER																								0	0.000
OTHER																								0	0.000
OTHER																								0	0.000
INTERIM CONTRACTOR SUPPORT																								0	0.000
INSTALL COST	0	0.000	0.0	0.000	0	0.000	10	0.180	50	0.600	81	0.964	61	0.759	60	0.761	73	0.933	75	0.994	189	2.506	599	7.697	
TOTAL PROCUREMENT		0.000		0.000		2.775		9.361		0.600		5.356		5.199		6.309		6.783		8.034		10.586		55.003	

Ten (10) first article units are being procured in FY98.

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AN/UPX-27 MODIFICATION TITLE: MK XII DIGITAL INTERROGATOR (MT031)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: *** Months PRODUCTION LEADTIME: 11 Months

CONTRACT DATES: FY 1999: Mar-99 FY 2000: Mar-00

DELIVERY DATE: FY 1999: Feb-00 FY 2000: Feb-01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$				
PRIOR YEARS																								0	0.000			
FY 1997 EQUIPMENT																									0	0.000		
FY 1998 EQUIPMENT							10	0.180																	10	0.180		
FY 1999 EQUIPMENT									50	0.600	81	0.964													131	1.564		
FY 2000 EQUIPMENT																										0	0.000	
FY 2001 EQUIPMENT													61	0.759												61	0.759	
FY 2002 EQUIPMENT															60	0.761										60	0.761	
FY 2003 EQUIPMENT																	73	0.933									73	0.933
FY 2004 EQUIPMENT																			75	0.994							75	0.994
FY 2005 EQUIPMENT																								88	1.192	88	1.192	
TO COMPLETE																								101	1.314	101	1.314	

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	5	5	0	5	5	20	30	20	18	17	16	16	15	15	15	15	15	15	15	18	18	18	19	19	19	19	18	189	599
Out	0	0	0	5	5	5	5	10	30	25	19	19	18	16	15	15	15	15	15	15	15	18	18	18	19	19	19	19	18	189	599

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*** 10 MONTHS FOR FY 98; 6 MONTHS FOR FY 99;00

FY99 FUNDS THE PROCUREMENT OF 60 DIGITAL INTERROGATORS IN FY99 AND 71 DIGITAL INTERROGATORS IN FY00 FOR A GRAND TOTAL OF 131 UNITS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CG's TYPE MODIFICATION: Upgrade MODIFICATION TITLE: SARTIS (MT110)

DESCRIPTION/JUSTIFICATION:

Congressional plus-up to complete production/deployment for remaining 22 cruisers and 3 shore sites.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **Updating specification & revisiting Milestone III July 97 for contract award August 97**

	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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																										
<i>RDT&E</i>																								0	0.000	
<i>PROCUREMENT</i>																								0	0.000	
INSTALLATION KITS																								0	0.000	
INSTALLATION KITS - UNIT COST																								0	0.000	
INSTALLATION KITS NONRECURRING																								0	0.000	
EQUIPMENT			25	7.767																				25	7.767	
EQUIPMENT NONRECURRING																								0	0.000	
ENGINEERING CHANGE ORDERS																								0	0.000	
DATA																								0	0.000	
TRAINING EQUIPMENT																								0	0.000	
SUPPORT EQUIPMENT																								0	0.000	
OTHER																								0	0.000	
OTHER																								0	0.000	
OTHER																								0	0.000	
INTERIM CONTRACTOR SUPPORT																								0	0.000	
INSTALL COST	0	0.000	0.0	0.000	0	0.000	AP	0.250	14	1.124	11	0.760	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	25	2.134
TOTAL PROCUREMENT		0.000		7.767		0.000		0.250		1.124		0.760		0.000		0.000		0.000		0.000				0.000		9.901

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: CG's MODIFICATION TITLE: SARTIS (MT110)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: _____ PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: N/A FY 2000: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																								0	0.000
FY 1997 EQUIPMENT							AP	0.250	14	1.124	11	0.760												25	2.134
FY 1998 EQUIPMENT																								0	0.000
FY 1999 EQUIPMENT																								0	0.000
FY 2000 EQUIPMENT																								0	0.000
FY 2001 EQUIPMENT																								0	0.000
FY 2002 EQUIPMENT																								0	0.000
FY 2003 EQUIPMENT																								0	0.000
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																								0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	0	0	0	0	1	6	6	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Out	0	0	0	0	0	3	4	3	4	3	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25

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CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: IDENTIFICATION SYSTEMS TYPE MODIFICATION: Maintenance/Reliability MODIFICATION TITLE: AN/UPX-29 IMPROVEMENTS
OE-120/UPX FC 1 (MT700)

DESCRIPTION/JUSTIFICATION:

Adds capability of detecting interrogator side lobe suppression trigger loss from interrogator set which will result in the automatic inhibiting of the ISLS pulse from the transmitted pulse sequence. Also replaces obsolete microprocessor and improves build-in test equipment performance.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RDT&E</i>																								0	0.000	
<i>PROCUREMENT</i>																								0	0.000	
INSTALLATION KITS	53	0.963																						53	0.963	
INSTALLATION KITS - UNIT COST		0.018																						0	0.000	
INSTALLATION KITS NONRECURRING																								0	0.000	
EQUIPMENT																								0	0.000	
EQUIPMENT NONRECURRING																								0	0.000	
ENGINEERING CHANGE ORDERS																								0	0.000	
DATA																								0	0.000	
TRAINING EQUIPMENT																								0	0.000	
SUPPORT EQUIPMENT																								0	0.000	
OTHER																								0	0.000	
OTHER																								0	0.000	
OTHER																								0	0.000	
INTERIM CONTRACTOR SUPPORT																								0	0.000	
INSTALL COST	35	0.636	10	0.000	8	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	53	0.636
TOTAL PROCUREMENT		1.599		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		1.599

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: IDENTIFICATION SYSTEMS MODIFICATION TITLE: AN/UPX-29 IMPROVEMENTS 0E-120/UPX FC 1 (MT700)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A

CONTRACT DATES: FY 1999: N/A FY 2000: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	35	0.636																					35	0.636
FY 1997 EQUIPMENT			10	**																			10	0.000
FY 1998 EQUIPMENT					8	**																	8	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL	
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
In	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
Out	53	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	53	

** Funding provided for installations by NAVSEA

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CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: IDENTIFICATION SYSTEMS TYPE MODIFICATION: Maintenance/Reliability MODIFICATION TITLE: AN/UPX-29 IMPROVEMENTS
AN/UPX-24(V) FC4 (MT700)

DESCRIPTION/JUSTIFICATION:

Improve IFF Target Processing, improved interface to combat system and by-pass operations (back up mode to the main processor).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RDT&E</i>																								0	0.000	
<i>PROCUREMENT</i>																								0	0.000	
INSTALLATION KITS	52	4.015																						52	4.015	
INSTALLATION KITS - UNIT COST		0.258																						0	0.000	
INSTALLATION KITS NONRECURRING																								0	0.000	
EQUIPMENT																								0	0.000	
EQUIPMENT NONRECURRING																								0	0.000	
ENGINEERING CHANGE ORDERS																								0	0.000	
DATA																								0	0.000	
TRAINING EQUIPMENT																								0	0.000	
SUPPORT EQUIPMENT																								0	0.000	
OTHER																								0	0.000	
OTHER																								0	0.000	
OTHER																								0	0.000	
INTERIM CONTRACTOR SUPPORT																								0	0.000	
INSTALL COST	0	0.000	1	0.051	0	0.000	30	1.409	11	0.495	4	0.184	6	0.276	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	52	2.415
TOTAL PROCUREMENT		4.015		0.051		0.000		1.409		0.495		0.184		0.276		0.000		0.000		0.000				0.000		6.430

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: Identification Systems MODIFICATION TITLE: AN/UPX-29 IMPROVEMENTS AN/PX-24(V) FC4 (MT700)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A

CONTRACT DATES: FY 1999: N/A FY 2000: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS			1	0.051			30	1.409	11	0.495	4	0.184	6	0.276										52	2.415
FY 1997 EQUIPMENT																								0	0.000
FY 1998 EQUIPMENT																								0	0.000
FY 1999 EQUIPMENT																								0	0.000
FY 2000 EQUIPMENT																								0	0.000
FY 2001 EQUIPMENT																								0	0.000
FY 2002 EQUIPMENT																								0	0.000
FY 2003 EQUIPMENT																								0	0.000
FY 2004 EQUIPMENT																								0	0.000
FY 2005 EQUIPMENT																								0	0.000
TO COMPLETE																								0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	52	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	52	
Out	1	8	8	8	6	2	3	6	0	3	1	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	52		

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: IDENTIFICATION SYSTEMS TYPE MODIFICATION: Maintenance/Reliability MODIFICATION TITLE: MK XII DIGITAL TRANSPONDER (MTTBD)

DESCRIPTION/JUSTIFICATION:
 Current MK-XII transponder systems no longer meet operational Reliability and Maintainability (R&M) requirements due to use beyond their intended life cycle and suffer high cost of ownership due to parts obsolescence. Current surface ship MK-XII transponders will be replaced to continue incremental digital and R&M upgrades to the MK-XII IFF System. The digital transponder will use an open systems architecture to allow future growth as requirements emerge.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																								0	0.000
<i>PROCUREMENT</i>																								0	0.000
INSTALLATION KITS																								0	0.000
INSTALLATION KITS - UNIT COST																								0	0.000
INSTALLATION KITS NONRECURRING																								0	0.000
EQUIPMENT								5	1.500	65	1.625	62	1.550	79	2.054	94	2.538	53	1.431	54	1.512	412	12.210		
EQUIPMENT NONRECURRING																								0	0.000
ENGINEERING CHANGE ORDERS																								0	0.000
DATA																								0	0.000
TRAINING EQUIPMENT																								0	0.000
SUPPORT EQUIPMENT																								0	0.000
OTHER																								0	0.000
OTHER																								0	0.000
OTHER																								0	0.000
INTERIM CONTRACTOR SUPPORT																								0	0.000
INSTALL COST	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	5	0.020	65	0.130	62	0.124	79	0.158	94	0.188	107	0.214	412	0.834	
TOTAL PROCUREMENT		0.000		0.000		0.000		0.000		0.000		1.645		1.680		2.178		2.696		1.619		1.726		13.044	

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: Identification Systems MODIFICATION TITLE: MK XII DIGITAL TRANSPONDER (MTTBD)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 12 MONTHS

CONTRACT DATES: FY 1999: N/A FY 2000: Mar-00

DELIVERY DATE: FY 1999: N/A FY 2000: Mar-01

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS																								0	0.000	
FY 1997 EQUIPMENT																								0	0.000	
FY 1998 EQUIPMENT																								0	0.000	
FY 1999 EQUIPMENT																								0	0.000	
FY 2000 EQUIPMENT										5	0.020													5	0.020	
FY 2001 EQUIPMENT												65	0.130											65	0.130	
FY 2002 EQUIPMENT														62	0.124									62	0.124	
FY 2003 EQUIPMENT																79	0.158							79	0.158	
FY 2004 EQUIPMENT																		94	0.188					94	0.188	
FY 2005 EQUIPMENT																							107	0.214	107	0.214
TO COMPLETE																								0	0.000	

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	3	2	0	0	22	22	21	0	21	21	20	0	27	27	25	0	32	31	31	107	412
Out	0	0	0	0	0	0	0	0	0	0	3	2	0	0	22	22	21	0	21	21	20	0	27	27	25	0	32	31	31	107	412

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: IDENTIFICATION SYSTEMS TYPE MODIFICATION: Maintenance/Reliability MODIFICATION TITLE: MK XII COMBAT INFORMATION CENTER UPGRADE (MTTBD)

DESCRIPTION/JUSTIFICATION:

Current MK-XII control monitors and video decoders no longer meet operational and maintainability requirements due to use beyond their intended life cycle. High cost of ownership due to parts obsolescence continues to be a prob associated with these systems. MK-XII interfaces used in surface combatants will be replaced with a single, digital unit that will use an open system architecture to allow future growth.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN (IN 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	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																								0	0.000
<i>PROCUREMENT</i>																								0	0.000
INSTALLATION KITS																								0	0.000
INSTALLATION KITS - UNIT COST																								0	0.000
INSTALLATION KITS NONRECURRING																								0	0.000
EQUIPMENT												5	1.500	44	0.880	75	1.533	80	1.671	1796	38.343	2000	43.927		
EQUIPMENT NONRECURRING																								0	0.000
ENGINEERING CHANGE ORDERS																								0	0.000
DATA																								0	0.000
TRAINING EQUIPMENT																								0	0.000
SUPPORT EQUIPMENT																								0	0.000
OTHER																								0	0.000
OTHER																								0	0.000
OTHER																								0	0.000
INTERIM CONTRACTOR SUPPORT																								0	0.000
INSTALL COST	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	0.060	45	0.450	70	0.715	1882	19.228	2000	20.453	
TOTAL PROCUREMENT		0.000		0.000		0.000		0.000		0.000		0.000		1.500		0.940		1.983		2.386		57.571		64.380	

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: Identification Systems

MODIFICATION TITLE: MK XII COMBAT INFORMATION CENTER UPGRADE (MTTBD)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A

CONTRACT DATES: FY 1999: N/A FY 2000: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total				
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			
PRIOR YEARS																								0	0.000		
FY 1997 EQUIPMENT																									0	0.000	
FY 1998 EQUIPMENT																									0	0.000	
FY 1999 EQUIPMENT																									0	0.000	
FY 2000 EQUIPMENT																									0	0.000	
FY 2001 EQUIPMENT																									0	0.000	
FY 2002 EQUIPMENT															3	0.060	2	0.020								5	0.080
FY 2003 EQUIPMENT																	43	0.430	1	0.010						44	0.440
FY 2004 EQUIPMENT																			69	0.705	6	0.061				75	0.766
FY 2005 EQUIPMENT																					80	0.817				80	0.817
TO COMPLETE																					1796	18.350			1796	18.350	

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	15	15	15	0	23	23	24	1882	2000
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	15	15	15	0	23	23	24	1882	2000

P-3A

CLASSIFICATION:

UNCLASSIFIED

Exhibit P-20, Requirements Study				APPROPRIATION/BUDGET ACTIVITY BA2 - Communications Other Procurement Navy and Electronic Equipment			DATE: February 1999	
P-1 ITEM NOMENCLATURE AN/UPM-155 Radar Test Set				Admin Leadtime (after Oct1): 6 MONTHS			Prod Leadtime : 18 MONTHS	
	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 Position	421	421	429	429	429	429	429	429
Deliveries from all prior year funding		8						
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	421	429	429	429	429	429	429	429
Inventory Objective or Current Authorized Allowance	453	453	453	453	453	453	453	453
Inventory Objective 453	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)		Vehicles Eligible for FY 2000 Replacement:		Aircraft: TOAI:	
Assets Rqd For Combat Loads:	FY 1998 thru XXXXX:	FY 1998 thru XXXXX:	FY 1998 thru XXXXX:		Vehicles Eligible for FY 2001 Replacement:		PAA: TAI	
WRM Rqmt:	FY 1997:	FY 1997:	FY 1997:		Vehicle Augment:		Attrition Res:	
Pipeline:	FY 1996:	FY 1996:	FY 1996:				BAI	
Other:	FY 1995:	FY 1995:	FY 1995:				Inactive Inv:	
TOTAL:							Storage:	
Remarks:								

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 1999																								
APPROPRIATION/BUDGET ACTIVITY			BA2 - Communications and Electronics Equipment			Weapon System			P-1 ITEM NOMENCLATURE IDENTIFICATION SYSTEMS 42MT																					
OTHER PROCUREMENT, NAVY						Production Rate			Procurement Leadtimes																					
Item	Manufacturer's Name and Location					MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																
AN/UPM-155 Radar Test Set	NAVCOM Defense Electronics El Monte, CA					1	20	60	12	9	22	18	26	Months																
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 1998												B A L												
						CALENDAR YEAR 1998																								
						CALENDAR YEAR 1999																								
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
AN/UPM-155 RTS NAVCOM OPN	96	N	6	0	6														6										0	
AN/UPM-155 RTS NAVCOM OPN	97	N	8	0	8							A							8										0	
AN/UPM-155 RTS NAVCOM SCN	95	N	1	0	1														1										0	
AN/UPM-155 RTS NAVCOM SCN	96	N	1	0	1														1										0	
AN/UPM-155 RTS NAVCOM SCN	97	N	4	0	4														4										0	
AN/UPM-155 RTS NAVCOM FMS			1	0	1														1										0	
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2000												B A L												
						CALENDAR YEAR 2000																								
						CALENDAR YEAR 2001																								
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
Remarks:																														

BUDGET ITEM JUSTIFICATION SHEET

DATE February 1999

APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE			SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								ID SYSTEMS-SABER BLI 2851			52MT	
	PY		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY												
COST (in millions)				\$1.0	\$4.2	\$4.3	\$4.7	\$3.3	\$3.4	\$3.4	Continuing	Continuing

PROGRAM COVERAGE: FY99 funding procures 32 SABER units and 1 Command and Control Terminal. This is a new start procurement in FY99.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: The Situational Awareness Beacon with Reply (SABER) system provides critical battlefield/operating area situational awareness and friendly ID capabilities by uniting GPS and communications technologies. The SABER system consists of a GPS receiver and two-way radio capable of Over-The-Horizon (OTH) and Line-Of-Sight (LOS) secure and no secure communications, plus a Collection of Broadcast From Remote Assets (COBRA) transmitter. The GPS receiver provides an accurate position of the user which is broadcast over the various RF links for reception by other SABER beacons. When a correctly encoded interrogation signal is received by the SABER, it transmits a reply via the radio of the users identification, position, heading, and speed. The interrogating system can be any member of the user's command and control structure. Additionally, SABER-equipped units who are preparing to launch an attack will send an intent-to-shoot LOS transmission indicating the target position and a kill radius. All SABER units on the network will compare the area with their own position. If an overlap exists, a "Don't Shoot" reply is sent to prevent fratricide. Three basic configurations will be developed and produced: self-contained (for amphibious forces and ground forces); integrated with NAVSSI (for ships so equipped); integrated with CDNU (in aircraft so equipped).

IDENT CODE: B

**UNCLASSIFIED
CLASSIFICATION**

COST ANALYSIS														DATE									
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT														P-1 ITEM NOMENCLATURE ID SYSTEMS-SABER BLI 2851					SUBHEAD 52MT				
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS																				
			FY 1998			FY 1999			FY 2000			FY 1998			FY 1999			FY 2000					
			QTY	TOTAL COST	QTY			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST							
MT001	Production Support	B											80			163							
MT002	SABER										32	27.7	887	164	21.5	3,526							
MT003	Command Control Terminals										1	55.0	55	2	47.0	94							
MT777	Installation												0			395							
TOTAL CONTROL				0						0			1,022			4,178							
Remarks: Each terminal requires one beacon																							

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY											C. P-1 ITEM NOMENCLATURE		SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT											ID SYSTEMS-SABER BLI 2851		52MT
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
MT002	SABER	99 00	Competitive Competitive	FFP FFPO	SPAWAR SPAWAR	See Remarks	Mar. 99 Nov-99	Nov. 99 Jul-00	32 164	28 22	Yes Yes		
MT003	Command Control Terminals	99 00	Competitive Competitive	FFP FFPO	SPAWAR SPAWAR	See Remarks	Mar. 99 Oct-99	Nov. 99 Dec-00	1 2	55 47	Yes Yes		
D. REMARKS: All ELEMENTS OF COST are included in a single contract awarded competitively. Basic Contract includes priced options. Options will be exercised when funds are available. No RFP's will be issued.													

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: FEBRUARY 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							P-1 ITEM NOMENCLATURE SURFACE IDENTIFICATON SYSTEMS NARM # 285600					
Program Element for Code B Items:							Other Related Program Elements Not Applicable					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	\$13.1	A	\$0.0	\$5.3	\$0.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0		
<p>DESCRIPTION:</p> <p>Surface Identification Systems fund procurement of the AN/SLQ-20 upgrade to improve the capability of the AN/SLQ-20A, Auto-ID prototype upgrades and the installation of Shipboard Advanced Radar Target Identification System (SARTIS) AN/UPX-34 radar track discriminator ruggedized prototypes.</p> <p>The AN/SLQ-20 upgrade improves the capability of the Vietnam-era AN/SLQ-20A System for AEGIS class ships. SARTIS is Non-Cooperative Target Recognition (NCTR) System for AEGIS class cruisers.</p> <p>FY 1999 provides funding to: procure four (4) AN/SLQ-20 System upgrades and install three (3) previously procured units.</p> <p>FY 2000 provides funding to: install eight (8) previously procured units.</p> <p>Installing Agent: Alternation Installation Team (AIT) When Installation to be made: N/A Ships or facilities to receive the equipment: CG-47 Class, DDG-51 Class, and CV/CVN Class</p>												

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a							DATE: FEBRUARY 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							P-1 ITEM NOMENCLATURE SURFACE IDENTIFICATION SYSTEMS					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
DB011 AN/SLQ-20	A											
QTY		7		4								11
FUNDING		\$10,920		\$4,775								\$15,695
* OTHER COSTS		\$2,137		\$481	\$590							
TOTAL		\$13,057		\$5,256	\$590							
* The amount identified against this cost element reflects total prior years funding associated with cost elements no longer financed in FY 1998 and beyond.												

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5				Weapon System				DATE: FEBRUARY 1999									
APPROPRIATION /BUDGET ACTIVITY Other Procurement, Navy				ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD Surface Identification Systems 42DB												
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS														
			Prior Years	FY 1998			FY 1999			FY 2000							
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost		
DB010	AN/UPX-34 SARTIS	A	24														
DB011	AN/SLQ-20 UPGRADE NOTE: 1	A	10,920				4	1,194	4,775								
DB013	AUTO-ID UPGRADE	A	1,100														
DB800	INTEGRATED LOGISTICS SUPPORT	N/A	261														
DB830	PRODUCTION ENGINEERING	N/A	288														
DB840	QUALITY ASSURANCE	N/A	53														
DB860	ACCEPTANCE, TEST & EVALUATION	N/A															
DB900	INSTALLATION (NON-FMP)	N/A															29
DB910	INSTALLATION (FMP)	N/A	411														561
	NOTE: 1 - Related RDT&E Elements W0676 Improved ID Developments																
			13,057				0			5,256							590

UNCLASSIFIED

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CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE FEBRUARY 1999			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2 Communications and Electronics Equipment					C. P-1 ITEM NOMENCLATURE Surface Identification Systems					SUBHEAD 42DB	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
DB011 AN/SLQ-20 EW SYSTEM UPGRADE											
FY95	2	2,061.0	SPAWARSYSCEN San Diego, CA	12/96	C/FP	SPAWARSYSCEN San Diego, CA	05/97	11/98			
FY96	5	1,359.6	SPAWARSYSCEN San Diego, CA	12/96	C/OPTION	SPAWARSYSCEN San Diego, CA	05/97	01/99			
FY99	4	1,193.8	SPAWARSYSCEN San Diego, CA	08/98	C/OPTION	SPAWARSYSCEN San Diego, CA	03/99	06/00	YES		
D. REMARKS											

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SURFACE ID TYPE MODIFICATION: UPGRADE MODIFICATION TITLE: AN/SLQ-20 UPGRADE - DB011

DESCRIPTION/JUSTIFICATION:

Upgrade improves the capacity of the Vietnam-era AN/SLQ-20A EW System for AEGIS class ships.

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	\$		
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E	2	10.930																			2	10.930
PROCUREMENT																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	7	8.225			4	4.775															11	13.000
EQUIPMENT NONRECURRING		2.695																				2.695
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST	0	0.035			3	0.209	8	0.590														0.834
TOTAL PROCUREMENT	7	10.955				4.984		0.590													11	16.529

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: **SURFACE ID** MODIFICATION TITLE: AN/SLQ-20 UPGRADE - DB011

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **AIT**

ADMINISTRATIVE LEADTIME: 5 Months

PRODUCTION LEADTIME: 15 Months

CONTRACT DATES: FY 1999: 3/99

FY 2000: N/A

DELIVERY DATE: FY 1999: 6/00

FY 2000: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	AP	0.035					3	0.209	4	0.267													7	0.511
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT									4	0.323													4	0.323
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
FY 2005 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	0	1	1	1	2	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11			
Out	0	0	1	1	1	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11				

P-3A

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40						DATE: February 1999						
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-2-Communications and Electronics Equipment						P-1 ITEM NOMENCLATURE Tactical Automated Mission Planning System(TAMPS)						
Program Element for Code B Items:						Other Related Program 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												
COST (In Millions)	64.1	A	\$15.3	\$23.5	\$20.8	\$15.5	\$19.1	\$13.6	\$13.3	\$14.3	CONT	CONT
<p><u>Tactical Automated Mission Planning System (TAMPS)</u> This line item provides funding to procure TAMPS for USN/USNR/USMC/USMCR. Program cost is not directly related to FY hardware quantity; software is a major cost factor independent of FY hardware quantity and cost. Installations are planned for aviation capable ships, air stations, aviation training/support facilities and deployed aviation units. It be funded in this line include:</p> <p>Work Station Components - TAMPS procures tactical computer hardware through the non-developmental item acquisition strategy. Tactical computer equipment is used to plan and analyze aircraft routes under various mission configurations and operational threat environments. Primary output is route plans for mission execution. New workstations consist of the components to make a complete workstation.</p> <p>Production Support Services - Cost element includes production support services, engineering support services, independent verification and validation test and acceptance, site activation, quality assurance efforts, etc.</p> <p>Software Releases - TAMPS produces software releases via an evolutionary acquisition process. These releases contain enhancements based on fleet inputs and emerging technology. They also contain changes required to retain compatibility with supported platforms, associated weapons, and threat and imagery data bases providing input to TAMPS. Software releases are independent of hardware buys.</p> <p>The hardware mix accomodates migration to Global Command and Control System (GCCS)/Defense Information Infrastructure - Common Operating Environment (DII-COE) based environment. PMA-233 will provide installed Mission Planning hardware, servers and planning stations , on a 3 year replacement cycle.</p> <p>* FY96 and prior funding was budgeted under the BA-3 Other Aviation Support Equipment program. Starting in FY97, TAMPS became its own line item under BA-2.</p>												

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a							DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-2-Communications and Electronics Equip							P-1 ITEM NOMENCLATURE Tactical Automated Mission Planning System(TAMPS)					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
New Workstations	A											
Quantity		318										318
Funding		18.5										18.5
Enterprise Server	A											
Quantity			8	10	10	5	10	12	10	5	Cont	Cont
Funding			2.0	2.5	2.5	1.3	2.6	3.2	2.7	1.4	Cont	Cont
Local Server	A											
Quantity			40	80	45	45	88	44	158	88	Cont	Cont
Funding			2.0	4.1	2.3	2.4	1.1	0.5	2.0	1.1	Cont	Cont
Unit Level System	A											
Quantity			175	475	850	327	792	536	342	929	Cont	Cont
Funding			0.9	2.4	4.4	1.7	4.2	2.9	1.9	5.3	Cont	Cont
Force Level System	A											
Quantity			4	50	25	30	64	108	56	64	Cont	Cont
Funding			0.2	2.2	1.1	0.4	0.8	1.3	0.7	0.8	Cont	Cont
Trusted System	A											
Quantity			15	30	15	25	30	15	25	30	Cont	Cont
Funding			0.8	1.5	0.8	1.3	0.4	0.2	0.3	0.4	Cont	Cont
Other Costs		45.6	9.4	10.9	9.6	8.4	10.0	5.4	5.7	5.3	Cont	Cont
Total P-1 Funding	**	64.1	15.3	23.5	20.8	15.5	19.1	13.6	13.3	14.3	CONT	CONT

** Numbers may not add due to rounding.

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System Various						DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2-Communications and Electronics Equipment						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Tactical Automated Mission Planning System(TAMPS) / Y2S7									
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years*	FY 1998			FY 1999			FY 2000						
				Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
S7400	New Workstations	A	18,479													
S7401	Enterprise Server	A		8	245	1,960	10	249	2,489	10	253	2,532				
S7402	Local Server	A		40	50	2,000	80	51	4,064	45	52	2,325				
S7403	Unit Level System	A		175	5	875	475	5	2,413	850	5	4,391				
S7406	Force Level System	A		4	43	172	50	44	2,184	25	44	1,111				
S7407	Trusted System	A		15	50	750	30	51	1,524	15	52	775				
S7410	Software Release	A	33,494			4,371			4,722			5,380				
S7430	Production Support		10,823			4,715			4,020			2,929				
S7900	Non-FMP Installation		1,249			437			1,739			950				
S7910	FMP-Installation								374			376				
			* FY96 and prior funding is budgeted under the BA-3 Other Aviation Support Equipment program. Starting in FY97, TAMPS became its own line item under BA-2.													
TOTALS:			64,045	242		15,280	645		23,529	945		20,769				

CLASSIFICATION:

UNCLASSIFIED

B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE			A. DATE		
Other Procurement, Navy					Tactical Automated Mission Planning System(TAMPS)			February 1999		
BA-2-Communications and Electronics Equipment								SUBHEAD		
								Y2S7		
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>FY98</u>			NAVAIR CAD2	N/A	C/FFP	Cordant, Inc., Reston,VA Intergraph Corp. Huntsville, AL	01/98	04/98	N/A	N/A
Enterprise Server	8	245.0								
Local Server	40	50.0								
Unit Level System	175	5.0								
Force Level System	4	43.0								
Trusted System	15	50.0								
<u>FY99</u>			NAVAIR CAD2	N/A	C/FFP	Cordant, Inc., Reston,VA Intergraph Corp. Huntsville, AL	01/99	04/99	N/A	N/A
Enterprise Server	10	248.9								
Local Server	80	50.8								
Unit Level System	475	5.1								
Force Level System	50	43.7								
Trusted System	30	50.8								
D. REMARKS										

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System Various		A. DATE February 1999			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2-Communications and Electronics Equipment					C. P-1 ITEM NOMENCLATURE Tactical Automated Mission Planning System(TAMPS)				SUBHEAD Y2S7	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY00			NAVAIR CAD2	N/A	C/FFP	TBD	01/00	04/00	N/A	N/A
Enterprise Server	10	253.2								
Local Server	45	51.7								
Unit Level System	850	5.2								
Force Level System	25	44.4								
Trusted System	15	51.7								
D. REMARKS										

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION																							
Aviation Capable Ships, Air Stations, Aviation Units, Aviation Training/ Support Facilities																							
MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION <u>N/A</u> MODIFICATION TITLE: Tactical Automated Mission Planning System(TAMPS)																							
DESCRIPTION/JUSTIFICATION:																							
TAMPS provides USN and USMC planners a common automated system for rapidly processing large quantities of digitized terrain, threat and environmental data, and aircraft and weapon system parameters.																							
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: <u>TAMPS is post milestone III</u>																							
N/A																							
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	\$		
FINANCIAL PLAN (IN MILLIONS)																							
RDT&E 0604231N		7.7		5.9		13.1		11.2		14.2		10.9		11.5		12.1		12.4		CONT		CONT	
PROCUREMENT																							
HARDWARE																							
NEW	318	18.5																			383	22.2	
UPGRADE																							
ENTERPRISE SERVER																							
Initial Issue		8	2.0	10	2.5	10	2.5	5	1.3	2	0.5	2	0.5							53	14.2	90	32.4
Replacement										8	2.1	10	2.7	10	2.7	5	1.4			CONT	CONT	CONT	CONT
LOCAL SERVER																							
Initial Issue		40	2.0	80	4.1	6	0.3	5	0.3	8	0.1			113	1.4					38	0.5	290	16.0
Replacement						39	2.0	40	2.1	80	1.0	44	0.5	45	0.6	88	1.1			CONT	CONT	CONT	CONT
UNIT LEVEL SYSTEM																							
Initial Issue		175	0.9	475	2.4	850	4.4	152	0.8	339	1.8			15	0.1	137	0.8	610	3.3			2753	27.0
Replacement								175	0.9	453	2.4	536	2.9	327	1.8	792	4.5			CONT	CONT	CONT	CONT
FORCE LEVEL SYSTEM																							
Initial Issue		4	0.2	50	2.2	25	1.1	26	0.3	44	0.5	27	0.3	26	0.3					80	1.0	282	8.3
Replacement								4		20	0.2	81	1.0	30	0.4	64	0.8			CONT	CONT	CONT	CONT
TRUSTED SYSTEM																							
Initial Issue		15	0.7	30	1.5	15	0.8	10	0.5													70	5.6
Replacement								15	0.8	30	0.4	15	0.2	25	0.3	30	0.4			CONT	CONT	CONT	CONT
SOFTWARE																							
PRODUCTION SUPPORT		33.3		4.4		4.7		5.4		4.8		5.4		3.0		2.9				CONT	CONT	CONT	CONT
INSTALL COST		1.5		0.4		2.1		1.3		0.8		0.8		0.8		0.8				CONT	CONT	CONT	CONT
TOTAL PROCUREMENT		64.1		15.3		23.5		20.8		15.5		19.1		13.6		13.3				CONT	CONT	CONT	CONT

CLASSIFICATION: UNCLASSIFIED

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

MODELS OF SYSTEMS AFFECTED: **Aviation Capable Ships, Air Stations, Aviation Units, Aviation Training/Support Facilities** MODIFICATION TITLE: Tactical Automated Mission Planning System (TAMPS)

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: Field Installation Team
 ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: N/A Months
 CONTRACT DATES: FY 1999: Jan-99 FY 2000: Jan-00
 DELIVERY DATE: FY 1999: Apr-99 FY 2000: Apr-00

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	253	0.9																						253	0.9
FY 1997 EQUIPMENT (65)			65	0.3																				65	0.3
FY 1998 EQUIPMENT (242)					242	0.4																		242	0.4
FY 1999 EQUIPMENT (645)							645	2.1																645	2.1
FY 2000 EQUIPMENT (945)									945	1.3														945	1.3
FY 2001 EQUIPMENT (432)											432	0.8												432	0.8
FY 2002 EQUIPMENT (984)													984	0.8										984	0.8
FY 2003 EQUIPMENT (715)														715	0.8									715	0.8
FY 2004 EQUIPMENT (591)																591	0.8							591	0.8
FY 2005 EQUIPMENT (1,116)																		1116	0.9					1116	0.9
TO COMPLETE																							CONT	CONT	
																							CONT	CONT	
																									Total 5988

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	560		645			945			432			984			715			591			1116					5988					
Out	560		323	322		473	472		216	216		492	492		358	357		296	295		558	558			5988						

P-3A

BUDGET ITEM JUSTIFICATION SHEET										DATE			
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT										P-1 ITEM NOMENCLATURE GCCS-M Ashore (LI #2804)		SUBHEAD 52JH	
	PY	FY97	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL	
QUANTITY													
COST (in millions)			3.3*	4.5*	\$9.4	\$10.3	\$11.9	\$12.3	\$12.4	\$16.0	Continuing	Continuing	
<p>PROGRAM COVERAGE: This program consolidates OPN P-1 Line Items; JMCIS OED (BLI 2805) and GCCS Equipment (BLI 3350) beginning in FY00. PY through FY99 detail information is provided for budget comparability.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: The Global Command and Control System - Maritime Ashore program (formerly JMCIS Ashore) (formerly included in LI 2906, NCCS Ashore) provides evolutionary systems and ancillary equipment upgrades to support the CNO, Fleet Commanders in Chief, Unified Commanders, Type Commanders, Force Anti-Submarine Warfare (ASW) Commander, and Submarine Operating Authorities worldwide. The Command and Control (C2) services provides a single system to receive, process, display, maintain and/or assess the unit characteristics, employment scheduling, material condition, combat readiness, warfighting capabilities, positional information and disposition of own and Allied forces, and to optimize the allocation of those resources. GCCS-M Ashore will provide current geolocational information on hostile land, sea and air forces integrated with environmental and other nationally derived information. GCCS-M Ashore will provide the tools necessary for operational commanders to execute plans, and to transmit tasking and tactical information to forces. The Joint Maritime Command Information System (JMCIS) OSIS Baseline Upgrade (OBU) Evolutionary Development (OED) program (previously OBU and included in LI 2906 NCCS Ashore) provides evolutionary systems and ancillary equipment upgrades to support three Joint Intelligence Centers (JIC), one JIC Detachment, one Training Center and one Software Support Activity. JMCIS OED provides for the analysis of multi-source intelligence to produce comprehensive reports of foreign forces and potential hostile activity. It also provides near-real-time all-source fusion, correlation and analysis tools, directly feeding automated reporting capabilities. JMCIS OED maintains characteristics and performance data on weapons platforms, collecting non-organic data from ashore and afloat sensors, and developing an all-source tactical picture. This data is disseminated to the operating forces for tactical threat warnings, decision making support, and support of Over-the-Horizon-Targeting. This line item contains equipment to support the Global Command and Control System (GCCS). GCCS is an operational multi-service/agency C3 program encompassing both strategic and tactical C3 functions. GCCS supports the National Command Authority and the CINCs by providing C3 data processing capabilities, including status of forces and support requirements for use in national security decision making, force preparation and operational planning execution. The Navy's procurement provides equipment to support the GCCS Automated Data Processing Equipment configuration.</p> <p>JH031. GCCS-M Ashore . Provides the Navy Command Center and Fleet, Unified and TYCOM Command Centers with a common C3I capability. Incorporated the former Navy WWMCCS Software Standardization functionality and migrated/consolidated the functionality from component systems into a new environment using iterative hardware/software releases. GCCS-M Ashore implements incremental changes in an evolutionary manner using modular segments as operational requirements dictate and as funding and technology allow. Hardware suites to support GCCS-M Ashore follow an IT-21 compatible client/server design implementing LAN and WAN architecture, serial and parallel processors, communications and database servers. GCCS-M Ashore also offers distributed briefing capabilities among commands using video and large screen displays.</p> <p>JH011. JMCIS OED Upgrade. Ocean Surveillance Information System Baseline Upgrade (OBU) provides for the analysis of intelligence information from multiple sources to produce a comprehensive report of activities. OBU provides positional data and operational intelligence to commanders at all levels.</p> <p>JH036. Navy GCCS. All procurements will directly support Navy GCCS and is in accordance with Joint Staff direction. GCCS consists of standard hardware, standard software, and service/site unique software. GCCS is an open systems client-server environment using COTS and NDI software and hardware and service/site unique software. Procurements will include Intelligent Workstations to replace obsolete terminals, Servers, Local Area Network (LAN) hardware and software and communications equipment.</p>													

PROGRAM COVERAGE:

JH776. Installation of Equipments. Provides for installation of equipments at the shore sites listed below.

The FY 00 Budget Request Procures: 1. GCCS-M Ashore Command Center Equipment; GCCS-M OED upgrades; Intelligent Workstations, Servers LAN hardware and software, communications equipment
2. Installation of Equipment.

INSTALLATION DATA: NCCS Shore equipment installation sites include the Navy Command Center Pentagon, USCINCPAC, CINCLANTFLT, CINCPACFLT, CINCUSNAVEUR (London UK and Naples IT); Software Support Activity SSC San Diego, CA; 2 Training sites at Fleet Computer Training Center sites at Dam Neck VA, and San Diego CA; 7 Submarine Operating Command Center sites at (SUBLANT) Norfolk, Va; (SUBGRU8) Naples, Italy; (SUBPAC) Pearl Harbor, HI; and (SUBGRU7)Yokosuka, Japan; COMSUBGRU 9 Bangor Washington; COMSUBGRU 10 Kings Bay, Georgia; COMSUBLANT REP UK, Northwood UK; 4 ASW Command Center sites at (CTF84) Norfolk, VA; (CTF67) Naples, Italy; (CTF12) Makalapa, HI; and (CTF72) Kamiseya, Japan; TYCOM Command Center sites, (SUBLANT), (SURFLANT), and (AIRLANT) at Norfolk, Va; (SUBPAC) at Pearl Harbor, HI; (SURFPAC), and (AIRPAC) at San Diego, CA: and Integrated Underwater Surveillance System (IUSS) Command Center sites at CINCPACFLT, Makalapa, HI; CINCLANTFLT, and COMUNDERSEASURV at Norfolk, VA; NAVOCEANPROFACs at Whidbey Island, WA; and Dam Neck, VA; JOINT MARITIME FACILITY at St. Mawgans, UK and CANADIAN FORCES IUSS CENTER at Halifax, NS and GCCS collocated/remote sites.. JMCIS OED equipment installation sites include ONI, JICPAC, JICPAC DETACHMENT, AIC, NMITC, and JAC MOLESWORTH. All GCCS equipment is scheduled for installation at Navy supported shore sites, USACOM (5), USPACOM, FCTCLANT, NAVCENTCOM, US FORCES JAPAN and COMNAVSPACECOM.

**UNCLASSIFIED
CLASSIFICATION**

COST ANALYSIS													DATE February 1999			
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE GCCS-M Ashore (LI #2804)					SUBHEAD 52JH				
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			PY			FY 1998			FY 1999			FY 2000				
			QTY	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST			
JH031	GCCS-M Ashore	A						VAR	VAR	2,790	VAR	VAR	4,133	VAR	VAR	6,281
JJ011	JMCIS OED	A						VAR	VAR	[750]	VAR	VAR	[306]			
JH011	JMCIS OED													VAR	VAR	441
NW036	GCCS Support Equipment	A						6	N/A	[1133]	11	N/A	[1687]			
JH036	GCCS Support Equipment													10	N/A	1,146
JJ776	Non FMP Install									[30]			[36]			
NW776	Non FMP Install									[648]			[1245]			
JH776	Non FMP Install	A						VAR	VAR	475	VAR	VAR	366	VAR	VAR	1,572
This program consolidates OPN P-1 Line Items: JMCIS OED (BLI 2805) and GCCS Equipment (BLI 3350) beginning in FY00. PY through FY99 detail information is provided for budget comparability.																
TOTAL CONTROL				0			0			3,265			4,499			9,440
Remarks: QTY represents 'sites', not items of equipment																

MODIFICATION TITLE: GCCS-M Ashore
 COST CODE: JH031
 MODELS OF SYSTEMS AFFECTED: N/A
 DESCRIPTION/JUSTIFICATION:

Provides the Fleet Command, Unified Command Centers, and the Navy Command Center with a common C3I capability. Incorporates the former Navy WWMCCS Software Standardization (NWSS) functionality and migrates/consolidates the functionality from component systems into a new environment using iterative hardware/software releases. Offers distributed briefing capabilities among commands using video and large screen displays.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring Equipment					VAR	2.8	VAR	4.1	VAR	6.3	VAR	7.0	VAR	7.8	VAR	8.7	VAR	8.8	VAR	11.8					
Equipment Nonrecurring Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	23	0.5	26	0.4	33	1.2	33	1.2	33	1.3	33	1.3	33	1.3	33	1.8					
PRIOR YR EQUIP																									
FY 97 EQUIP					23	0.5																			
FY 98 EQUIP							26	0.4																	
FY 99 EQUIP									33	1.2															
FY 00 EQUIP											33	1.2													
FY 01 EQUIP													33	1.3											
FY 02 EQUIP															33	1.3									
FY 03 EQUIP																	33	1.3							
FY 04 EQUIP																		33	1.3						
FY 05 EQUIP																			33	1.8					
FY TC EQUIP																									
TOTAL INSTALLATION COST		0.0		0.0		0.5		0.4		1.2		1.2		1.3		1.3		1.3		1.8					
TOTAL PROCUREMENT COST		0.0		0.0		3.3		4.5		7.5		8.2		9.1		10.0		10.1		13.6					

ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 3

CONTRACT DATES: FY 1998: VAR FY 1999: VAR FY 2000: VAR

DELIVERY DATES: FY 1998: VAR FY 1999: VAR FY 2000: VAR

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	23		13	13		16	17			16	17		
OUTPUT	23		13	13		16	17			16	17		

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT			16	17		16	17			16	17				16	17			
OUTPUT			16	17		16	17			16	17				16	17			

Notes/Comments
 **Quantities represent sites

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

JMCIS OED
 JJ011
 N/A

JMCIS OED provides for the analysis of intelligence information from multiple sources to produce a comprehensive report of foreign forces and potential hostile activity. In addition, it provides near-real-time all-source fusion, correlation and analysis tools, directly feeding automated reporting capabilities. JMCIS OED provides positional data and operational intelligence to commanders at all levels.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Development and Operational testing for major system upgrades is scheduled for FY 97 and will be conducted every other year. Each major upgrade/enhancement will undergo formal testing by Operational Test and Evaluation Force (OPTEVFOR).

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment					VAR	[0.75]	VAR	[0.31]	VAR	0.44	VAR	0.46	VAR	0.49	VAR	0.47	VAR	0.47	VAR	0.49	CONT.	CONT.			
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*					[3]	[0.03]	[3]	[0.03]	3	0.03	3	0.03	3	0.03	3	0.03	3	0.03	3	0.04	CONT.	CONT.			
PRIOR YR EQUIP																								0 0.0	
FY 97 EQUIP																								0 0.0	
FY 98 EQUIP					[3]	[0.03]																		0 0.0	
FY 99 EQUIP							[3]	[0.03]																0 0.0	
FY 900 EQUIP									3	0.03														3 0.0	
FY 01 EQUIP											3	0.03												3 0.0	
FY 02 EQUIP													3	0.03										3 0.0	
FY 03 EQUIP															3	0.03								3 0.0	
FY 04 EQUIP																	3	0.03						3 0.0	
FY 05 EQUIP																			3	0.04				3 0.0	
FY TC EQUIP																								3 0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.00		0.00		0.03		0.03		0.03		0.03		0.03		0.04				0.2	
TOTAL PROCUREMENT COST										0.47		0.49		0.52		0.50		0.50		0.53				3.0	

ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 3

CONTRACT DATES: FY 1998: FY 1999: FY 2000: VAR

DELIVERY DATES: FY 1998: FY 1999: FY 2000: VAR

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	3					2	1			1	2		
OUTPUT	3					2	1			1	2		

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL		
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT			2		1		2		1		1		2		2		1		CONT		CONT
OUTPUT			2		1		2		1		1		2		2		1		CONT		CONT

Notes/Comments
 **Quantities represent sites

MODIFICATION TITLE:
COST CODE

Global Command and Control System(GCCS) (52NW) (Non-FMP)
NW036

MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION:

GCCS is an operational multi-service/agency program. GCCS supports the National Command Authority (NCA) and the CINC's by providing Command, Control and Communication (C3) data processing capabilities including status of forces and support requirements for use in security decision making, force preparation and operational planning execution. Equipment is Scheduled for installation at Navy supported GCCS shore sites, NAVCENTCOM, USACOM, CNO, COMUSJAPAN, and CINCUSNAVEUR. Procurements includes intelligent workstations, servers, LAN hardware and software, and communications equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment					[6]	[1.2]	[11]	[1.7]	Var.	1.1	Var.	1.2	Var.	1.7	Var.	1.3	Var.	1.3	Var.	1.4	Var.	CONT.	Var.	CONT.	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*					[6]	[0.6]	[11]	[1.2]	10	0.4	10	0.4	10	0.6	10	0.5	10	0.5	10	0.5	10	0.5	Var.	CONT.	
PRIOR YR EQUIP																							CONT.	CONT.	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP					[6]	[0.6]																	0	0.0	
FY 99 EQUIP							[11]	[1.2]															0	0.0	
FY 00 EQUIP									10	0.4													10	0.4	
FY 01 EQUIP											10	0.4											10	0.4	
FY 02 EQUIP													10	0.6									10	0.6	
FY 03 EQUIP															10	0.5							10	0.5	
FY 04 EQUIP																	10	0.5					10	0.5	
FY 05 EQUIP																			10	0.5			10	0.5	
FY TC EQUIP																							Var.	CONT.	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.4		0.4		0.6		0.5		0.5		0.5		0.5		CONT.	
TOTAL PROCUREMENT COST										1.5		1.6		2.3		1.8		1.8		1.9			CONT.	CONT.	

ADMINISTRATIVE LEADTIME: 1

PROCUREMENT LEADTIME: 2

CONTRACT DATES:

FY 1998:

FY 1999:

FY 2000:

Var.

DELIVERY DATES:

FY 1998:

FY 1999:

FY 2000:

Var.

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT					4	6			4	6		
OUTPUT					3	4	3		3	4	3	

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		4	6		4	6			4	6			4	6			CONT.	CONT.
OUTPUT		3	4	3	3	4	3		3	4	3		3	4	3		CONT.	CONT.

Notes/Comments

**Quantities represent sites

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET

DATE February 1999

APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE			SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								JMCIS OED (LI# 2805)			52JJ	
	PY	FY97	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY												
COST (in millions)			\$0.8	\$0.3								

NOTE: JMCIS OED (2805) transfers to the GCCS-M Ashore program (2804) in FY00. Detailed budget justification material for FY98 and FY99 is included in the GCCS-M Ashore program for budget comparability.

PROGRAM COVERAGE: The Joint Maritime Command Information System (JMCIS) OSIS Baseline Upgrade (OBU) Evolutionary Development (OED) program (previously OSIS Baseline Upgrade (OBU) and included in LI 2906 NCCS Ashore) provides evolutionary systems and ancillary equipment upgrades to support three Joint Intelligence Centers (JIC), one JIC Detachment, one Training Center and one Software Support Activity. JMCIS OED provides for the analysis of intelligence information from multiple sources to produce a comprehensive report of foreign forces and potential hostile activity. In addition, it provides near-real-time all-source fusion, correlation and analysis tools, directly feeding automated reporting capabilities. JMCIS OED provides positional data and operational intelligence to commanders at all levels. JMCIS OED functions encompass establishing and maintaining characteristics and performance data on weapons platform systems, collecting non-organic data from ashore and afloat sensors, developing an all-source tactical picture, and analyzing intelligence information. The data derived from this process is disseminated as an Operational Intelligence (OPINTEL) product to the operating forces for tactical threat warnings, decision making support, and support of Over-the-Horizon-Targeting.

JJ011. JMCIS OED Upgrade. Ocean Surveillance Information System (OSIS) Baseline Upgrade (OBU) provides for the analysis of intelligence information from multiple sources covering a number of different events to produce a comprehensive report of activities that assesses its significance. OBU provides positional data and operational intelligence to commanders at all levels.

JJ776. Installation of Equipments. Provides for installation of equipments at the shore sites listed below.

The FY 98 Budget Request Procures: 1. JMCIS OED upgrades; 2. Installation of Equipment.
The FY 99 Budget Request Procures: 1. JMCIS OED upgrades; 2. Installation of Equipment.

INSTALLATION DATA: JMCIS OED equipment installation sites include ONI, JICPAC, JICPAC DETACHMENT, AIC, NMITC, and JAC MOLESWORTH

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE TADIXS B 2900			SUBHEAD 52DH	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$4.3	\$12.3	\$6.2	\$5.3						
<p>PROGRAM COVERAGE:</p> <p>Narrative Description/Justification: Commander's Tactical Terminals/Joint Tactical Terminals (CTTs/JTTs) provide designated platforms with the critical capability to receive near-real-time (NRT) contact data reports via Ultra High Frequency (UHF) communications links called Tactical Data Information Exchange Subsystem (TADIXS) B and Tactical Related Applications (TRAP) Data Dissemination System (TDDS) and to receive and transmit tactical intelligence dissemination networks, such as Tactical Information Broadcast Service (TIBS) and Tactical Reconnaissance Intelligence Exchange System (TRIXS). This data provides over-the-horizon targeting (OTH-T) for the targeting and retargeting of missiles, global detection and cueing information from multiple sources to tactical users worldwide, theater information with tracking accuracy of fast moving targets to joint operational users, and direct dedicated links for critical time sensitive surveillance information to battlefield commanders. The CTT, one of the two migration systems identified in the DOD approved Integrated Broadcast Service (IBS) Plan presented to the House Permanent Select Committee on Intelligence (HPSCI), is undergoing in-depth testing and operational assessment by all services. Successful developmental tests have been conducted both in the lab and aboard ship. The JTT, as required by the IBS Plan, will evolve from the CTT and OPTEVFOR will conduct Follow-on Operational Test and Evaluation (FOT&E), if required, on any functional differences between the CTT and JTT. Common IBS Modules (CIBS-M) provide expanded capability for JTT to meet outyear and emergent requirements and allow JTT functionality to be incorporated into other open architecture systems.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: The last year of CTT procurement was FY 97; installs continue through FY 99. FY98 and FY99 funds procure JTTs, ancillary hardware and appropriate production support.</p> <p>INSTALLATION AGENT: SPAWARSYSCEN Charleston and SPAWARSYSCEN San Diego will install systems on Navy surface ships, submarines and Navy Shore stations. Shipboard installations will be accomplished by Alteration Installation Teams (AITs)</p>											

APPROPRIATION ACTIVITY				P-1 ITEM NOMENCLATURE									SUBHEAD			
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT				TADIXS B 2900									52DH			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			PY			FY 1998			FY 1999			FY 2000				
			QTY	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST			
DH400	Production Support	A								1,337			1,050			1,011
DH520	JTT Systems	A						11	260	2,855	41	243	9,976			
DH776	Non FMP Installation Equipment	A														720
DH777	FMP Installation Equipment	F								82			1,300			4,517
TOTAL CONTROL										4,274			12,326			6,248
Remarks:																

PROCUREMENT HISTORY AND PLANNING										A. DATE		
										February 1999		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					SUBHEAD		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					TADIXS B 2900					52DH		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DH520	JTT Systems	97	E-Systems; St. Petersburg, FL	FFP	Army; PM JSTAR		Sep-97	Oct-99	30	338	YES	
		98	E-Systems; St. Petersburg, FL	FFP	Army; PM JSTAR		Apr-98	Mar-00	11	260	YES	
		99	E-Systems; St. Petersburg, FL	FFP	Army; PM JSTAR		Jun-99	Oct-00	41	243	YES	
D. REMARKS												

UNCLASSIFIED

Feb. 1999

MODIFICATION TITLE: TADIXS B 2900
 COST CODE: DH520
 MODELS OF SYSTEMS AFFECTED: Commander's Tactical (CTT)
 DESCRIPTION/JUSTIFICATION: This display includes installation of both shipboard (FMP) and Shore (Non-FMP) equipment.

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	5	3.5	6	2.2																			11	5.7	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	1	0.1	10	0.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11	1.0	
PRIOR YR EQUIP					1	0.1	4	0.4															5	0.5	
FY 97 EQUIP							6	0.5															6	0.5	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.1		0.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.0	
TOTAL PROCUREMENT COST		3.5		2.2		0.1		0.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		6.7	

ADMINISTRATIVE LEADTIME: 8 Mo. PROCUREMENT LEADTIME: 12 mos.

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE: FY 99 FY 00 FY 01

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4

INPUT 1 3 3 3 1

OUTPUT 1 3 3 3 1

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 11

OUTPUT 11

Notes/Comments

Note 2: P-1 Shopping List Item No 92-4 of 92-7

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb. 1999

MODIFICATION TITLE: TADIXS B 2900
 COST CODE: DH520
 MODELS OF SYSTEMS AFFECTED: Joint Tactical Terminals (JTT)
 DESCRIPTION/JUSTIFICATION: Army is the lead service for JTT procurement per OSD direction in PBD77720 dtd 22 Jan 1996. This display includes installation of both shipboard (FMP) and Shore (Non-FMP) equipment. Ancillary equipment being procured in same year as installation.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment	0	0.0	30	10.8	11	2.9	41	10.0																82	23.7	
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	41	3.7	41	4.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	82	8.1
PRIOR YR EQUIP																									0	0.0
FY 97 EQUIP									30	2.7															30	2.7
FY 98 EQUIP									11	1.0															11	1.0
FY 99 EQUIP											41	4.4													41	4.4
FY 00 EQUIP																									0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY 05 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		3.7		4.4		0.0		0.0		0.0		0.0		0.0		0.0		8.1
TOTAL PROCUREMENT COST		0.0		10.8		2.9		10.0		3.7		4.4		0.0		0.0		0.0		0.0		0.0		0.0		31.8

ADMINISTRATIVE LEADTIME: 8 Mo. PROCUREMENT LEADTIME: Note 2

CONTRACT DATES: FY 1998: Apr-98 FY 1999: Jun-99 FY 2000:

DELIVERY DATES: FY 1998: Mar-00 FY 1999: Oct-00 FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 10 10 10 11 10 10 10 11

OUTPUT 10 10 10 11 10 10 10

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 82

OUTPUT 11 82

Notes/Comments

Note 2: P-1 Shopping List Item No 92-5 of 92-7

Basic 25 Months
 1st Option 23 Months
 2nd Option 16 Months

Exhibit P-3a, Individual Modification Program
Unclassified
Classification

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE																				DATE																																							
(DOD EXHIBIT P-21A)																			February 1999																																								
APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE										SUBHEAD NO.																																							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT										TADIXS B										52DH																																							
COST CODE	ITEM/MANUFACTURER	S E R V FY	PRC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98												FISCAL YEAR 99					FISCAL YEAR 00																																				
						PY97			CALENDAR YEAR 98									CALENDAR YEAR 99					CALENDAR YEAR 00																																				
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S																		
C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E																								
DH520	CIT Systems	97	6	6																2	1	3																																					
DH520	JTT Systems	97	30	30																																																							
		98	11	11							A																																																
		99	41	41																																																							

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

APPROPRIATION/BUDGET ACTIVITY OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE TADIXS B		SUBHEAD NO. 52DH		PRODUCTION SCHEDULE																												DATE																																				
																																		February 1999																																				
COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03												L A S T E R																														
				CALENDAR YEAR 01												CALENDAR YEAR 02												CALENDAR YEAR 03																																										
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S																															
DH520	CTT Systems	97	0																																																																			
DH520	JTT Systems	97	0																																																																			
		98	0																																																																			
		99	41	4	4	4	4	4	4	4	4	4	4	4	4	4	1																																																					

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES					Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT			

Claimant: CNO (N09BF) (11)

CLASSIFICATION

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET					DATE Feb-99			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-2				P-1 Nomenclature FY 2000/2001 President's Budget BLI: 2901 NAVAL SPACE SURVEILLANCE SYSTEM (NSSS)				
	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
QUANTITY	Various	Various	Various	Various	Various	Various	Various	Various
COST (in millions)	\$0.0	\$0.0	\$6.6	\$3.2	\$5.4	\$8.6	\$16.0	\$38.4
<p><u>Naval Space Command</u></p> <p>Replacement of the Naval Space surveillance fence to ensure continued operation of the nation's only unalerted space sensor. Aging Components have risked ability to "maintain a constant surveillance." Procurement of computer system hardware and software is necessary to adequately manage catalog growth and handle workload caused by lack of ephemerides (a computerized listing, tracking and prediction of locations of both space junk such as old Soviet orbital objects, failed other national interplanetary probes and current active in use satellites as the volume of space junk increases.)</p>								

Claimant: CNO (N09BF) (11)

CLASSIFICATION

UNCLASSIFIED

PROGRAM COST BREAKDOWN					Date: Feb-99	
Appropriation/Budget Activity			P-1 Nomenclature			
Other Procurement, Navy/BA-2			BLI: 2901 Naval Space Surveillance System (NSSS)			
TOTAL COST IN THOUSANDS OF DOLLARS						
COST	IDENT	FY 1998	FY 1999		FY 2000	
CODE	ELEMENT OF COST	TOTAL	TOTAL		TOTAL	
		COST	QTY	COST	QTY	COST
Naval Space Command (NAVSPACECOM):						
Naval Space Surveillance Fence:						
	C2 Connectivity - Hardware & Software	0		0	var	1,867
	Command Center - Hardware & Software	0		0	var	477
	Processing - Hardware & Software	0		0	var	4,290
	Subtotal, NAVSPACECOM	0		0		6,634
	GRAND TOTAL, NSSS	0		0		6,634

UNCLASSIFIED
CLASSIFICATION

A. DATE

Feb-99

PROCUREMENT HISTORY AND PLANNING

B. APPROPRIATION/BUDGET ACTIVITY			C. P-1 ITEM NOMENCLATURE							SUBHEAD		
OP,N - BA 2 COMMUNICATIONS & ELECTRONIC EQUIPMENT			BLI: 2901 Naval Space Surveillance System (NSSS)									
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
	Naval Space Command (NAVSPACECOM): Naval Space Surveillance Fence:											
	C2 Connectivity - Hardware & Software	00	Unknown	MIPR/WR/*	Unknown	N/A	12/99	1/00	Var	Var		
	Command Center - Hardware & Software	00	Unknown	MIPR/WR/*	Unknown	N/A	12/99	1/00	Var	Var		
	Processing - Hardware & Software	00	Unknown	MIPR/WR/*	Unknown	N/A	12/99	1/00	Var	Var		
D. REMARKS												
* IDIQ & BPA Awarded by various Contracting offices authorized to procure systems for the navy.												

BUDGET ITEM JUSTIFICATION SHEET	DATE February 1999
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APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE GCCS-M Tactical Mobile (#2906)			SUBHEAD 52T4	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$36.7	\$23.9	\$7.1	\$6.1	\$8.1	\$7.0	\$5.7	\$7.7	Continuing	Continuing

Narrative Description/Justification: Through FY97, the Navy Command and Control System (NCCS) Ashore program provided evolutionary systems and ancillary equipment upgrades to support the CNO, Fleet Commanders in Chief, Unified Commanders, and Fleet Ocean Surveillance Information Centers and Facilities, Force Anti-Submarine Warfar (ASW) Commander, Maritime Sector Commanders and Submarine Operating Authorities worldwide. The Command and Control services provided include analysis and correlation of diverse sensor information; data management support, command decision aids; access to rapid data communication, mission planning and evaluation; dissemination of sanitized ocean surveillance positional data and threat alerts to operational users ashore and afloat. Beginning in FY 98, this LI became solely the Joint Maritime Command Information System (JMCIS) Tactical/Mobile (JTM) program. The JMCIS Tactical/Mobile (JTM) Systems include both fixed sites (Tactical Support Centers (TSCs)) and mobile components (Mobile Operations Control Centers (MOCCs), Mobile Ashore Support Terminals (MASTs) and Mobile Integrated Command Facilities (MICFACs)). These centers provide the Navy Component Commander, the Maritime Sector Commander (Ashore), the Theater Commander (Ashore) or the Naval Liaison Element Commander (Ashore) with the capability to plan, direct and control the tactical operations of Joint and Naval Expeditionary Forces and other assigned units within his respective area of responsibility. These operations include littoral and open ocean surveillance, anti-surface warfare, over-the-horizon targeting, counter-drug operations, power projection, antisubmarine warfare, mining, search and rescue, and special operations. All Tactical/Mobile variants include C4I systems (based on the Joint Maritime Command Information System (JMCIS) common architecture) which has evolved to the GCCS-Maritime architecture which includes NT personal computers, and are in compliance with the implementation of the Defense Information Infrastructure (DII) Common Operating Environment (COE). In FY99, the JMCIS Tactical/Mobile (JTM) program was renamed to the Global Command and Control System - Maritime (GCCS-M) Tactical/Mobile. TSC's provide C4I capability, air-ground, satellite and point-to-point communications systems; sensor analysis capabilities; avionics and weapons system interfaces and facilities equipment. MOCC is a rapidly-deployable, self-contained, take-what-you-need C4I system which can be transported in two fleet-configured P-3 aircraft for contingency operations. For example, a MOCC has been deployed to Bosnia for support of P-3 operations and provide an on-site C4I capability. MAST and MICFAC are miniaturized mobile facilities designed to support a theater commander or naval liaison element ashore. MAST provides a deployable (in a C-130 aircraft) basic C4I capability for rapid deployment to remote locations. Support of the Liberian contingency operations is an example. The MICFAC is a robust C4I system deployable (in a C-5 / C-17 class aircraft) that can support a numbered fleet commander's staff ashore. MICFAC Bahrain has acted as the COMUSNAVCENT C4I command center when the hard site was undergoing upgrades. This program assures that existing TSC's, MOCC's, MAST's and MICFAC's remain interoperable with other GCCS-Maritime platforms, Joint, NATO and allied forces. GCCS-M Tactical/Mobile systems leverage other JMCIS '98 systems while following the Copernicus Forward Architecture. TSC/MOCC's will continue to support P-3C/S-3B updates to sensors and weapons systems, such as the Anti-Surface Warfare Improvement Program (AIP).

This budget also includes funds for the MIUW Van Upgrades.

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE GCCS-M Tactical Mobile (#2906)
		SUBHEAD 52T4
<p>Narrative Description/Justification: (continued)</p> <p>T4350. TSC Communications (TCOMM) Replacement. Equipment is site dependent and quantities vary based on equipment condition and configuration. Funds procure replacement point-to-point and tactical Command, Control, Communication, Computers and Intelligence (C4I) Equipment for TSCs and MOCCs when they have reached the end of service life. This line has been combined with T4371 starting in FY-99 because procuring COTS hardware and the rapid advancement in technology and the need to keep abreast of advancements have overtaken the need to have a replacement cost code for this program.</p> <p>T4371. Upgrade Equipment. This line procures various types of TSC C4I Equipment in order to provide a new or an increased capability over the present system and replace the equipment systems when they have reached the end of service life, and assure the existing system remains interoperable with updated aircraft, sensors, and weapons systems.</p> <p>T4500. Mobile Ashore Support Terminal/Mobile Integrated Command Facility (MAST/MICFAC). These miniaturized mobile facilities provide a deployable basic C3 capability (MAST) or deployable complete GCCS-M C4I capability (less special compartmented information elements (MAST/MICFAC) to a theater commander or naval liaison element ashore. These facilities were established and will be upgraded using the evolutionary acquisition approach.</p> <p>T4600. MIUW Van Upgrades. This budget includes funding for the MIUW Van Upgrades.</p> <p>T4776. Installation of Equipments. Provides for installation of equipments at the shore sites listed below.</p> <p>The FY98 Budget Request Procures: 1. TSC Communication Replacement equipment; 2. TSC Upgrade Equipment; 3. MAST/MICFAC Equipment; and 4. Installation of Equipment. The FY99 Budget Request Procures: 1. TSC Upgrade Equipment; 2. MAST/MICFAC Equipment; and 3. Installation of Equipment. The FY00 Budget Request Procures: 1. TSC Upgrade Equipment; 2. MAST/MICFAC Equipment; and 3. Installation of Equipment.</p> <p>INSTALLATION DATA: 16 TSC systems (15 in FY 99) at 14 operational sites (13 in FY99) (located at Keflavik, Iceland; Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Rota, Spain; Barbers Point/Kaneohe, HI; Whidbey Island, WA; Kadena, Japan; Misawa, Japan; Cecil Field, FL (consolidates with Jacksonville in FY 99); North Island, CA; Diego Garcia, Indian Ocean; Roosevelt Roads, Puerto Rico, and Masirah, Oman); 1 training site at Fleet Combat Training Center (FCTC) Dam Neck, Va and 1 ISEA site at SSC CHARLESTON DET Patuxent River; 8 MOCCs (Homeported at Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Barbers Point/Kaneohe, HI; Misawa, Japan; Whidbey Island, WA; Willow Grove, PA; and Point Mugu, CA.; C2 Engineering Development, Software Support Facility (SSC CHARLESTON).</p>		

**UNCLASSIFIED
CLASSIFICATION**

COST ANALYSIS													DATE February 1999						
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE GCCS-M Tactical Mobile (#2906)					SUBHEAD 52T4							
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS																
			PY				FY 1998			FY 1999			FY 2000						
			QTY	TOTAL COST			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST				
T4350	TCOMM Replacements	A								1,440						0			0
T4371	Upgrade Equipment TSC	A								566						2,023			6,072
T4500	MAST/MICFAC	A								567						568			351
T4600	MIUW Van Upgrades	A								33,061						19,917			0
T4776	Non FMP Install	A								1,040						1,374			654
TOTAL CONTROL										36,674						23,882			7,077
Remarks: T4371-FY00 change in POM to meet IT21 upgrades for TSC/MOCC.																			

MODIFICATION TITLE: **GCCS-M Tactical Mobile (#2906)**

COST CODE: T4371

MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: Tactical Support Centers are nodes of the NCCS Ashore, with fixed sites and mobile components (MOCCs) that provide the Maritime Sector Commander with the capability to plan, direct and control the tactical operations of joint and Naval Expeditionary Forces and other assigned units within his respective area of responsibility. These operations include littoral and open ocean surveillance, anti-surface warfare, over-the-horizon targeting, counter-drug operations, power projection, antisubmarine warfare, mining, search and rescue and special operations. This subhead contains TSC C4I systems (based on the GCCS-M common architecture) and air-ground, satellite and point-to-point communications systems. The MOCCs are rapidly-deployable, self-contained, take-what-you-need C4I systems which can be transported in two fleet-configured P-3 aircraft for contingency operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity	CANNOT BE DEFINED																								
Installation Kits																									
Installation Kits Nonrecurring Equipment			VAR	0.5	VAR	0.6	VAR	2.0	VAR	6.1	VAR	4.3	VAR	5.1	VAR	3.4	VAR	2.8	VAR	4.3	CONT	CONT	VAR	29.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	7	0.3	16	0.4	8	0.4	9	1.1	4	0.6	4	1.4	3	1.3	15	2.9	8	0.5	10	1.4	CONT	CONT	84	10.3	
PRIOR YR EQUIP	7	0.3																						7	0.3
FY 97 EQUIP			16	0.4																				16	0.4
FY 98 EQUIP					8	0.4																		8	0.4
FY 99 EQUIP							9	1.1																9	1.1
FY 00 EQUIP									4	0.6														7	1.9
FY 01 EQUIP											3	1.3												4	1.4
FY 02 EQUIP											1	0.1	3	1.3										5	2.2
FY 03 EQUIP															5	2.2								10	0.7
FY 04 EQUIP																	8	0.5						8	0.5
FY 05 EQUIP																			10	1.4				10	1.4
FY TC EQUIP																					CONT	CONT	CONT	CONT	
TOTAL INSTALLATION COST		0.3		0.4		0.4		1.1		0.6		1.4		1.3		2.9		0.5		1.4		CONT	CONT	10.3	
TOTAL PROCUREMENT COST		0.3		0.9		1.0		3.1		6.7		5.7		6.4		6.3		3.3		5.7		CONT	CONT	39.4	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: VAR

PROCUREMENT LEADTIME: VAR

CONTRACT DATES:

FY 1998: VAR FY 1999: VAR FY 2000: VAR

DELIVERY DATES:

FY 1998: VAR FY 1999: VAR FY 2000: VAR

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	31	8	1			2	2		1	2	1	
OUTPUT	31	2	6	1			2	2		1	2	1

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	1	1	1		2	5	5	3	1	4	3		2	5	3		CONT	84
OUTPUT		1	1	1	4	6	5		1	4	3		2	5	3		CONT	84

Notes/Comments

* P5 contains VAR quantities of equipment procured; P-3A contains "Shore Sites installed" as measures of quantity.

* Equipment cost includes initial training.

MODIFICATION TITLE: GCCS-M Tactical Mobile (#2906)

COST CODE: T4500

MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: Provide a deployable basic C3 capability (MAST) or deployable complete GCCS-M C4I capability (MICFAC) to a theater commander or naval liaison element ashore.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total				
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			
RDT&E																											
PROCUREMENT:																											
Kit Quantity																											
Installation Kits																											
Installation Kits Nonrecurring																											
Equipment																											
Equipment Nonrecurring																											
Engineering Change Orders																											
Data																											
Training Equipment																											
Support Equipment																											
Other																											
Interm Contractor Support																											
Installation of Hardware*	0	0.0	0	0.0	2	0.3	4	0.3	1	0.1	1	0.1	1	0.1	2	0.3	5	0.3	4	0.3	CONT	CONT	20	1.8			
PRIOR YR EQUIP																											
FY 97 EQUIP																									0	0.0	
FY 98 EQUIP					2	0.3																			0	0.0	
FY 99 EQUIP							4	0.3																	2	0.3	
FY 00 EQUIP									1	0.1															4	0.3	
FY 01 EQUIP											1	0.1													1	0.1	
FY 02 EQUIP													1	0.1											1	0.1	
FY 03 EQUIP															2	0.3									2	0.3	
FY 04 EQUIP																	5	0.3							5	0.3	
FY 05 EQUIP																			4	0.3					4	0.3	
FY TC EQUIP																						CONT	CONT	CONT	CONT		
TOTAL INSTALLATION COST		0.0		0.0		0.3		0.3		0.1		0.1		0.1		0.3		0.3		0.3		0.3		CONT	CONT	1.8	
TOTAL PROCUREMENT COST		1.6		0.7		0.9		0.9		0.5		0.5		1.7		0.7		2.4		2.0		CONT	CONT	CONT	CONT	11.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: VAR PROCUREMENT LEADTIME: VAR

CONTRACT DATES: FY 1998: VAR FY 1999: VAR FY 2000: VAR

DELIVERY DATES: FY 1998: VAR FY 1999: VAR FY 2000: VAR

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 2 2 2 1 1

OUTPUT 2 2 2 1 1

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 1 1 1 2 3 1 2 1 TBD 20

OUTPUT 1 1 1 2 3 1 2 1 TBD 20

Notes/Comments

* P5 contains VAR quantities of equipment procured; P-3A contains "Shore Sites installed" as measures of quantity.

* Equipment cost includes initial training.

P-1 Shopping List-Item No 94-5 of 94-7

Exhibit P-3a, Individual Modification Program

MODIFICATION TITLE: Mobile Inshore Undersea Warfare (MIUW-SU) SUBHEAD/COSTCODE:52T4/T4600

COST CODE T4600

MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: The MIUW-SU provides deployable elements to conduct surface and subsurface surveillance of inshore areas, provide C4I support to deployed operational commanders within inshore areas, and to provide crisis response support to special operations, counter-drug, maritime prepositioning, mine countermeasures and law enforcement forces.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment			10	44.1	4	33.1		19.9															14	97.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	3	0.0	7	0.0	4	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	14	0.0	
PRIOR YR EQUIP																									
FY 97 EQUIP					3		7																	0	0.0
FY 98 EQUIP									4															10	0.0
FY 99 EQUIP																								4	0.0
FY 00 EQUIP																								0	0.0
FY 01 EQUIP																								0	0.0
FY 02 EQUIP																								0	0.0
FY 03 EQUIP																								0	0.0
FY 04 EQUIP																								0	0.0
FY 05 EQUIP																								0	0.0
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	0.0
TOTAL PROCUREMENT COST		0.0		44.1		33.1		19.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		CONT	97.1

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 10 mos. PROCUREMENT LEADTIME: 10 mos.

CONTRACT DATES: FY 1998: Jul-98 FY 1999: VAR FY 2000: VAR

DELIVERY DATES: FY 1998: Oct-99 FY 1999: VAR FY 2000: VAR

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 3 1 2 4 2 2

OUTPUT 3 1 2 4 2 2

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT TBD TBD

OUTPUT TBD TBD

Notes/Comments

MODIFICATION TITLE: GCCS-M Tactical/Mobile (JTM) Communications Replacement SUBHEAD: 52T4

COST CODE T4350

MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: Tactical Support Centers are nodes of the NCCS Ashore, with fixed sites and mobile components (MOCCs) that provide the Maritime Sector Commander with the capability to plan, direct and control the tactical operations of joint and Naval Expeditionary Forces and other assigned units within his respective area of responsibility. These operations include littoral and open ocean surveillance, anti-surface warfare, over-the-horizon targeting, counter-drug operations, power projection, antisubmarine warfare, mining, search and rescue and special operations. This subhead contains TSC C4I systems (based on the GCCS-M common architecture) and air-ground, satellite and point-to-point communications systems. The MOCCs are rapidly-deployable, self-contained, take-what-you-need C4I systems which can be transported in two fleet-configured P-3 aircraft for contingency operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring Equipment																										
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*	18	0.7	2	0.1	8	0.3	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	28	1.1
PRIOR YR EQUIP	18	0.7	2	0.1																					20	0.8
FY 97 EQUIP					8	0.3																			8	0.3
FY 98 EQUIP																									0	0.0
FY 99 EQUIP																									0	0.0
FY 00 EQUIP																									0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY 05 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST		0.7		0.1		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.1
TOTAL PROCUREMENT COST		0.7		0.8		1.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		CONT		3.2

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES:

FY 1998:

FY 1999:

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999:

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	28											
OUTPUT	28											

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4										
INPUT																										28
OUTPUT																										28

Notes/Comments

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1999
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APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 2/Communications and Electronics Equipment	P-1 ITEM NOMENCLATURE Common Imagery Ground Surface Systems (CIGSS) (J25E) (PEO(CU))(BLI: 291400)
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Program Element for Code B Items: Not Applicable	Other Related Program Elements 0204229N
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	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	*		*	65.6	41.3	47.8	46.6	45.4	74.0	75.1	Cont.	*

*Note: All previous procurement budgets for this item were submitted in the Procurement, Defense-Wide appropriation as Distributed Common Ground Systems (DCGS), PE 0305208D8Z. OSD Program Decision Memorandum of 18 August 1998 transferred all funding for this family of programs to the services beginning with FY 1999

The Joint Services Imagery Processing System – Navy (JSIPS-N) is the Navy’s portion of an OSD/Defense Airborne Reconnaissance Office (DARO) effort entitled Distributed Common Ground System (DCGS). DCGS is a cooperative effort between the services, agencies, and DoD to provide systems capable of receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance platforms. DCGS is further subdivided into systems which process, exploit, and disseminate Measurements Analysis and Signatures Intelligence (MASINT) data, Signals Intelligence (SIGINT) data, Multi-Intelligence Reconnaissance data, and Imagery data. Cooperative imagery processing systems are collected under the general heading, Common Imagery Ground/Surface Systems (CIGSS). JSIPS-N is the Navy CIGSS component.

JSIPS-N has a capability to receive, process, exploit, store, and disseminate imagery, imagery-derived products, and Imagery Intelligence (IMINT) reports based on multi-source from multiple inputs. The primary mission of JSIPS-N is to assist strike planners, tactical aviators, and Marine Corps amphibious planners in the delivery of precision ordnance (including Tomahawk Cruise Missiles) on target.

JSIPS-N includes three major components:

Softcopy Exploitation Segment (SES) - consisting of the Digital Imagery Workstation Suite Afloat (DIWSA), Strike Planning Archive (SPA) and the Precision Targeting Workstation (PTW).

National Input Segment (NIS) - equipment which processes imagery from national sensors

Tactical Input Segment (TIS)- equipment which processes imagery from tactical sensors.

JSIPS-N is being installed onboard aircraft carriers (CV/CVN), amphibious assault ships (LHA/LHD), select fleet flag ships (AGF/LCC) and shore sites.

Secondary missions of the system are to provide near-real-time imagery and support to fleet intelligence assets, Special Operations Forces, and to support primary exploitation and dissemination of tactical organic and theater IMINT products.

UNCLASSIFIED

CLASSIFICATION:

WEAPONS SYSTEM COST ANALYSIS P-5				Weapon System								DATE: February 1999				
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA 2/Common Imagery Ground/Surface System				ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Common Imagery Ground Surface Systems (CIGSS) (J25E (PEO(CU))(BLI: 291400)											
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years	FY 1998			FY 1999			FY 2000						
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost				
	Joint Services Imagery Processing System- Navy		*				*									
01000	Tactical Input Segment (TIS)							4	4,000	16,000						
01500	TIS Retrofit							2	2,000	4,000						
02000	SPA/PTW							10	310	3,100	8	336	2,688			
03000	Procurement Support									10,584			10,203			
04000	Product Improvements									15,287			15,026			
05000	Battle Group H/W and S/W Integration									9,785			6,567			
06000	Equipment Support Kits									6,800			6,771			
	TOTAL									65,556			41,255			

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P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO.

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*Note: All previous procurement budgets for this item were submitted in the Procurement, Defense-Wide appropriation as Distributed Common Ground Systems (DCGS), PE 0305208D8Z. OSD Program Decision Memorandum of 18 August 1998 transferred all funding for this family of programs to the services beginning with FY 1999.

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CLASSIFICATION:

B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
Other Procurement, Navy					Common Imagery Ground Surface Systems (CIGSS) (J25E)					
BA 2/Communications and Electronics Equipment					(PEO(CU))(BLI: 291400)					
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										
							A. DATE:			
							February 1999			
<i>JSIPS-N Components</i>										
01000 Tactical Input Segment (TIS)										
FY 1999	4	\$ 4,000	ESC Hanscom AFB	N/A	SS/FFP	Lockheed Martin Gaithersburg, MD	Oct 99	Apr 00	Yes	N/A
01500 TIS RETROFIT										
FY 1999	2	\$ 2,000	ESC Hanscom AFB	N/A	SS/FFP	Lockheed Martin Gaithersburg, MD	Oct 99	Apr 00	Yes	N/A
02000 SPA/PTW										
FY 1999	10	\$310	SPAWAR, San Diego CA	N/A	SS/FFP	GDE Systems San Diego, California	Feb 99	May 99	Yes	N/A
FY 2000	8	\$ 336	SPAWAR, San Diego, CA	N/A	SS/FFP	GDE Systems San Diego, California	Feb 00	May 00	Yes	N/A
D. REMARKS										

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21						DATE		February 1999																						
APPROPRIATION/BUDGET ACTIVITY						Weapon System		P-1 ITEM NOMENCLATURE																						
Other Procurement, Navy BA 2						JSIPS-N		Joint Services Imagery Processing System - Navy																						
Item	Manufacturer's Name and Location	Production Rate			Procurement Leadtime:					Total	Unit of Measure																			
		MSR	1-8-5	MAX	Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT																						
Tactical Input Segment (TIS)	Lockheed Martin																													
	Gaithersburg, MD	N/A	N/A	N/A	0	12*	6	7	18	LOC																				
*ALT for subsequent buys -6mos																														
Strike Planning Archive (SPA) /	GDE Systems	N/A	N/A	N/A	0	4	3	3	7	LOC																				
Precision Targetting Workstation (PTW)	San Diego, California																													
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 1998												B A L												
						1997																								
						CALENDAR YEAR 1998						CALENDAR YEAR 1999																		
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
Tactical Input Segment	99	N	4	0	4																									4
Lockeed Gaithersburg, MD																														
Tactical Input Segment Retrofit	99	N	2	0	2																									2
Lockheed, Gaithersburg, MD																														
SPA/PTW																														
GDE Systems San Diego, California	99	N	10	0	10																									0
Remarks:																														
LOC: Lines of Code. TIS and SPA/PTW are classified as software products.																														

BUDGET ITEM JUSTIFICATION SHEET P-40						DATE: Feb-99					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY						P-1 ITEM NOMENCLATURE/LINE ITEM # Nuclear Radiation Safety Monitoring Equipment (RADIAC) 292000					
Program Element for Code B Items: 0603542N						OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	To Complete	Total
QUANTITY											0
EQUIPMENT COST (In Millions)		B	\$6.2	\$4.0	\$7.8	\$8.4	\$8.0	\$8.3	\$8.8	N/A	\$51.5
SPARES COST (In Millions)											0
PROGRAM DESCRIPTION/JUSTIFICATION:											
<p>The NAVSEA RADIAC Program is responsible for ensuring the availability of radiation monitoring instruments to support uses ranging from operation and maintenance of nuclear propulsion plants in ships and submarines to industrial radiography as well as medical applications and the radiological leg of chemical, biological and radiological defense. The program provides centrally managed acquisition of equipment to detect and measure radiation and convert these measurements into meaningful terms so that Navy personnel can adequately control radiation exposure. The instruments are used to ensure the safety of personnel and the environment. The Multifunction Radiac (MFR) and Dosimetry System replace older systems with equipment with increased capability that can be operated and maintained at a lower total ownership cost.</p> <p>REQUIREMENTS:</p> <ol style="list-style-type: none"> 1. Nuclear Propulsion Program: Field changes, Items under \$200K, MFR and Dosimetry System. 2. Nuclear Weapons Program: Items under \$200K, MFR. 3. Radiological Affairs Support Program: Items under \$200K, MFR. 4. Chemical, Biological and Radiological Program/Nuclear Warfare, Items under \$200K, MFR 5. Naval Medical Radiation Safety Program: Field Changes, Items under \$200K, MFR. 6. EOD: Underwater Radiac (UWR). 											

WEAPONS SYSTEM COST ANALYSIS						Weapon System			DATE:					
P-5									February 1999					
APPROPRIATION/BUDGET ACTIVITY						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD							
Other Procurement, Navy						B	NUCLEAR RADIATION SAFETY MONITORING EQUIPMENT (RADIAC) (82M2)							
BA-(2): (ACTIVITY TITLE) COMMUNICATIONS & ELECTRONIC EQUIPMENT														
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
M2100	MULTIFUNCTION RADIACS													
	MFR CONTROL UNIT	A	1,281	1.183	1,515	837	1.202	1,006	1,000	1.222	1,222			
	GAMMA/BETA PROBE	A	755	0.640	483				68	0.661	45			
	BETA PROBE INTERFACE	A	560	0.648	363	375	0.660	248						
	IM-260 EXTENDER	A				69	0.500	35	85	0.509	43			
	DT-289 INTERFACE	A				125	1.000	125	93	1.017	95			
	NEUTRON INTERFACE PROBE	A				120	5.000	600	126	5.085	641			
	ALPHA PROBE	A				98	3.556	348	78	3.616	282			
	MFR CHECKSOURCE KITS	A				412	1.016	419	206	1.033	213			
	FRISKER STATION	A							195	0.517	101			
M2200	DOSIMETRY SYSTEM													
	DT-678	B	2,347	0.295	692									
	CP-2197 READER (SHIP)	B	9	166.000	1,494									
	CP-1112 UPGRADES								20	7.628	153			
	DOSIMETER SYSTEM								17,105	0.044	753			
	SHIPBOARD READER								38	53.400	2,029			
	SHOREBASED READER								6	91.500	549			
	DOSIMETER IRRADIATOR								28	7.600	213			
M2300	UNDERWATER RADIAC	B	13	24.000	312	14	24.384	341						
M2400	OTHER RADIAC													
	ACCEPTANCE TESTING	A			476			448			626			
	ITEMS UNDER 200K	A			346						186			
M2830	PRODUCTION SUPPORT	A			477			448			627			
TOTAL					6,158			4,018			7,778			

CLASSIFICATION

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy					C. P-1 ITEM NOMENCLATURE NUCLEAR RADIATION SAFETY MONITORING EQUIPMENT (RADIAC)				SUBHEAD 82M2	
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
<i>FY1998</i>										
M2100-MFR CONTROL UNIT	1281	1.183	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/98	4/99	YES	
M2100-GAMMA/BETA PROBE	755	0.64	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	7/98	2/99	YES	
M2100-BETA PROBE INTERFACE	560	0.648	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	2/98	2/99	YES	
M2200-DT-678	2347	0.295	SPAWARSYSCEN		C/FP	KEITHLEY, OHIO	6/98	10/98	YES	
M2200-CP-2197 SHIP READER	9	166	SPAWARSYSCEN		C/FP	KEITHLEY, OHIO	6/98	10/98	YES	
M2300-UNDERWATER RADIAC	13	24	SPAWARSYSCEN		C/FP	SPAWARSYSCEN, SD	1/98	11/99	YES	
<i>FY1999</i>										
M2100-MFR CONTROL UNIT	837	1.202	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/99	4/01	YES	
M2100-BETA PROBE INTERFACE	375	0.66	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	2/99	1/00	YES	
M2100-260 EXTENDER	69	0.5	SPAWARSYSCEN		C/FP	SAIC/SAN DIEGO	7/99	1/00	YES	
M2100-DT-289 INTERFACE	125	1	SPAWARSYSCEN		C/FP	SAIC/SAN DIEGO	9/99	3/00	YES	
NEUTRON INTERFACE PROBE	120	5	SPAWARSYSCEN	5/99	C/FP	UNKNOWN	11/99	5/00	YES	
M2100-ALPHA PROBE	98	3.556	SPAWARSYSCEN	2/99	C/FP	UNKNOWN	9/99	3/00	YES	
M2100-MFR CHECKSOURCE KITS	412	1.016	SPAWARSYSCEN	2/99	C/FP	UNKNOWN	5/99	11/99	YES	
M2300-UNDERWATER RADIAC	14	24.4	SPAWARSYSCEN		C/FP	UNKNOWN	1/99	11/99	YES	
D. REMARKS										

CLASSIFICATION

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE				
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy					C. P-1 ITEM NOMENCLATURE NUCLEAR RADIATION SAFETY MONITORING EQUIPMENT (RADIAC)				SUBHEAD		
									82M2		
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	
<i>FY 2000</i>											
M2100-MFR CONTROL UNIT	1000	1.222	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/00	10/00	YES		
M2100-GAMM/BETA PROBE	68	0.661	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/00	10/00	YES		
M2100-260 EXTENDER	85	0.51	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/00	10/00	YES		
M2100-DT-289 INTERFACE	93	1.017	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/00	10/00	YES		
M2100- NEUTRON INTERFACE PROBE	126	5.085	SPAWARSYSCEN		OPT	UNKNOWN	1/00	10/00	YES		
M2100-ALPHA PROBE	78	3.616	SPAWARSYSCEN		OPT	UNKNOWN	1/00	10/00	YES		
M2100-MFR CHECKSOURCE KITS	206	1.033	SPAWARSYSCEN		OPT	UNKNOWN	1/00	10/00	YES		
M2100-FRISKER STATION	195	0.517	SPAWARSYSCEN	6/99	C/FP	UNKNOWN	1/00	7/00	YES		
M2200- CP-1112 UPGRADES	20	7.628	SPAWARSYSCEN	6/99	C/FP	UNKNOWN	1/00	10/00	YES		
M2200-DOSIMETER SYSTEM	17105	0.044	SPAWARSYSCEN	3/99	C/FP	UNKNOWN	3/00	10/00	YES		
M2200- SHIPBOARD READER	38	53.4	SPAWARSYSCEN	3/99	C/FP	UNKNOWN	3/00	10/00	YES		
M2200- SHOREBASED READER	6	91.5	SPAWARSYSCEN	3/99	C/FP	UNKNOWN	3/00	10/00	YES		
M2200-DOSIMETER IRRADIATOR	28	7.6	SPAWARSYSCEN	3/99	C/FP	UNKNOWN	3/00	10/00	YES		
D. REMARKS											

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
MFR Control Unit	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	4397	1281	837	1000					
Unit Cost	1183	1183	1202	1222					
Total Cost (\$ K)	5202	1515	1006	1222					
Asset Dynamics									
Beginning Asset Position	0	1575	3659	5842					
Deliveries from all prior year funding	1575	2100	268	0					
Deliveries from FY 1997 funding			454						
Deliveries from FY 1998 funding			1281						
Deliveries from FY 1999 funding			217	620					
Deliveries from subsequent years' funding				1000					
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.	0	16	37	58					
End of Year Asset Position	1575	3659	5842	7404					
Inventory Objective/Current Authorized Allowance	19198	19198	19198	19198					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Training Usage	Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
Gamma /Beta Probe	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	1746	755	0	68					
Unit Cost	650	640	650	661					
Total Cost (\$ K)	1135	483	0	45					
Asset Dynamics									
Beginning Asset Position	0	900	1737	2475					
Deliveries from all prior year funding	900	846							
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding			755						
Deliveries from subsequent years' funding				68					
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.		9	17	24					
End of Year Asset Position	900	1737	2475	2519					
Inventory Objective/Current Authorized Allowance	7000	7000	7000	7000					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months			Prod Leadtime: 6 months				
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
Beta Probe Interface	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	1702	560	375						
Unit Cost	633	648	660						
Total Cost (\$ K)	1077	362	248						
Asset Dynamics									
Beginning Asset Position	0	600	1194	1782					
Deliveries from all prior year funding	600	600	44						
Deliveries from FY 1997 funding			458						
Deliveries from FY 1998 funding			98	462					
Deliveries from FY 1999 funding				138					
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.	0	6	12	18					
End of Year Asset Position	600	1194	1782	2364					
Inventory Objective/Current Authorized Allowance	2641	2641	2641	2641					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Training Usage	Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature			Admin Leadtime (after Oct 1): 6 months			Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
IM-260 Extender	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY			69	85					
Unit Cost			500	509					
Total Cost (\$ K)			35	43					
Asset Dynamics									
Beginning Asset Position			0	85					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding			85						
Deliveries from subsequent years' funding				85					
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.			0	1					
End of Year Asset Position			85	169					
Inventory Objective/Current Authorized Allowance			256	256					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
DT-289 Interface	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY			125	93					
Unit Cost			1000	1017					
Total Cost (\$ K)			125	95					
Asset Dynamics									
Beginning Asset Position			0	125					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding			125						
Deliveries from subsequent years' funding				93					
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.			0	1					
End of Year Asset Position									
Inventory Objective/Current Authorized Allowance			427	427					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
Neutron Interface Probe	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY			120	126					
Unit Cost			5000	5085					
Total Cost (\$ K)	0	0	600	641					
Asset Dynamics									
Beginning Asset Position	0	0	0	120					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding			120						
Deliveries from subsequent years' funding				126					
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.			0	1					
End of Year Asset Position									
Inventory Objective/Current Authorized Allowance			589	589					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months			Prod Leadtime: 6 months				
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
Alpha Probe	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	0	0	98	78					
Unit Cost	3500	3500	3556	3616					
Total Cost (\$ K)	0	0	348	282					
Asset Dynamics									
Beginning Asset Position		0	0	98					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding		0							
Deliveries from FY 1998 funding			0						
Deliveries from FY 1999 funding			98	0					
Deliveries from subsequent years' funding				78					
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.		0	0	1					
End of Year Asset Position									
Inventory Objective/Current Authorized Allowance		2503	2503	2503					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+4
MFR Checksource Kits	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		0	412	206					
Unit Cost		0	1016	1033					
Total Cost (\$ K)		0	419	213					
Asset Dynamics									
Beginning Asset Position		0	0	412					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding			412						
Deliveries from FY 1999 funding				206					
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.			0	0					
End of Year Asset Position		0	412	618					
Inventory Objective/Current Authorized Allowance			618	618					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
DT-678	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	1253	2347	0	0					
Unit Cost	295	295	0	0					
Total Cost (\$ K)	370	692	0	0					
Asset Dynamics									
Beginning Asset Position		908	908	4508					
Deliveries from all prior year funding	908	0							
Deliveries from FY 1997 funding			1253						
Deliveries from FY 1998 funding			2347						
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position	908	908	4508	4508					
Inventory Objective/Current Authorized Allowance	4508	4508	4508	4508					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:	PY thru _____:					
	PY-1:	PY-1:	PY-1:	PY-1:					
	PY-2:	PY-2:	PY-2:	PY-2:					
	PY-3:	PY-3:	PY-3:	PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 9 months				Prod Leadtime: 9 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
CP-2197	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY	6	9	0	0					
Unit Cost(\$K)	166	166	0	0					
Total Cost (\$ K)	996	1494	0	0					
Asset Dynamics									
Beginning Asset Position		2	2	17					
Deliveries from all prior year funding	2								
Deliveries from FY 1997 funding			6						
Deliveries from FY 1998 funding			9						
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.	0	0	0	0					
End of Year Asset Position	2	2	17	17					
Inventory Objective/Current Authorized Allowance	17	17	17	17					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature			Admin Leadtime (after Oct 1): 6 months			Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
Frisker Station	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY				195					
Unit Cost				517					
Total Cost (\$ K)				101					
Asset Dynamics									
Beginning Asset Position				0					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding				195					
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.				0					
End of Year Asset Position				195					
Inventory Objective/Current Authorized Allowance				1232					
Example: 50									
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
CP-1112 UPGRADES	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY			0	20					
Unit Cost			0	7.6					
Total Cost (\$ K)			0	153					
Asset Dynamics									
Beginning Asset Position			0	0					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding				20					
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.	0	0	0	0					
End of Year Asset Position	0	0	0	20					
Inventory Objective/Current Authorized Allowance	92	92	92	92					
Example: 50									
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months			Prod Leadtime: 6 months				
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2_4	BY2+5
DOSIMETER SYSTEM	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY				17105					
Unit Cost				0.044					
Total Cost (\$ K)				753					
Asset Dynamics									
Beginning Asset Position				0					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.	0	0	0	0					
End of Year Asset Position	0	0	0	0					
Inventory Objective/Current Authorized Allowance	94920	94920	94920	94920					
Example: 50									
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru	PY thru	PY thru						
	_____:	_____:	_____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months			Prod Leadtime: 6 months				
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
SHIPBOARD READER	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY				38					
Unit Cost				53.4					
Total Cost (\$ K)				2029					
Asset Dynamics									
Beginning Asset Position				0					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.	0	0	0	0					
End of Year Asset Position	0	0	0	0					
Inventory Objective/Current Authorized Allowance	205	205	205	205					
Example: 50									
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Training Usage	Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
SHOREBASED READER	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY				6					
Unit Cost				91.5					
Total Cost (\$ K)				549					
Asset Dynamics									
Beginning Asset Position				0					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.	0	0	0	0					
End of Year Asset Position	0	0	0	0					
Inventory Objective/Current Authorized Allowance	33	33	33	33					
Example: 50									
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature			Admin Leadtime (after Oct 1): 6 months			Prod Leadtime: 6 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
DOSIMETER IRRADIATOR	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY				28					
Unit Cost				7.6					
Total Cost (\$ K)				213					
Asset Dynamics									
Beginning Asset Position				0					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding									
Deliveries from FY 1999 funding									
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.	0	0	0	0					
End of Year Asset Position	0	0	0	0					
Inventory Objective/Current Authorized Allowance	166	166	166	166					
Example: 50									
Inventory Objective	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru _____:	PY thru _____:		PY thru _____:					
	PY-1:	PY-1:		PY-1:					
	PY-2:	PY-2:		PY-2:					
	PY-3:	PY-3:		PY-3:					
TOTAL:									
REMARKS:									

Exhibit P-20, Requirements Study		Approp Code/BA		Subhead		Date: Feb-99			
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 6 months				Prod Leadtime: 9 months			
Project Unit/Item	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3	BY2+4	BY2+5
Underwater RADIAC	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary QTY		13	14		5				
Unit Cost		24000	24.38400						
Total Cost (\$ K)		312	341						
Asset Dynamics									
Beginning Asset Position		0	0	13					
Deliveries from all prior year funding									
Deliveries from FY 1997 funding									
Deliveries from FY 1998 funding			13						
Deliveries from FY 1999 funding				14					
Deliveries from subsequent years' funding									
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage									
Disposals/Retirements/Attritions/etc.			0	0					
End of Year Asset Position		0	13	27					
Inventory Objective/Current Authorized Allowance		79	79	79					
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru _____:	PY thru _____:	PY thru _____:						
	PY-1:	PY-1:	PY-1:						
	PY-2:	PY-2:	PY-2:						
	PY-3:	PY-3:	PY-3:						
TOTAL:									
REMARKS:									

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BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY								P-1 ITEM NOMENCLATURE/LINE ITEM # GENERAL PURPOSE ELECTRONIC TEST EQUIPMENT (GPETE) (82M6)					
Program Element for Code B Items:								OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)		A	N/A	\$7.3	\$9.6	\$9.0	\$9.2	\$9.4	\$9.7	\$9.9	\$10.1		\$74.2
SPARES COST (In Millions)													0
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>This program provides for the initial procurement and distribution of General Purpose Electronic Test Equipment (GPETE). This equipment is essential to the operational readiness of the Navy for repair, installation, and maintenance (preventive and routine) of electronic systems and equipments, both afloat and ashore. The GPETE procured must meet rigid technical requirements, be cost effective and satisfy valid deficiencies in authorized allowance.</p>													

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WEAPONS SYSTEM COST ANALYSIS P-5								Weapon System			DATE: February 1999			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA- 2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT						ID Code A	P-1 ITEM NOMENCLATURE/SUBHEAD GENERAL PURPOSE ELECTRONIC TEST EQUIPMENT (GPETE) 82M6							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
	<u>N091 TEST AND EVAL</u>													
M6000	FIBER OPTICS AND DATA COMM		17	3.765	64				30	2.400	72			
M6001	SIGNAL GENERATORS AND ANALYZERS		16	3.875	62	126	1.087	137	451	2.468	1,113			
M6002	OSCILLSCPS, METERS AND COUNTERS													
M6003	PROC ENGR AND DOCUMENTATION				25			40			406			
	<u>N096 OCEANOGRAPHY</u>													
M6000	FIBER OPTICS AND DATA COMM		39	6.923	270	3	9.333	28	140	5.536	775			
M6001	SIGNAL GENERATORS AND ANALYZERS		35	2.229	78	62	6.742	418	820	2.204	1,807			
M6002	OSCILLSCPS, METERS AND COUNTERS													
M6003	PROC ENGR AND DOCUMENTATION				60			149			819			
	<u>N6 SEW & C4</u>													
M6000	FIBER OPTICS AND DATA COMM		52	7.096	369	40	12.225	489	20	9.600	192			
M6001	SIGNAL GENERATORS AND ANALYZERS		100	6.420	642	189	4.243	802	329	2.322	764			
M6002	OSCILLSCPS, METERS AND COUNTERS													
M6003	PROC ENGR AND DOCUMENTATION				176			422			347			
	<u>N86- SURFACE WARFARE</u>													
M6000	FIBER OPTICS AND DATA COMM		121	7.777	941	40	32.650	1,306	15	3.200	48			
M6001	SIGNAL GENERATORS AND ANALYZERS		513	3.567	1,830	436	3.546	1,546	659	2.021	1,332			
M6002	OSCILLSCPS, METERS AND COUNTERS													
M6003	PROC ENGR AND DOCUMENTATION				377			761			572			
	<u>N87 -SUBMARINE WARFARE</u>													
M6000	FIBER OPTICS AND DATA COMM		24	6.375	153	24	13.625	327						
M6001	SIGNAL GENERATORS AND ANALYZERS		250	2.508	627	284	2.437	692	57	2.316	132			
M6002	OSCILLSCPS, METERS AND COUNTERS													
M6003	PROC ENGR AND DOCUMENTATION				121			341			47			
	<u>N88 AIR WARFARE</u>													
M6000	FIBER OPTICS AND DATA COMM		18	10.889	196	24	10.458	251						
M6001	SIGNAL GENERATORS AND ANALYZERS		205	5.293	1,085	331	4.227	1,399	184	2.326	428			
M6002	OSCILLSCPS, METERS AND COUNTERS													
M6003	PROC ENGR AND DOCUMENTATION				211			511			152			
TOTAL					7,287			9,619			9,006			

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1999																				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATION AND ELECTRONIC EQUIPMENT Program Element for Code B Items:							P-1 ITEM NOMENCLATURE/LINE ITEM # <i>INTEGRATED COMBAT SYSTEMS TEST FACILITY (ICSTF) - 296000</i> OTHER RELATED PROGRM ELEMENTS 63582N																				
	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)			\$3.7	\$6.5	\$4.4	\$4.4	\$4.6	\$4.7	\$4.8	\$4.9	Cont.	Cont.															
SPARES COST (In Millions)			\$0.5	\$0.4	\$0.5	\$0.4	\$0.5	\$0.4	\$0.5	\$0.5	Cont.	Cont.															
PROGRAM DESCRIPTION/JUSTIFICATION:																											
<p>Naval Surface Warfare Center, Port Hueneme Division, San Diego Detachment (NSWC PHD DET SD), formally known as ICSTF, is the Navy owned and operated combat systems program integration test site in San Diego at SPAWAR SYSTEMS CENTER. NSWC PHD DET SD performs an essential role in promoting the readiness of surface combatant computer program networks. NSWC PHD DET SD's mission is to perform certification testing of computer programs prior to delivery to the Fleet. The threat driven requirement of inter-system data exchange has continued to grow exponentially since the USS CALIFORNIA's protracted pier-side recovery program in the 1970's. NSWC PHD DET SD has been used efficiently to detect combat system computer program problems on most configurations of surface combatants, providing knowledge of and corrective action for the remaining problems. The cost of fixing the problems increase significantly with time, either in dollars and/or ship operations days. The cost of detecting the problems during deployment may be measured in harsher terms.</p> <p>NSWC PHD DET SD is the only permanent Navy facility for testing CV/CVN, LHD, LHA, LSD, LPD-17, DD 963 and FFG ship class shipboard combat system computer networks and for providing combat system in-service engineering support for Fleet identified problems. The site can support basic testing of the current combat system configurations. As existing combat subsystems are upgraded and/or new subsystems are added to the CV/CVN and amphibious ship class combat system configurations, NSWC PHD DET SD must upgrade its testbeds to perform computer network integration testing. In addition, with the issuance of CNO msg. DTG021648Z May 98 on Battle Group Interoperability (BGI), NSWC PHD DET SD must expand its capabilities to support Battle Group Interoperability testing.</p> <p>The basic procurement program outlined herein is directed at adding to NSWC PHD DET SD the capability of supporting the following upgrades/new systems and to support Battle Group Interoperability testing:</p> <table style="width:100%; border: none;"> <tr> <td style="width:33%;">Fiber Optics</td> <td style="width:33%;">CVN-76 Combat System</td> <td style="width:33%;">LPD-17 Combat System</td> </tr> <tr> <td>Open Architecture</td> <td>CEC Upgrades</td> <td>CEC with DDS System</td> </tr> <tr> <td>AN/SPS-48E</td> <td>COTS</td> <td>NAVSSI Upgrade</td> </tr> <tr> <td>SSDS/ICDS</td> <td>C4ISR</td> <td>AIEWS</td> </tr> <tr> <td>Simulators/Stimulators</td> <td>LANs</td> <td>DX/DR</td> </tr> </table>													Fiber Optics	CVN-76 Combat System	LPD-17 Combat System	Open Architecture	CEC Upgrades	CEC with DDS System	AN/SPS-48E	COTS	NAVSSI Upgrade	SSDS/ICDS	C4ISR	AIEWS	Simulators/Stimulators	LANs	DX/DR
Fiber Optics	CVN-76 Combat System	LPD-17 Combat System																									
Open Architecture	CEC Upgrades	CEC with DDS System																									
AN/SPS-48E	COTS	NAVSSI Upgrade																									
SSDS/ICDS	C4ISR	AIEWS																									
Simulators/Stimulators	LANs	DX/DR																									

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BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION		DATE: February 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATION AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # INTEGRATED COMBAT SYSTEMS TEST FACILITY (ICSTF) - 296000	
<p>In addition, the basic program provides for increasing centralized test support so that NSWC PHD DET SD can provide simultaneous support to multiple ship classes and to connect to geographically dispersed land based test sites (CONUS) to participate in total ship integrated testing.</p> <p>Included is procurement of equipment at the Space Warfare System Center (SWSC) CHAS, SC for the Distributed Engineering Plant to ensure Battle Group Interoperability.</p> <p>All procurements will be received and installed by NSWC PHD DET SD. Installations are based on CSIT and BG Interoperability schedules.</p> <p>The shipboard Electronics Systems Evaluation Facilities (SESEF) are Navy-owned and operated test ranges capable of action as the partner in two party operational performance testing of systems currently in the Fleet (i.e., AIMS MK XII IFF (all modes)), TACAN, conventional radars (both search and fire control), communication systems secure voice and LINK 11/4A). The SESEF provides ship Captains and Type Commanders the capability of measuring and testing a ship's condition of material readiness at the completion of construction, industrial availability, during routine ship operations and prior to deployment.</p> <p>Consistent with the CNO's approval for modernization of SESEFs, OPN funds have been provided to procure equipment to upgrade the capabilities for Ft. Story, VA., San Diego, CA., Puget Sound, WA., Pearl Harbor, HI., Yokosuka, Japan, and Mayport, FL. This equipment will provide two party capabilities to test the new and more complex ship board electronic systems (i.e., SLQ-32, AN/SPY-1, etc.) and perform antenna radiation pattern measurements.</p>		

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WEAPONS SYSTEM COST ANALYSIS						Weapon System			DATE:					
P-5									February 1999					
APPROPRIATION/BUDGET ACTIVITY						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD							
OTHER PROCUREMENT, NAVY							INTEGRATED COMBAT SYSTEMS TEST FACILITY							
BA-2: COMMUNICATION AND ELECTRONIC EQUIPMENT							(ICSTF) - 296000							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
	<u>SURFACE SHIPS (N86)</u>													
M8100	CS ELEC EQUIP	A			2,233			2,640			2,310			
	Control Console Repl		1	200	(200)	5	182.0	(910)	5	200.0	(1000)			
	Supt Sys Processor		4	30	(120)	1	130	(130)	4	125	(500)			
	Centralized IFF		1	311	(311)									
	SSDS/RAIDS					1	650	(650)						
	Cooperative Engagement Capability (CEC)		2	325	(650)	1	500	(500)						
	Fiber Optic Data Sys				(135)				N/A		(180)			
	VME BASED KCMX EMULATOR	A												
	TAC Series Workstation		1	60	(60)									
	NAVSSI		1	157	(157)	1	450	(450)	1	430	(430)			
	NATO REACH		1	600	(600)									
	DNMFL													
	DTS Link 16								2	100	(200)			
M8200	SS ELEC EQUIP	A			225			355	N/A		800			
	Misc Elec Equipment				(110)			(280)	N/A		(100)			
	Radar Video Sim								1	250	(250)			
	Data Reduction/analysis				(115)			(75)	N/A		(150)			
	LLS Switches								1	300	(300)			
M8300	CS SIMULATION	A			443			378			271			
M8400	SESEF ELECTRONICS EQUIP	A			546			792			735			
M8500	SPACE WARFARE SYSCEN SWSC	A						2,000						
M8900	SESEF CONSULTING SERVICES	A			134			145			145			
M86IN	EQUIPMENT INSTALLATION				135			146			95			
TOTAL					3,716			6,456			4,356			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System		A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATION AND ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE INTEGRATED COMBAT SYSTEM TEST FACILITY (ICSTF)			February 1999		
									SUBHEAD		
									82M8		
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 YES/NO	IF NO WHEN AVAILABLE	
FY 1998											
CONRL CONSL REPL	1	200	NAVSEA		C/FP	LORAL, ST. PAUL, MN	03/98	09/98			
SPT SYS PROCESSOR	4	30	NSWC, PHD		WR	ELMA, OAKLAND, CA	03/98	09/98			
COOP ENGAGE CAPB	2	325	NAVSEA		C/FP	APL/JHU, MD	03/98	03/99			
NATO REACH	1	600	NAVSEA		C/FP	RAYTHEON, WAYLAND, MA	03/98	03/99			
TAC SERIES WORK STA	1	60	NRAD		C/FP	HEWLETT-PACKARD PALO ALTO, CA	01/98	06/98			
NAVSSI	1	157	SPAWAR		C/FP	TELOS	03/98	01/99			
CENTRALIZED IFF	1	311	NAVSEA		WR	NAWCAD	04/98	09/98			
FY 1999											
CONRL CONSL REPL	5	182	NAVSEA		C/FP	LORAL, ST. PAUL, MN	03/99	09/99			
COOP ENGAGE CAPB	1	500	NAVSEA		C/FP	APL/JHU, MD	03/99	09/99			
SSDS/RAIDS	1	650	NAVSEA		C/FP	HUGHES, SAN DIEGO, CA	03/98	03/99			
SPT SYS PROCESSOR	1	130	NSWC, PHD		WR	ELMA, OAKLAND, CA	03/99	09/99			
NAVSSI	1	450	SPAWAR		C/FP	TELOS	03/99	09/99			
FY 2000											
CONRL CONSL REPL	5	200	NAVSEA		C/FP	LORAL, ST. PAUL, MN	03/00	09/00			
SPT SYS PROCESSOR	4	125	NSWC, PHD		WR	ELMA, OAKLAND, CA	03/00	09/00			
NAVSSI	1	430	SPAWAR		C/FP	TELOS	01/00	06/00			
D. REMARKS											

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: N/A TYPE MODIFICATION: N/A MODIFICATION TITLE: N/A

DESCRIPTION/JUSTIFICATION:

INSTALLATION OF TEST BED EQUIPMENT REQUIRED TO CONDUCT PLANNED COMBAT SYSTEM INTEGRATION TEST

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1996		FY 1997		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	\$	
<i>RDT&E</i>																									0.0
<i>PROCUREMENT</i>																									
INSTALLATION KITS																									0.0
INSTALLATION KITS NONRECURRING																									0.0
EQUIPMENT		5.8	VAR	4.6	VAR	3.5	VAR	6.3	VAR	4.2	VAR	4.2	VAR	4.4	VAR	4.5	VAR	4.6	VAR	4.7					46.8
EQUIPMENT NONRECURRING																									0.0
ENGINEERING CHANGE ORDERS																									0.0
DATA																									0.0
TRAINING EQUIPMENT																									0.0
SUPPORT EQUIPMENT																									0.0
OTHER		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1					1.0
OTHER																									0.0
OTHER																									0.0
INTERIM CONTRACTOR SUPPORT																									0.0
INSTALL COST		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1					1.5
TOTAL PROCUREMENT		6.0		4.8		3.8		6.5		4.4		4.4		4.6		4.7		4.8		4.9		0.0			47.1

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: _____ MODIFICATION TITLE: _____

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: NOT APPLICABLE

ADMINISTRATIVE LEADTIME: VARIOUS

PRODUCTION LEADTIME: VARIOUS

CONTRACT DATES: FY 1997: VARIOUS

FY 1998: VARIOUS

FY 1999: VARIOUS

DELIVERY DATE: FY 1997: VARIOUS

FY 1998: VARIOUS

FY 1999: VARIOUS

(\$ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																								
FY 1997 EQUIPMENT				0.139																				0.139
FY 1998 EQUIPMENT						0.135																		0.135
FY 1999 EQUIPMENT								0.146																0.146
FY 2000 EQUIPMENT									0.095															0.095
FY 2001 EQUIPMENT											0.142													0.142
FY 2002 EQUIPMENT													0.141											0.141
FY 2003 EQUIPMENT															0.141									0.141
FY 2004 EQUIPMENT																	0.144							0.144
FY 2005 EQUIPMENT																				0.147				0.147
TO COMPLETE																								0

INSTALLATION SCHEDULE:

SHIP AVAILABILITIES

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

P-3A

**OTHER PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION SHEET**

BUDGET ACTIVITY 02 - COMMUNICATIONS AND ELECTRONICS EQPT			P-1 ITEM NOMENCLATURE CALIBRATION STANDARDS					
QUANTITY	FY 98	FY99	FY00	FY 01	FY02	FY 03	FY 04	FY 05
COST (in millions)	\$ 2.0	\$ 1.9	**					

** This line item has been consolidated into Line Items less than \$5 million in Budget Activity 02.

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/LINE ITEM # EMI CONTROL INSTRUMENTATION LI:297000 82MA					
Program Element for Code B Items:								OTHER RELATED PROGRAM 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)	N/A	A		\$4.8	\$7.5	\$6.6	\$6.7	\$6.7	\$6.6	\$6.8	\$6.8		52.5
SPARES COST (In Millions)													
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>Funds will be used to procure emergency field change kits, hardware devices and sensor kits to solve Electromagnetic Interference (EMI) problems in electronic systems/equipment's throughout the surface ship NAVY. The fixes which include various types of filters, limiters, blankers and shielding will be installed by fleet support and maintenance personnel to eliminate EMI where it is causing unacceptable degradation in the operational performance of mission-essential systems. EMI control instrumentation will be procured for use in identifying the sources of EMI and determining the extent of EMI so that effective corrective measures can be applied. Better definition of the problems will also provide data which will be used by designers to reduce EMI problems in future systems and equipment's. The instrumentation procured will include automated and special EMI test equipment, (e.g. spectrum analyzers, field intensity meters, AN/PSM-40 series test sets, etc.). Instrumentation, hardware and software will also be procured to upgrade the Frequency Assignment Computer Terminal Systems (FACTS) and to provide remote access capability to the Communications Area Master Stations (CAMS) and other high-density users.</p> <p>Estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.</p>													

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1999					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD EMI CONTROL INSTRUMENTATION LI:297000 82MA							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLAR:											
			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
	<u>ELECTRONICS SUPPORT (OP-N6)</u>													
MA001	EMERG FIELD CHANGE KITS	A			55			500			500			
MA004	EMI FIXES & SENSOR KITS	A			3,384			5,269			4,554			
MA104	EMI CONTROL INSTRUMENTATION	A			1,190			1,586			1,345			
MA107	FACTS INSTRUMENTATION	A			131			150			155			
GRAND TOTAL					4,760			7,505			6,554			

**OTHER PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION SHEET**

BUDGET ACTIVITY
02 - COMMUNICATIONS AND ELECTRONICS EQPT

P-1 ITEM NOMENCLATURE
SHORE ELEC ITEMS UNDER \$2M

QUANTITY	FY 98	FY99	FY00	FY 01	FY02	FY 03	FY 04	FY 05
COST (in millions)	\$ 2.4	\$ 10.5	**					

** This line item has been consolidated into Line Items less than \$5 million in Budget Activity 02.

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET										DATE:			
P-40										February 1999			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY/BA-2								P-1 ITEM NOMENCLATURE/LINE ITEM # 298000 - Items Less than \$5 Million					
Program Element for Code B Items:								OTHER RELATED PROGRM ELEMENTS N/A					
	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)				\$0.0	\$0.0	\$5.2	\$6.0	\$6.8	\$9.9	\$10.2	\$8.3	N/A	46.4
SPARES COST (In Millions)				\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	0
PROGRAM DESCRIPTION/JUSTIFICATION:													
This is a Consolidated Budget for Shore Electronic Items Under \$2M (297500), Calibration Standards (296200), and Radar Support (204000)													
OPN Funds provide for the following:													
297500 - Shore Electronic Items Under \$2M - ANUYS-2													
(1) Procurement of AN/UYS-2A hardware, including assemblies, and components, (2) quality assurance, production engineering, and acceptance testing in support of AN/UYS-2A procurements, (3) support and materials incident to modification of AN/UYS-2A equipment, (4) procurement of Commercial-Off-The-Shelf (COTS) hardware to support modernization/replacement of AN/UYS-2A equipment, (5) procurement/direct support costs to support modernization activities.													
297500 - Shore Electronic Items Under \$2M - TECR													
1) Tactical Embedded Computer Resources (TECR) Reutilization Program which refurbishes, reconfigures, and tests TECR assets made available through decommissionings and other downsizing efforts and provides these assets to satisfy current tactical systems requirements.													
2) The TECR Depot and Diminishing Manufacturing Sources (DMS) capability, including procurement of test equipment and potentially obsolete parts to maintain both organic and original equipment manufacturer depots for out-of-production equipment which will remain in the Fleet well past the year 2010													
296200 - Calibration Standards													
These funds procure calibration equipment for intermediate and organizational maintenance levels. Test and Monitoring Systems (TAMS), which include test equipment and gages must be calibrated to ensure the equipment are operational, accurate and precise. Funds are used to procure Calibration Standards. Calibration Standards are equipments which ensure the accuracy of test equipment used to install, align and maintain all Navy Weapons systems shore and afloat. IMA Mechanical Standards programs provides various new and replacement calibration equipment for instrument repair and calibration shops aboard tenders and shore based intermediate maintenance activities. The Shipboard Gage Calibration program provides the organization maintenance level aboard ship with portable calibration equipment to provide calibration support in only specific types of measurement.													
Integrated Condition Assessment System (ICAS) is an NDI (COTS Equipment) computer based system that provides real-time, on-line machinery condition monitoring and failure detection, diagnosis, trending for failure prognosis and expert troubleshooting capability. ICAS us linked through data networks to other critical ship systems, such as Machinery Control, Damage Control and Bridge Systems to receive necessary sensory information.													

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

<p align="center">BUDGET ITEM JUSTIFICATION SHEET P-40</p>	<p>DATE: February 1999</p>
<p>204000 - Radar Support</p> <p>AN/BPS RADAR AND UPGRADE KITS - PROVIDE FOR UPGRADES TO IMPROVE RELIABILITY AND MAINTAINABILITY AND RESOLVE CRITICAL PROBLEMS IN THE SUBMARINE RADAR. AN/SPS-73(V) RADAR - PROVIDES REPLACEMENT RADAR FOR AN/SPS-64 RADAR ON ALL SHIP CLASSES AND REPLACEMENT FOR AN/SPS-55 AND AN/SPS-67(V)1 RADAR ON VARIOUS CLASS SHIPS. AN/SPA-25 MODS (VARIOUS) - THIS SERIES OF IMPROVEMENTS WILL INCREASE OPERATIONAL CAPABILITY, ACCURACY AND RELIABILITY. RADAR SWITCHBOARD UPGRADE - MODIFICATIONS AND FLEET CHANGES ARE REQUIRED TO PROVIDE INCREASED SAFETY, RELIABILITY AND UNIFORM CONFIGURATION. PROCUREMENT OF A NEW SOLID STATE SWITCHBOARD AND SIGNAL DATA CONVERTER WILL REPLACE THE OLDER SWITCHBOARDS CURRENTLY INSTALLED IN THE FLEET. MISC SPA FIELD CHANGES - RELIABILITY, MAINTAINABILITY FIELD CHANGES TO UPGRADE OPERATIONAL RADAR DISPLAYS AND ADDRESS THE REPLACEMENT OF OBSOLETE COMPONENTS EQUIPMENT INSTALLATION - FUNDING IS THE INSTALLATION OF EQUIPMENT INCLUDING FLEET MODERNIZATION PROGRAM INSTALLATIONS, INSTALLATION OF TRAINING EQUIPMENT, INSTALLATION OF EQUIPMENT IN OTHER SHORE FACILITIES AND INSTALLATION/CERTIFICATION/TESTING OF EQUIPMENT BY RADD/ASDS AIT.</p>	

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							Items Less than \$5 Million							
BA-2: Items Less than \$5 Million														
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			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
	Shore Elec Items Under \$2M - NSP				981			1,201			1,351			
	Shore Elec Items Under \$2M - SECR				1,464			9,315			1,388			
	Calibration Standards				2,026			1,863			1,395			
	Radar Support				19,640			33,840			827			
	Radar Support FMP				2,610			279			245			
TOTAL *							26,721			46,498			5,206	0

* This line item was consolidated starting in FY 2000. FY 1998 and FY 1999 data is included for display purposes only.

BUDGET ITEM JUSTIFICATION SHEET							DATE February 1999				
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE BLI: 3010 Ship Tactical Comms			SUBHEAD 52DN	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$14.3	\$37.2	\$21.5	\$29.3	\$14.7	\$22.8	\$35.6	\$44.0		
<p>PROGRAM COVERAGE:</p> <p>SHIP TACTICAL COMMUNICATIONS SYSTEMS ARE PROCURED UNDER THIS PROGRAM. THE EQUIPMENT PROCURED COVERS THE FREQUENCY SPECTRUM FROM MEDIUM FREQUENCY TO ULTRA HIGH FREQUENCY.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>ITEMS PROCURED UNDER THIS PROGRAM PROVIDE INTERCONNECTIVITY WITH THE JOINT MARITIME COMMUNICATIONS SYSTEM (JMCOMS) ARCHITECTURES INCLUDING AUTOMATED DIGITAL NETWORK SYSTEM (ADNS) AND DIGITAL MODULAR RADIO.</p> <p>HF TILT MECHANISMS - DEVICES TO ENABLE VERTICAL WHIP ANTENNA TO BE LOWERED TO A HORIZONTAL POSITION DURING FLIGHT OPERATIONS.</p> <p>HIGH FREQUENCY RADIO GROUP (HFRG BROADBAND) - WILL ALLOW FULLY AUTOMATED OPERATION OF THE HF COMMUNICATIONS SYSTEM. THIS SYSTEM WILL REDUCE THE NUMBER OF TOPSIDE ANTENNA USED, REDUCE ELECTROMAGNETIC INTERFERENCE AND REDUCE MANNING REQUIREMENTS.</p> <p>HIGH FREQUENCY SMALL SHIP TRANSMITTER (HFSST NARROWBAND) - HFSST IS A ONE-TO-ONE RADIO REPLACEMENT OF LEGACY NARROWBAND HF TRANSMITTERS AND ANTENNA COUPLERS, REPLACING 1960'S VACCUM TUBE TECHNOLOGY.</p> <p>DIGITAL WIDEBAND TRANSMISSION SYSTEM (DWTS) - UHF LINE-OF-SIGHT RADIO SYSTEM, SHIP-TO-SHIP AND SHIP-TO-SHORE COMMUNICATIONS REQUIRED TO SUPPORT LANDING FORCE SYSTEMS. THE CURRENT PROGRAM PROCURES DWTS FOR AMPHIBIOUS AND FLAG SHIPS ONLY.</p> <p>EXPLANATION OF CHANGES:</p> <ol style="list-style-type: none"> DWTS Production support increases due to change in reporting methods; amount shown includes all indirect costs: program management, system engineering, testing, ILS production. DWTS Non-FMP installations deleted. Begin DWTS Range Extension Suites in FY99. <p>INSTALLING AGENTS: INSTALLATION WILL BE ACCOMPLISHED BY ALTERATION INSTALLATION TEAMS (AIT) FROM SPAWAR FIELD ACTIVITIES.</p>											

COST ANALYSIS													DATE February 1999		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE BLI: 3010					SUBHEAD 52DN			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS												
			QTY	PY				FY 1998			FY 1999			FY 2000	
	TOTAL COST					QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
DN006	Production Support	A						198			750			952	
DN013	HF Tilt Mechanism	A				/1		351	18	73	1,305	18	73	1,309	
DN016	HFRG Broadband	A						3,094	2	4370	8,739				
DN017	HFSST Narrowband	A										6	906	5,436	
DN019	DWTS /2	A				11	410	4,506	39	466	18,169	3	627	1,880	
DN777	FMP Installation	A						5,728			7,937			11,515	
	DSA	A						375			343			395	
	TOTAL CONTROL							14,252			37,243			21,487	
Remarks: /1: No quantities procured due to funding reductions; funds used for engineering support efforts /2: DWTS unit cost for FY99 include Range Extension Suites. FY00 procures only the Extension Suites															

PROCUREMENT HISTORY AND PLANNING											A. DATE	
B. APPROPRIATION/BUDGET ACTIVITY											SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE				52DN		
						BLI: 3010						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DN013	HF Tilt Mechanism	99	TBD	IDIQ	SPAWAR		May-99	May-00	18	73	YES	
		00	TBD	IDIQ	SPAWAR		Nov-99	Nov-00	18	73		
DN016	HFRG Broadband	99	HARRIS Corporation	FFP/O	SPAWAR		Nov-98	Nov-99	2	4,389	YES	
DN017	HFSST Narrowband	00	TBD	FFP/O	SPAWAR		Nov-99	Nov-00	6	887	YES	
DN019	DWTS	98	Canadian Marconi	IDIQ	SSC CHASN		Dec-97	Aug-98	11	410	YES	N/A
		99	Canadian Marconi	IDIQ	SSC CHASN		Dec-98	Oct-99	39	466		
		00	Canadian Marconi	IDIQ	SSC CHASN		Dec-99	Oct-00	3	627		
D. REMARKS												

MODIFICATION TITLE: SHIP TACTICAL COMMUNICATIONS
 COST CODE: DN013
 MODELS OF SYSTEMS AFFECTED: HF TILT MECHANISMS
 DESCRIPTION/JUSTIFICATION: Installation on ships to allow vertical whip antennas to be lowered to a horizontal position during flight operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	155	6.9	0	0.0	0	0.4	18	1.3	18	1.3	19	1.5	0	0.0	9	0.8	26	2.1	44	4.4	311	34.2	600	52.9
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	142	11.9	0	0.0	0	0.0	13	1.2	18	1.2	18	1.2	19	1.4	0	0.0	9	0.7	26	1.9	355	37.1	600	56.6
PRIOR YR EQUIP	142	11.9					13	1.2															155	13.1
FY 97 EQUIP																							0	0.0
FY 98 EQUIP																							0	0.0
FY 99 EQUIP								18	1.2														18	1.2
FY 00 EQUIP										18	1.2												18	1.2
FY 01 EQUIP												19	1.4										19	1.4
FY 02 EQUIP														19	1.4								0	0.0
FY 03 EQUIP																9	0.7						9	0.7
FY 04 EQUIP																		26	1.9				26	1.9
FY 05 EQUIP																					44	4.4	44	4.4
FY TC EQUIP																					311	32.7	311	32.7
TOTAL INSTALLATION COST		11.9		0.0		0.0		1.2		1.2		1.2		1.4		0.0		0.7		1.9		37.1	600	56.6
TOTAL PROCUREMENT COST		18.8		0.0		0.4		2.5		2.5		2.7		1.4		0.8		2.8		6.3		71.3	600	109.5

ADMINISTRATIVE LEADTIME: 6 Months PROCUREMENT LEADTIME: 12 Months

CONTRACT DATES: FY 1998: FY 1999: May-99 FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: May-00 FY 2000: Nov-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	142	9	2	2	12	6	7	5	6				
OUTPUT	142	9	2	2	12	6	7	5	6				

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT	7	7	5					7	2					10	7	7	2	355	600
OUTPUT	7	7	5					7	2					10	7	7	2	355	600

Notes/Comments

UNCLASSIFIED

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

SHIP TACTICAL COMMUNICATIONS
 DN016
 HIGH FREQUENCY RADIO GROUP
 Provides for fully automated operation of the High Frequency Communications System.

Feb-99

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	29	23.0	0	0.0	0	3.1	2	8.7	0	0.0	2	10.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	33	45.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	22	27.2	0	0.0	3	3.7	3	5.9	3	6.3	0	0.0	2	4.5	0	0.0	0	0.0	0	0.0	0	0.0	33	47.5	
PRIOR YR EQUIP	22	27.2			3	3.7	3	5.9	1	2.1													29	38.8	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP									2	4.2													2	4.2	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP													2	4.5									2	4.5	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		27.2		0.0		3.7		5.9		6.3		0.0		4.5		0.0		0.0		0.0		0.0	33	47.5	
TOTAL PROCUREMENT COST		50.2		0.0		6.8		14.6		6.3		10.2		4.5		0.0		0.0		0.0		0.0		92.6	

ADMINISTRATIVE LEADTIME: 5 Months

PROCUREMENT LEADTIME: 12 Months

CONTRACT DATES:

FY 1998:

FY 1999: Nov-98

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999: Nov-99

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	25	2	1		2	1							
OUTPUT	25		2	1			2	1					

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
INPUT	1	1																						33
OUTPUT			1	1																				33

Notes/Comments

PY quantities included HFSST narrowband radios. New cost code, DN017 established for FY99 to differentiate between the two systems.

UNCLASSIFIED

MODIFICATION TITLE: SHIP TACTICAL COMMUNICATIONS
 COST CODE: DN017
 MODELS OF SYSTEMS AFFECTED: HIGH FREQUENCY SMALL SHIP TRANSMITTER
 DESCRIPTION/JUSTIFICATION: Provides for fully automated operation of the High Frequency Communications System.

Feb-99

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	0	0.0	0	0.0	6	5.4	12	10.2	0	0.0	7	6.6	35	29.4	25	22.1	156	98.7	241	172.4	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	2.8	12	6.0	0	0.0	7	2.6	35	13.6	181	58.2	241	83.3	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP										6	2.8												6	2.8	
FY 01 EQUIP													12	6.0									12	6.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																	7	2.6					7	2.6	
FY 04 EQUIP																							35	13.6	
FY 05 EQUIP																							25	8.0	
FY TC EQUIP																							156	50.2	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		2.8		6.0		0.0		2.6		13.6		58.2	241	83.3	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		5.4		13.1		6.0		6.6		32.0		35.7		156.9	241	255.7	

ADMINISTRATIVE LEADTIME: 9 Months PROCUREMENT LEADTIME: 12 Months

CONTRACT DATES: FY 1998: FY 1999: FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: FY 2000: Nov-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT										3	3		
OUTPUT											3	3	

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT	4	4	4						3	4				20	10	5		181	241
OUTPUT	4	4	4							3	4				20	10	5	181	241

Notes/Comments

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SHIP TACTICAL COMMUNICATIONS
 COST CODE: DN019
 MODELS OF SYSTEMS AFFECTED: DWTS
 DESCRIPTION/JUSTIFICATION: UHF Line-Of-Sight radio system, ship to ship and ship to shore communications.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	2	0.9	11	4.5	39	18.2	3	1.9	0	0.0	3	1.9	23	14.9	0	0.0	2	1.0	0	0.0	83	43.2	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other - Equipment not requiring installation							4		3				3		23				2					35	
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	8	2.0	5	0.9	24	4.0	11	2.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	48	9.0	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP					2	0.5																	2	0.5	
FY 98 EQUIP					6	1.5	5	0.9															11	2.4	
FY 99 EQUIP /1									24	4.0	11	2.1											35	6.1	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		2.0		0.9		4.0		2.1		0.0		0.0		0.0		0.0		0.0	48	9.0	
TOTAL PROCUREMENT COST		0.0		0.9		6.5		19.1		5.9		2.1		1.9		14.9		0.0		1.0		0.0		52.2	

ADMINISTRATIVE LEADTIME: 1 mo. PROCUREMENT LEADTIME: 10 mos.

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Dec-99 FY 2000: #####

DELIVERY DATES: FY 1998: Aug-98 FY 1999: Oct-99 FY 2000: Oct-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	8	5			10	11		3	8	3				
OUTPUT	8	5				10	11	3	8	3				

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		49
OUTPUT																		49

Notes/Comments
 No significant installation costs associated with Range Extension Suites. These are carry-on units.
 FY99 procurement includes 4 carry-on units. Carry-on units do not require installation.
 FY00 and outyears include only carry-on units.

P-1 Shopping List-Item No 103-7 of 103-9

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE
February 1999

APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE												SUBHEAD NO.											
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				BLI: 3010												52DN											
COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98						FISCAL YEAR 99						FISCAL YEAR 00								
							CALENDAR YEAR 98						CALENDAR YEAR 99						CALENDAR YEAR 00								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
DN013	HF Tilt Mechanism	99		18		18																					
		00		18		18																					
DN016	HFRG Broadband	99		2		2								A													
																				1		1					
DN017	HFSST Narrowband	00		6		6																					
DN019	DWTS	98		11		11		A							3	3	5										
		99		39		39								A									9	9			
		00		3		3																					

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

BUDGET ITEM JUSTIFICATION SHEET										DATE	
APPROPRIATION/BUDGET ACTIVITY										February 1999	
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE			SUBHEAD	
							BLI: 3033 Portable Radios			52T7	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$1.3	\$10.9								
<p>Note: Portable Radios Program transfers to the Ship Items Under \$5M BLI 3055 in FY00. Detail budget justification material for PY through FY99 is included in the Ship Items Under \$5M Program for budget comparability.</p> <p>PROGRAM COVERAGE:</p> <p>Portable and mobile radios support the unique air, sea, and land environment of the Navy Explosive Ordnance Disposal Units, Construction Battalions, Naval Beach Groups, Tactical Air Control Units, Naval Special Warfare Units, and Shipboard requirements defined by OPNAVINST C2300.44F.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: Requirements include:</p> <ul style="list-style-type: none"> a. Combat Survivor Evader Locator Beacons (CSEL). b. Single Channel Ground Air Radio System (SINCGARS) VHF FM units, both manpack and vehicular for anti-jam communications. c. HF radios for beyond-line-of-sight operations. d. Emergency lifeboat radios. e. Survival ground to air radios. <p>Hierarchical Yet Dynamic Reprogrammable Architecture (HYDRA) AN/SRC-55 will replace all stovepipe wireless shipboard systems (DCWIFCOM, MOMCOM, PVPCS, FDACS) with an integrated system on all ship classes. HYDRA is a wireless digital voice and data communications system using COTS trunking technology. HYDRA is capable of interfacing with PBX/BG Cellular/RF systems.</p> <p>Unit costs vary with the ship type and are based on the number of channels and radios in the system. Installations are performed by AITs during dockside availabilities.</p>											

BUDGET ITEM JUSTIFICATION SHEET										DATE	
APPROPRIATION/BUDGET ACTIVITY										SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT										52D5	
P-1 ITEM NOMENCLATURE											
BLI: 3040 SINGGARS											
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$7.1	\$27.8								
<p>Note: <i>The SINGGARS Program transfers to the Ship Items Under \$5M BLI 3055 in FY00. Detail budget justification material for PY through FY99 is included in the Ship Items Under \$5M Program for budget comparability.</i></p> <p>PROGRAM COVERAGE: The Shipboard SINGGARS (Single Channel Ground and Airborne Radio System) provides tactical anti-jam radios to support ship-to-shore communications during amphibious operations. This program also fills the requirements for VHF ship-to-ship and ship-to-boat communications, replacing the aging AN/VRC-46 family of radios. FY 1999 provides funding for the the buy-out of the SINGGARS requirements. Production Support provides funding for procuring modified ILS documentation and support packages which reflect SINGGARS-SIP configurations and to integrate the products of this program with other components of the JMCOMS system, such as ADNS.</p> <p>EXPLANATION OF PROGRAM CHANGE: Systems are being procured in configurations which are specific to each ship class. These configurations consist of differing numbers of five standard subcomponents. The SIP version of SINGGARS is to be fielded, replacing non-SIP SINGGARS which have already been partially fielded.</p> <p>Standard Components:</p> <ol style="list-style-type: none"> 1) Ship System (AN/SRC-54A) - A SINGGARS System Improvement Program (SIP) configuration which uses a single radio in a single mount. 2) Ship System (AN/SRC-54B) - A SINGGARS SIP configuration which uses two radios in a single mount. 3) Multicoupler (TD-1456) This multicoupler is being provided to all ships to couple up to four SINGGARS radios to a single antenna; one radio can operate in anti-jam mode. 4) SINGGARS Remote Control System (OT-637A) - A device for providing remote control of radios from the command and control spaces throughout the ship. 5) Test Set (AN/GRM-122) - A test set for testing the unique components of the SINGGARS SIP frequency-hopping radio. <p>INSTALLING AGENTS: Alteration Installation Teams by all SPAWAR field activities.</p>											

BUDGET ITEM JUSTIFICATION SHEET											DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE BLI: 3050 SHIP COMMUNICATIONS AUTOMATION				SUBHEAD 52PQ	
			FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY												
COST (in millions)			\$28.1	\$90.3	\$220.7	\$173.3	\$173.6	\$181.2	\$131.5	\$126.2	Continuing	Continuing
<p>PROGRAM COVERAGE/JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>NAVMACS II/SMS: The Naval Modular Automated Communication System II (NAVMACS II)/Single Message Solution (SMS) is a system based on VME architecture to automate and increase the speed and efficiency of handling tactical message traffic aboard ships. This system was developed with an open system architecture, and is conducive to technological upgrades. NAVMACS II is the Navy's host platform for tactical DMS. These systems are being procured to replace the older NAVMACS systems which lack the speed and capacity to handle current message traffic loads during periods of accelerated combat operations.</p> <p>Automated Digital Network System (ADNS): Provides automated routing and switching of Tactical and Strategic C4I data via Transmission Control Protocol/Internet Protocol (TCP/IP) networks linking deployed Battle Group units with each other and with the Defense Information Systems Network (DISN) ashore via multiple Radio Frequency (RF) paths. Consists of Commercial Off-The-Shelf (COTS) non-developmental Joint Tactical Architecture (JTA) compliant hardware (routers, processors, switches) and commercial Y2K compliant software (VxWorks toolkit) in a standardized, scalable shock qualified rack design. Provides Internet Protocol (IP) connectivity afloat and ashore. Merges multiple redundant stove pipe communications circuits and efficiently manages RF assets resulting in better throughput using existing RF media.</p> <p>Tactical Switching: Provides the switching and bandwidth management components of high capacity interoperable communications, as the number one fleet CINC requirement in the Navy Wide C4 and Information Warfare (IW) Joint Mission Area (JMA) assessment. Provides for the shore segment interconnect of an end-to-end dynamic bandwidth management, Internet Protocol, and Channel Access Protocol capability to deploying Battle Groups/Amphibious Ready Groups and other support units. Automates the major shore nodes which allow network centric and lights-out operations. Provides afloat interoperability of tactical and strategic C4I circuits with Marine Corps Ground Mobile Forces (GMF). Tactical Switching (which includes GMF interoperability, Automated Network Control Center (ANCC), Automated Technical Control (ATC) and the Automated Digital Multiplexer System (ADMS)) is the key enabling mechanism for the execution of the Automated Digital Network System (ADNS) strategy which is essential to meeting the Information Technology for the 21st Century (IT21) vision.</p> <p>High Speed Fleet Broadcast (HSFB): Replaces current outmoded Satellite and High Frequency (HF) Broadcast equipment with a system that allows higher transmission speeds, greater efficiency, and is more flexible.</p> <p>ATM LANS: As a direct result of the Navy's Information Technology for the 21st Century (IT-21) strategy, Ship Communications Automation is participating in the modification/upgrade of Local Area Network (LAN) system designs that advances the technology of the existing LAN systems and expands the scope of LAN system implementations to include both unclassified and classified LAN systems. Under this strategy, Ship Communications Automation would install the modified LAN system architecture in all future installations. Ship Communications Automation, with its field activities, has commenced qualification and evaluation of the Asynchronous Transfer Mode (ATM) LAN system, currently as a lab mock-up, and qualification of Ship Communications Automation applications within the architecture.</p> <p>Element Management System: Provides ships and shore sites with the capability to rapidly realign communications, and deploys essential baseline elements of IT-21 Automated Digital Network Systems (ADNS). Automates and remotely controls communications switching and quality monitoring equipment which eliminates manual operations. Provides operator controlled automated configuration of the Radio Communications System Circuits, computerized communications plan development and quality monitoring and reporting. Eliminates manual operator functions (patch panels) and provides open system architecture in accordance with Defense Information Infrastructure (DII).</p> <p>INSTALLING AGENTS: Installation will be by Alteration Installation Teams (AIT) from SPAWAR field activities.</p>												

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CLASSIFICATION**

COST ANALYSIS													DATE		
APPROPRIATION ACTIVITY													February 1999		
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT													P-1 ITEM NOMENCLATURE		
													BLI: 3050 SHIP COMMUNICATIONS AUTOMATION		
													SUBHEAD		
													52PQ		
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS												
						FY 1998			FY 1999			FY 2000			
							QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
PQ065	NAVMACS II/SMS	B					9	389	3,504	42	302	12,704	80	170	13,632
PQ069	ADNS								10,968			12,460			15,190
PQ070	TACTICAL SWITCHING	A										4,780			5,813
PQ071	HSFB	A					64	3	203						
PQ099	Production Support	A							1,408			2,052			4,078
PQ007	ATM LANS /1 /2	A								26	1,041	27,053	59	1,038	61,268
PQ075	EMS	A													4,635
PQ777	FMP Install	A							11,348			27,883			99,365
	FMP DSA	A							684			3,332			8,993
PQ776	NON FMP INSTALL	A													7,696
	TOTAL CONTROL								28,115			90,264			220,670

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				SUBHEAD		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						BLI: 3050 SHIP COMMUNICATIONS AUTOMATION				52PQ		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
PQ065	NAVMACS II/SMS 1/	99 00	SSC CHARLESTON SSC CHARLESTON	SOW SOW	SPAWAR SPAWAR	Oct-98 Oct-99	Nov-98 Nov-99	Jan-99 Jan-00	42 80	302 170	YES NO	N/A Mar-99
PQ071	HSFB	98	RJO, Lanham MD	CFFP	SPAWAR	Option 4	Dec-97	Dec-98	64	3	YES	N/A
PQ007	ATM LANS /1 /2	99 00	Various Various	IDIQ IDIQ	SPAWAR SPAWAR		Nov-98 Nov-99	Jan-99 Jan-00	26 59	1,041 1,038	YES YES	N/A N/A

D. REMARKS

Note: 1/ Unit cost based on average cost. Variances due to the diverse types ship sets being procured.

Note: 2/ Between years, the composition of ships change, i.e., one year may have more larger ships such as CVs while another year may consist mainly of SSNs. As a result, the per unit costs are different. Additionally, different ships require different peripherals listed under the "Various" category, which leads to per unit cost differences in that category.

MODIFICATION TITLE: NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II)
 COST CODE: PQ065/PQ777
 MODELS OF SYSTEMS AFFECTED: NAVMACS II
 DESCRIPTION/JUSTIFICATION: The Navy Modular Automated Communications system (NAVMACS II) will automate and increase the efficiency of message handling aboard ships.

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	43	29.0	7	2.2	9	3.5	42	12.7	80	13.6	76	10.4	27	4.6	104	13.2	102	10.6	187	17.2	Continue		677	117.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	43	5.3	7	3.3	9	1.2	42	4.7	80	3.9	76	3.6	27	1.1	104	3.3	102	3.1	187	6.7	Continue		677	36.2	
PRIOR YR EQUIP	43	5.3																						43	5.3
FY 97 EQUIP			7	3.3																				7	3.3
FY 98 EQUIP					9	1.2																		9	1.2
FY 99 EQUIP							42	4.7																42	4.7
FY 00 EQUIP									80	3.9														80	3.9
FY 01 EQUIP											76	3.6												76	3.6
FY 02 EQUIP													27	1.1										27	1.1
FY 03 EQUIP															104	3.3								104	3.3
FY 04 EQUIP																	102	3.1						102	3.1
FY 05 EQUIP																			187	6.7				187	6.7
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST		5.3		3.3		1.2		4.7		3.9		3.6		1.1		3.3		3.1		6.7				36.2	
TOTAL PROCUREMENT COST		34.3		5.5		4.7		17.4		17.5		14.0		5.7		16.5		13.7		23.9				153.3	

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 1 PROCUREMENT LEADTIME: 3

CONTRACT DATES: FY 1998: Nov-97 FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000: Jan-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	59	10	20	12	15	44	21	15	48	13				
OUTPUT	59	5	15	22	10	34	36	10	38	28				

INSTALLATION SCHEDULE:		FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		12	10	5	30	46	28	15	53	34	37	107	43						
OUTPUT		8	12	7	20	37	47	10	52	40	19	85	83						

Notes/Comments

UNCLASSIFIED

February 1999

MODIFICATION TITLE: Automated Digital Network System (ADNS)
 COST CODE: PQ0069/PQ777
 MODELS OF SYSTEMS AFFECTED: Automated Digital Network System (ADNS) Build 2 Afloat.
 DESCRIPTION/JUSTIFICATION: Automated Digital Network System (ADNS) Build 2 implements ATM multiplexing technology, and JDIICS-D compliant Integrated Network Management tools.

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment					25	11.0	27	12.5	25	12.6	35	16.3	28	13.5	36	17.4	28	13.4	35	17.2	6	10.7	245	124.6	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*					25	8.9	27	7.2	25	10.7	35	12.3	28	9.9	36	14.1	28	11.6	35	14.7	6	7.6	245	97.0	
PRIOR YR EQUIP																									
FY 97 EQUIP																									0 0.0
FY 98 EQUIP					25	8.9																			0 0.0
FY 99 EQUIP							27	7.2																	25 8.9
FY 00 EQUIP									25	10.7															27 7.2
FY 01 EQUIP											35	12.3													25 10.7
FY 02 EQUIP													28	9.9											35 12.3
FY 03 EQUIP															36	14.1									28 9.9
FY 04 EQUIP																	28	11.6							36 14.1
FY 05 EQUIP																			28	11.6					28 11.6
FY TC EQUIP																					35	14.7			35 14.7
TOTAL INSTALLATION COST		0.0		0.0		8.9		7.2		10.7		12.3		9.9		14.1		11.6		14.7		6	7.6	6	7.6
TOTAL PROCUREMENT COST		0.0		0.0		19.9		19.7		23.3		28.6		23.4		31.5		25.0		31.9					245 97.0
METHOD OF IMPLEMENTATION:																									18.3
																									221.6

AIT																										
CONTRACT DATES:	FY 1998:		Nov-97					FY 1999:		Nov-98				FY 2000:		Nov-99										
DELIVERY DATES:	FY 1998:		Dec-97					FY 1999:		Dec-98				FY 2000:		Dec-99										
INSTALLATION SCHEDULE:																										
INPUT	25		9	9	9		9	8	8		12	12	11													
OUTPUT	25			9	9		9		8		8		12	12												
INSTALLATION SCHEDULE:																										
INPUT			10	9	9		12	12	12		10	9	9		12	12	11		6						245	
OUTPUT		11		10	9		9		12	12	12		10	9		9		12	12		17				245	

MODIFICATION TITLE: Automated Digital Network System (ADNS) 1/
 COST CODE: PQ0069/PQ777
 MODELS OF SYSTEMS AFFECTED: Automated Digital Network System (ADNS) Build 2 Ashore.
 DESCRIPTION/JUSTIFICATION: Automated Digital Network System (ADNS) Build 2 implements ATM multiplexing technology, and JDIICS-D compliant Integrated Network Management tools. It adds SCI ADNS Architecture, Integrated Network Management Architecture, and supports legacy system programs.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	<4>	<2.7>	<4>	<2.5>	4	2.6	4	2.6	4	2.7	4	2.8	2	1.5	0	0.1	0	0.0	26	0.2	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	<4>	<2.6>	<4>	<2.4>	4	2.6	4	2.6	4	2.3	4	2.7	2	1.4	0	0.0	0	0.0	26	17.0	
PRIOR YR EQUIP	0	0.0																					0	0.0	
FY 97 EQUIP			0	0.0																			0	0.0	
FY 98 EQUIP					<4>	<2.6>																	<4>	<2.6>	
FY 99 EQUIP							<4>	<2.4>															<4>	<2.4>	
FY 00 EQUIP									4	2.6													4	2.6	
FY 01 EQUIP											4	2.6											4	2.6	
FY 02 EQUIP													4	2.3									4	2.3	
FY 03 EQUIP															4	2.7							4	2.7	
FY 04 EQUIP																	2	1.4					2	1.4	
FY 05 EQUIP																			0	0.0			0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST	0.0		0.0		<2.6>		<2.4>		2598.0		2640.0		2332.0		2724.0		1407.0		0.0		0.0		17.0		
TOTAL PROCUREMENT COST	0.0		0.0		<4.7>		<4.9>		5192.0		5276.0		5081.0		5514.0		2904.0		123.0		123.0		189.0		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 Mos. PROCUREMENT LEADTIME: 4 Mos.

CONTRACT DATES: FY 1998: FY 1999: FY 2000: Dec-99

DELIVERY DATES: FY 1998: FY 1999: FY 2000: Apr-00

INSTALLATION SCHEDULE:	FY 99				FY 00				FY 01			
	PY	1	2	3	4	1	2	3	4	1	2	3

INPUT <4> <4> 4 4

OUTPUT <4> <4> 4 4

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL 2/
	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 4 4 2 26

OUTPUT 4 4 2 26

Notes/Comments

1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3368 (Subhead 52D6, Cost Code D6002). Beginning in FY 00 funding for this program was transferred to BLI 3050.

2/ Total quantity meets inventory objective.

UNCLASSIFIED

February 1999

MODIFICATION TITLE: Tactical Switching
 COST CODE: PQ070/PQ777
 MODELS OF SYSTEMS AFFECTED: Tactical Switching Afloat
 DESCRIPTION/JUSTIFICATION: Provides the switching and bandwidth management components of high capacity interoperable communications.

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	0	0.0	17	4.8	11	3.2	5	1.5	4	1.1	5	1.4	6	1.9	0	0.0	0	0.0	48	13.9	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*					0	0.0	13	4.8	15	5.4	5	1.8	4	1.5	5	1.9	6	2.3	0	0.0	0	0.0	48	17.6	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP					0	0.0																	0	0.0	
FY 99 EQUIP							13	4.8	4	1.4													17	6.2	
FY 00 EQUIP								11	3.9														11	3.9	
FY 01 EQUIP										5	1.8												5	1.8	
FY 02 EQUIP												4	1.5										4	1.5	
FY 03 EQUIP														5	1.9								5	1.9	
FY 04 EQUIP																6	2.3						6	2.3	
FY 05 EQUIP																		0	0.0				0	0.0	
FY TC EQUIP																				0	0.0		0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		4.8		5.4		1.8		1.5		1.9		2.3		0.0		0.0		17.6	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		9.5		8.6		3.3		2.6		3.3		4.2		0.0		0.0		31.5	

METHOD OF IMPLEMENTATION:

AIT ADMINISTRATIVE LEADTIME: 1 mo PROCUREMENT LEADTIME: 1 mo

CONTRACT DATES: FY 1998: FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: FY 1999: Dec-98 FY 2000: Dec-99

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

PY	1	2	3	4	1	2	3	4	1	2	3	4
----	---	---	---	---	---	---	---	---	---	---	---	---

INPUT 0 6 7 4 6 5 5

OUTPUT 0 6 7 4 6 5 5

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	TC	TOTAL
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----	-------

INPUT 4 5 6 48

OUTPUT 4 5 6 48

Notes/Comments: 4 systems procured in FY99 are scheduled to start installation prior to FY00 and be completed commencing 1 Oct 99 based on the availability schedule prior to IT-21 Battlegroup ships deploying 1st quarter FY00.

MODIFICATION TITLE: Tactical Switching
 COST CODE: PQ070/PQ777
 MODELS OF SYSTEMS AFFECTED: Automated Network Control Center (ANCC)
 DESCRIPTION/JUSTIFICATION: Modifications to operational ADNS/ANCC/ATCs to maintain current technology, modernization of manual patch and test facilities.
 Quantities reflect the following areas of coverage: Med, Lant, Eastpac and Westpac. Costs vary by site requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	<7>	<14>	<3>	<8>	<3>	<3.7>	<5>	<1.3>	5	1.1	5	1.1	5	1.2	5	1.3	5	1.3	5	1.2	0	0.0	48	7370.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	<7>	<1.2>	<3>	<3>	<3>	<3>	<5>	<5>	5	0.5	5	0.5	5	0.5	5	0.5	5	0.7	5	0.5	0	0.00	48.00	6.60	
PRIOR YR EQUIP	<7>	<1.2>																						<7>	<1.2>
FY 97 EQUIP			<3>	<3>																				<3>	<3>
FY 98 EQUIP					<3>	<3>																		<3>	<3>
FY 99 EQUIP							<5>	<5>																<5>	<5>
FY 00 EQUIP									5	0.5														5	0.5
FY 01 EQUIP										5	0.5													5	0.5
FY 02 EQUIP												5.00	0.5											5	0.5
FY 03 EQUIP														5.00	0.5									5	0.5
FY 04 EQUIP															5.00	0.7								5	0.7
FY 05 EQUIP																	5.00	0.5						5	0.5
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST		<1.2>		<3>		<3>		<5>		0.5		0.5		0.5		0.5		0.7		0.5		0.00		6.60	
TOTAL PROCUREMENT COST		<13.2>		<1.1>		<5.0>		<1.8>		1.6		1.6		1.7		1.8		2.0		1.8		0.00		33.8	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 Mos.

PROCUREMENT LEADTIME: 4 Mos.

CONTRACT DATES:

FY 1998: FY 1999: FY 2000: Dec-99

DELIVERY DATES:

FY 1998: FY 1999: FY 2000: Apr-00

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	<13>		<5>				5				5		
OUTPUT	<13>		<5>				5				5		

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL 2/						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
INPUT			5				5				5				5									48
OUTPUT			5				5				5				5									48

Notes/Comments

1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3368 (Subhead 52D6, Cost Code D6001). Beginning in FY 00 funding for this program was transferred to BLI 3050.

2 / Total quantity meets inventory objective.

UNCLASSIFIED

February 1999

MODIFICATION TITLE: Tactical Switching
 COST CODE: PQ070/PQ777
 MODELS OF SYSTEMS AFFECTED: Automated Technical Control (ATC)
 DESCRIPTION/JUSTIFICATION: Modifications to operational ADNS/ANCC/ATCs to maintain current technology, modernization of manual patch and test facilities.
 Quantities reflect the following areas of coverage: Med, Lant, Eastpac and Westpac. Costs vary by site requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	<3>	<3.4>	<1>	<1>	<1>	<1.1>	<1>	<1.2>	1	1.3	1	1.5	1	1.2	1	1.4	1	1.5	1	1.3			12	15.0
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	<3>	<2.0>	<0>	<0.0>	<2>	<1.0>	<1>	<0.5>	1	0.6	1	0.6	1	0.6	1	0.5	1	0.9	1	0.6	0	0.0	12	6.4
PRIOR YR EQUIP	<3>	<2.0>																					<3>	<2.0>
FY 97 EQUIP			<0>	<0.0>																			<0>	<0.0>
FY 98 EQUIP					<2>	<1.0>																	<2>	<1.0>
FY 99 EQUIP							<1>	<0.5>															<1>	<0.5>
FY 00 EQUIP									1	0.6													1	0.6
FY 01 EQUIP											1	0.6											1	0.6
FY 02 EQUIP													1	0.6									1	0.6
FY 03 EQUIP															1	0.5							1	0.5
FY 04 EQUIP																	1	0.9					1	0.9
FY 05 EQUIP																			1	0.6			1	0.6
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		<2.0>		<0.0>		<1.0>		<0.5>		0.6		0.6		0.6		0.5		0.9		0.6		0.0		6.4
TOTAL PROCUREMENT COST		<5.8>		<1.5>		<1.6>		<1.7>		1.9		2.1		1.8		1.9		2.3		1.8		0.0		21.4

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 Mos.

PROCUREMENT LEADTIME: 4 Mos.

CONTRACT DATES:

FY 1998: FY 1999: FY 2000: Dec-99

DELIVERY DATES:

FY 1998: FY 1999: FY 2000: Apr-00

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	<5>		<1>				1					1	
OUTPUT	<5>		<1>				1					1	

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL 2/						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
INPUT			1				1					1					1							12
OUTPUT			1				1					1						1						12

Notes/Comments

1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3368 (Subhead 52D6, Cost Code D6001). Beginning in FY 00 funding for this program was transferred to BLI 3050.

2 / Total quantity meets inventory objective.

UNCLASSIFIED

February 1999

MODIFICATION TITLE: Tactical Switching
 COST CODE: PQ070/PQ777
 MODELS OF SYSTEMS AFFECTED: Automated Digital Multiplexer System (ADMS)/Automated Digital Network System (ADNS) Build 2 1/
 DESCRIPTION/JUSTIFICATION: Automated Network management capability which is fully compatible with switching technologies and in compliance with national and international standards.
 Quantities reflect the units at various sites within the following areas of coverage: Med, Lant, Eastpac, and Westpac. Costs vary by site size, requirements and configuration.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	<4>	<3.0>	<4>	<2.3>			<2>	<0.7>	3	0.3	10	0.3	10	0.3	10	0.3	11	0.3	11	0.3			65	0.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	<4>	<0.5>	<4>	<2.0>	0.00	0.00	<2>	<0.6>	3	0.2	10	0.2	10	0.2	10	0.2	11	191.0	11	195.0	0	0.0	65	4.2	
PRIOR YR EQUIP	<4>	<0.5>																					<4>	<0.5>	
FY 97 EQUIP			<4>	<2.0>																			<4>	<2.0>	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP							<2>	<0.6>															<2>	<0.6>	
FY 00 EQUIP									3	0.2													3	0.2	
FY 01 EQUIP											10	0.2											10	0.2	
FY 02 EQUIP													10	0.2									10	0.2	
FY 03 EQUIP															10	0.2							10	0.2	
FY 04 EQUIP																	11	0.2					11	0.2	
FY 05 EQUIP																			11	0.2			11	0.2	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		<0.5>		<2.0>		0.0		<0.6>		0.2		0.2		0.2		0.2		0.2		0.2		0.0		4.2	
TOTAL PROCUREMENT COST		<3.5>		<4.3>		0.0		<1.3>		0.4		0.4		0.4		0.5		0.5		0.5		0.0		11.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 Mos. PROCUREMENT LEADTIME: 4 Mos.

CONTRACT DATES: FY 1998: FY 1999: FY 2000: Dec-99

DELIVERY DATES: FY 1998: FY 1999: FY 2000: Apr-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT <8> <2> 3 10

OUTPUT <2> 3 10

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL 2/
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 10 10 11 11 65

OUTPUT 10 11 11 11 65

Notes/Comments
 1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3368 (Subhead 52D6, Cost Code D6002). Beginning in FY 00 funding for this program was transferred to BLI 3050.
 2 / Total quantity meets inventory objective.

UNCLASSIFIED

February 1999

MODIFICATION TITLE: HIGH SPEED FLEET BROADCAST
 COST CODE: PQ071
 MODELS OF SYSTEMS AFFECTED: HIGH SPEED FLEET BROADCAST
 DESCRIPTION/JUSTIFICATION: Replaces the current outmoded system with a system that is much faster, more flexible and provides more efficient use of transmission media such as satellite and HF.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	39	9.8	22	2.9	64	0.2	0		0		0												125	12.9	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	39	0.1	0	0.0	86	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	125	1.4	
PRIOR YR EQUIP	39	0.1																					39	0.1	
FY 95 EQUIP																							0	0.0	
FY 96 EQUIP																							0	0.0	
FY 97 EQUIP					22	0.4																	22	0.4	
FY 98 EQUIP					64	0.9																	64	0.9	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST	100.0		0.0		1.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.4		
TOTAL PROCUREMENT COST	9900.0		2900.0		1.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		14.3		

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES: FY 1998: Dec-97 FY 1999: FY 2000:

DELIVERY DATES: FY 1998: Dec-98 FY 1999: FY 2000:

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 99 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4

INPUT 125

OUTPUT 125

INSTALLATION SCHEDULE: 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 FY 04 1 2 3 4 FY 05 TC TOTAL 1/

INPUT 125

OUTPUT 125

Notes/Comments

1 / Total quantity meets inventory objective.

MODIFICATION TITLE: 3050 SHIP COMMUNICATIONS AUTOMATION ATM LANs (52PQ/PQ007)
 MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed Asynchronous Transfer Mode (ATM) network systems to replace aging LAN systems for Battle Group ships.
 DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							26	27.1	59	61.3	33	41.7	69	52.0	53	42.6	23	28.1	17	19.1			280	271.9	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*							26	11.2	59	73.6	33	49.3	68	58.2	53	48.4	21	26.6	20	19.3			280	286.6	
PRIOR YR EQUIP																								0	0.0
FY 97 EQUIP																								0	0.0
FY 98 EQUIP																								0	0.0
FY 99 EQUIP							26	11.2																26	11.2
FY 00 EQUIP									59	73.6														59	73.6
FY 01 EQUIP										33	49.3													33	49.3
FY 02 EQUIP												68	58.2											69	59.1
FY 03 EQUIP														1	0.9									53	48.7
FY 04 EQUIP																52	47.5	1	1.3					23	28.3
FY 05 EQUIP																		20	25.4			3	2.9	17	16.4
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST							26	11.2	59	73.6	33	49.3	68	58.2	53	48.4	21	26.6	20	19.3			280	286.6	
TOTAL PROCUREMENT COST								38.3		134.8		91.0		110.2		90.9		54.7		38.4					558.5

ADMINISTRATIVE LEADTIME: 3 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1998: NA FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: NA FY 1999: Jan-99 FY 2000: Jan-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL 1/		
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT	0		16	10			28	31			16	17																					
OUTPUT	0		4	12	10		8	27	24		5	13	15																				
INPUT			30	38			1	23	29		1	8	12																		280		
OUTPUT			5	26	37			5	21	27			1	8	12																		280

1 / Total is the inventory objective.

MODIFICATION TITLE: Shore Remote Control Systems (SRCS)/Element Management System -Ashore (EMS) 1/
 COST CODE PQ075/PQ776
 MODELS OF SYSTEMS AFFECTED: Various transmission media.
 DESCRIPTION/JUSTIFICATION: Automates and remotely controls communications switching and quality monitoring equipment which eliminates manual operations.
 Quantities reflect installation sites in the following areas of coverage: Med, Lant, Eastpac, and Westpac. Cost vary by site size, requirements and configuration.

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

	PY		FY 97		FY 98		FY 99		FY 00 2/		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment	<8>	<2.8>	<4>	<1.5>	<4>	<2.4>	<13>	<2.7>	21	2.5	12	1.4	10	1.2	11	1.2	9	1.1	3	0.4	0	0.0	95	17.5		
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*	<8>	<.9>	<8>	<.9>	<4>	<1.5>	<13>	<4.1>	21	3.8	12	2.2	10	1.6	11	2.0	9	1.7	3	0.7	0	0.0	95	19.6		
PRIOR YR EQUIP	<8>	<.9>																								
FY 97 EQUIP			<8>	<.9>																					0	0.0
FY 98 EQUIP					<4>	<1.5>																			0	0.0
FY 99 EQUIP							<13>	<4.1>																	0	0.0
FY 00 EQUIP									21	3.8															21	3.8
FY 01 EQUIP											12	2.2													12	2.2
FY 02 EQUIP													10	1.6											10	1.6
FY 03 EQUIP															11	2.0									11	2.0
FY 04 EQUIP																	9	1.7							9	1.7
FY 05 EQUIP																			3	0.7					3	0.7
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST	<.9>		<.9>		<1.5>		<4.1>		3.8		2.2		1.6		2.0		1.7		0.7		0.0				19.6	
TOTAL PROCUREMENT COST	<3.7>		<2.4>		<3.9>		<6.8>		6.4		3.6		2.8		3.2		2.7		1.1		0.0				37.1	

ADMINISTRATIVE LEADTIME: 2 Mos. PROCUREMENT LEADTIME: 4 Mos.

CONTRACT DATES: FY 1998: FY 1999: FY 2000: Dec-99
 DELIVERY DATES: FY 1998: FY 1999: FY 2000: Apr-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL 3/
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	<16>			<13>				21				12																			
OUTPUT	<16>			<13>				21				12																			
INPUT				10				11				9																95			
OUTPUT				10				11				9																95			

Notes/Comments
 1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3368 (Subhead 52D6, Cost Code D6002). Beginning in FY 00 funding for this program was transferred to BLI 3050.
 2 / The Unit cost has decreased significantly since the original cost estimates were made. Savings are attributed to technology change and architecture refinement.
 3 / Total quantity meets inventory objective.

MODIFICATION TITLE: Element Management System-Afloat (EMS) 1/
 COST CODE: PQ075/PQ777
 MODELS OF SYSTEMS AFFECTED: Various transmission media.
 DESCRIPTION/JUSTIFICATION: Automates and remotely controls communications switching and quality monitoring equipment which eliminates manual operations.
 Quantities reflect the following areas of coverage: Med, Lant, Eastpac, and Westpac. Cost vary by site size, requirements and configuration.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	<6>	<7.8>	<1>	<1.5>	<4>	<3.1>	<28>	<5.8>	11	2.1	26	4.9	19	3.9	29	5.7	28	5.7	35	7.2	44	11.4	192	40.8
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Intern Contractor Support																								
Installation of Hardware*	<3>	<0.9>	<3>	<1.0>	<5>	<0.9>	<20>	<6.0>	19	5.9	26	8.2	19	6.4	29	9.4	28	9.4	35	11.9	44	18.8	231	69.9
PRIOR YR EQUIP	<3>	<0.9>	<3>	<1.0>																			0	0.0
FY 97 EQUIP					<1>	<0.1>																	0	0.0
FY 98 EQUIP					<4>	<0.8>																	0	0.0
FY 99 EQUIP							<20>	<6.0>															0	0.0
FY 00 EQUIP									19	5.9													22	5.9
FY 01 EQUIP											26	8.2											26	8.2
FY 02 EQUIP													19	6.4									19	6.4
FY 03 EQUIP															29	9.4							29	9.4
FY 04 EQUIP																	28	9.4					28	9.4
FY 05 EQUIP																			35	11.9			35	11.9
FY TC EQUIP																					44	18.8	44	18.8
TOTAL INSTALLATION COST	<0.9>		<1.0>		<0.9>		<6.0>		5.9		8.2		6.4		9.4		9.4		11.9		18.8		69.9	
TOTAL PROCUREMENT COST	<8.7>		<2.5>		<4.1>		<11.8>		8.0		13.1		10.2		15.1		15.0		19.1		30.2		110.8	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 Mos.

PROCUREMENT LEADTIME: 4 Mos.

CONTRACT DATES: FY 1998: FY 1999: Nov-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: FY 1999: Dec-98 FY 2000: Apr-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL 2/
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	<11>		<10>	<10>		8	5	6			9	9	8																		
OUTPUT	<11>			<10>	<10>		8	5	6			9	13																		
INPUT			7	6	6		10	10	9		10	9	9				10	12	13		54					231					
OUTPUT		4		7	9		3	10	14		5		10	14		4		12	18		59					231					

Notes/Comments
 1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3055 (Subhead 52NG). Beginning in FY 00 funding for this program was transferred to BLI 3050.
 2 / Total quantity meets inventory obje

BUDGET ITEM JUSTIFICATION SHEET										DATE	
APPROPRIATION/BUDGET ACTIVITY										February 1999	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE			SUBHEAD	
							BLI: 3055 Ship & Shore Items Under \$5M			52NG	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$11.4	\$22.2	\$20.7	\$15.8	\$16.2	\$15.5	\$18.3	\$20.5		
<p>PROGRAM COVERAGE: This program consolidates OPN P-1 Line Items; TMIP (BLI 2435), Portable Radios (BLI 3033) and SINGARS (BLI 3040) beginning in FY00. PY through FY99 detail information is provided for budget comparability. Ship Items Under \$5M provides funds for the continued procurement of items of lesser visibility but necessary for the required integration and completion of communications suites aboard ship. The following specific efforts will be funded under this program:</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>R-2368/URR HF RECEIVER: The R-2368/URR will replace all existing High Frequency (HF) receivers and will provide a capability for automated operation. When Digital Modular Radio (DMR) offers the HF receive capability, the funding will be transferred.</p> <p>RED/BLACK DIGITAL SWITCH/EMS: The Red and Black Digital Switches (transitioning to the Element Management System (EMS)) are essential elements of the Joint Maritime Communications System (JMCOMS)/COPERNICUS switching architecture. These switches will provide the capability for automation of the Radio Communications Suite, via automatic interconnection between the remote subscriber to cryptographic equipment/multiplexers and digital radio equipment. This program provides for the transition of JMCOMS Automated Digital Network System (ADNS) to Integrated Services Digital Network (ISDN) and Asynchronous Transfer Mode (ATM) suitability. Beginning in FY99, EMS provides operator controlled automatic configuration of the Radio Communication System (RCS) circuits, computerized communications plan development, and quality monitoring and reporting. ¹</p> <p>FCIP: The Field Change Improvement Plan (FCIP) upgrades Command, Control, Communications, Computers and Intelligence (C4I) equipment on over 200 ships annually by installing field changes to correct equipment and personnel safety hazards, restore reliability, update operating parameters, correct inter-operability problems, and replace obsolete components. Alteration Installation Team (AIT) coordination supports alterations that are made outside scheduled availabilities and integrates AIT installation with Type Command (TYCOM) pier side availability schedules. ²</p> <p>MCIXS: Battle Group Cellular Telephone (BG Cellular)/Maritime Cellular Information Exchange Systems (MCIXS) provides non mission-critical Intra-Battle Group real-time transfer of information using a standard telephone or cellular hand held mobile telephone.</p> <p>VIXS: Video Information Exchange System (VIXS) provides the Fleet with tactical video teleconferencing. The system provides multipoint secure Video Teleconferencing (VTC) between deployed carriers/large deck amphibis, Fleet Commander-in-Chief (CINCs), Chief of Naval Operations (CNO) and select Department of Defense (DOD) commands. Shipboard systems also provide connectivity to the Joint Worldwide Intelligence Communications System (JWICS) VTC system.</p> <p>¹ Beginning in FY00, this program has been reclassified and associated funding transferred to BLI 3050, Subhead 52PQ. The programs have been consolidated into BLII 3050 as an ADNS IT21 enabler. Funding consolidation moves all ADNS systems into one budget line item.</p> <p>² FCIP will transfer to OMN beginning FY00.</p>											

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET

DATE February 1999

APPROPRIATION/BUDGET ACTIVITY

OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE

BLI: 3055 Ship & Shore Items Under \$5M

SUBHEAD

52NG

TMIP: Theater Medical Information Program - Maritime (TMIP-M) program is charged with deployment of both infrastructure and the software to support the theater requirements for healthcare and command and control (C2) activities: clinical, resources, logistics, decision support, etc. The development and release of the TMIP-M software will be conducted incrementally and it will be based on GOTS medical software that is currently available in the military inventory. Software components that have been selected for TMIP are: SAMS, MEDPAR-CC, MAD and CHCS in the Block 1 release, and TRAC2ES and DMLSS in the Block 2 release. Subsequent TMIP-J Block releases will follow. The TMIP-M program plans to leverage IT-21 and NTCSS infrastructure components, as well as installation, logistics, and fleet support components.

PORTABLE RADIOS: Portable and mobile radios support the unique air, sea, and land environment of the Navy Explosive Ordnance Disposal Units, Construction Battalions, Naval Beach Groups, Tactical Air Control Units, Naval Special Warfare Units, and Shipboard requirements defined by OPNAVINST C2300.44F. Radios procured include Combat Survivor Evader Locator Beacons (CSEL), Single Channel Ground Air Radio System (SINGARS) VHF FM units, both manpack and vehicular for anti-jam communications, HF radios for beyond-line-of-sight operations, Emergency lifeboat radios, Survival ground to air radios. Hierarchical Yet Dynamic Reprogrammable Architecture (HYDRA) AN/SRC-55 which will replace all stovepipe wireless shipboard systems (DCWIFCOM, MOMCOM, PVPCS, FDGS) with an integrated system on all ship classes.

SINGARS: Single Channel Ground and Airborne Radio System (SINGARS) provides tactical anti-jam radios to support ship-to-shore communications during amphibious operations. This program also fills the requirements for VHF ship-to-ship and ship-to-boat communications, replacing the aging AN/VRC-46 family of radios. FY 1999 provides funding for the the buy-out of the SINGARS requirements. FY 2000 procurements are limited to special purpose test equipment. FY99 PBD-290 provided funds and directed the Navy to accelerate procurement of equipment in order to conform to Joint PMO plans.

Installing Agents: Installation will be accomplished by AIT from SPAWAR field activities.

UNCLASSIFIED
CLASSIFICATION

COST ANALYSIS												DATE				
												February 1999				
APPROPRIATION ACTIVITY						P-1 ITEM NOMENCLATURE						SUBHEAD				
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						BLI: 3055 Ship & Shore Items Under \$5M						52NG				
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			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		
NG001	Production Support	A														501
NG184	R2368/URR HF Receiver ¹	A			197	205	8	1,698	94	8	791					
NG237	Red/Black Digital Switch/Element Management Systems ²	A	4	782	3,127	28	189	5,286								
NG238	MCIXS ¹	A			405	5	239	1,193	4	255	1,018					
NG239	VIXS	A				6	130	780	8	124	995					
NG776	Non-FMP Installation (VIXS)	A						415			223					
NG777	FMP Installation	A			6,948			11,809			1,010					
	FMP DSA	A			700			1,046			206					
	TMP															
NG240	TMIP	B							27	29	794					
NG777	TMIP Installation										147					
	PORTABLE RADIOS															
T7003	RF-5000 Series	A	[4]	[43]	[171]											
NG241	RF-5000 Series	A														
T7016	SINCGARS Manpack	A			[5]	[18]	[8]	[143]								
NG242	SINCGARS Manpack	A														
T7029	SINCGARS Vehicle	A			[126]	[62]	[23]	[1,411]								
NG243	SINCGARS Vehicle	A														
T7039	CSEL	B				[104]	[6]	[621]								
NG244	CSEL	B														
T7041	DVITS (Portable)	A			[29]											
T7045	Production Support	A			[142]											
NG001	Production Support	A														
T7046	HYDRA	A	[1]	[642]	[642]	[3]	[2,436]	[7,308]								
NG245	HYDRA	A										5	2,258	11,290		
T7777	FMP Installation (Total Install/DSA)	F			[169]			[1,385]								
	FMP Installation				[169]			[1,191]								
	FMP DSA							[194]								
NG777	FMP Installation (Total Install/DSA)	F														2,144
	FMP Installation															1,864
	FMP DSA															280

UNCLASSIFIED
CLASSIFICATION

COST ANALYSIS												DATE					
												February 1999					
APPROPRIATION ACTIVITY						P-1 ITEM NOMENCLATURE						SUBHEAD					
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						BLI: 3055 Ship & Shore Items Under \$5M						52NG					
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS														
			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			
	SINGGARS																
D5001	Ship System Upgrades (AN/SRC-54)	A				[60]	[18]	[1,080]	[120]	[11]	[1,332]						
NG246	Ship System Upgrades (AN/SRC-54)	A															
D5005/D5006	TD-1456/GRC FH Multicoupler	A				[49]	[58]	[2,853]	[141]	[62]	[8,799]						
NG247	TD-1456/GRC FH Multicoupler	A															
D5007	AN/GRM-122 Radio Test Set	A				[12]	[53]	[641]	[17]	[47]	[796]						
NG248	AN/GRM-122 Radio Test Set	A										21	47	986			
D5008	Ship System (AN/SRC-54A)	A							[19]	[35]	[662]						
NG249	Ship System (AN/SRC-54A)	A															
D5009	Ship System (AN/SRC-54B)	A							[218]	[62]	[13,465]						
NG250	Ship System (AN/SRC-54B)	A															
D5010	Remote Control System (OK-637A)	A							[162]	[8]	[1,324]						
NG251	Remote Control System (OK-637A)	A															
D5011	Production Support	A									[554]						
D5777	FMP Installation Equipment	F						[2,517]			[841]						
	FMP Installation							[2,399]			[800]						
	FMP DSA							[119]			[41]						
NG777	FMP Installation Equipment	F															641
	FMP Installation																597
	FMP DSA																44
	TOTAL CONTROL							11,377			22,227						20,746
Remarks:	¹ FY 98 funds were used for production support. ² Beginning in FY00, funding for this program has been transferred to BLI 3050, Subhead 52PQ.																

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						BLI: 3055 Ship & Shore Items Under \$5M					52NG	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NG184	R2368/URR HF Receiver	99 00	Harris TBD	SSP FFP	SPAWAR SPAWAR	Sep-98	Mar-99 Oct-99	Dec-99 Apr-00	205 94	8 8	YES YES	
NG237	Red/Black Digital Switch/Element Mgmt System ^{1,2}	99	SSC SD	FFP/OPT	SPAWAR	Jul-98	Jan-99	Apr-99	28	189	YES	
NG238	MCIXS	99 00	TTK Inc TTK Inc	FFP/OPT FFP/OPT	SPAWAR SPAWAR		Apr-99 Oct-99	Jul-99 Jan-00	5 4	239 255	YES YES	
NG239	VIXS ³	99 00	SSC CHS SSC CHS	WX WX	SPAWAR SPAWAR	N/A N/A	Dec-98 Dec-99	Apr-99 Apr-00	6 8	130 124	YES YES	
NG240	TMIP TMIP	00	SSC SD/CHAS	WX	SSC SD/CHAS	N/A	Oct-99	Nov-99	27	29	YES	
	PORTABLE RADIOS											
T7016	SINGGARS Manpack	99	ITT: Ft. Wayne, IN	FFP	CECOM: Ft. Monmouth, NJ		Jun-99	Jun-00	[18]	[8]	YES	
T7029	SINGGARS Vehicle	99	ITT: Ft. Wayne, IN	FFP	CECOM: Ft. Monmouth, NJ		Jun-99	Jun-00	[62]	[23]	YES	
T7039	CSEL	99	Boeing	WX/FP	USAF-SMC/CZ		Mar-99	Jun-99	[104]	[6]	YES	
T7046	HYDRA-Amphibs /Carrier	99	TBD	C/FFP	SSC CHS	Jul-97	Dec-98	Apr-99	[3]	[2,436]	YES	
NG245	HYDRA-Carriers&Amphibs	00	TBD	C/FFP	SSC CHS		Dec-99	Jun-00	5	2,258	YES	

D. REMARKS

¹ Beginning in FY 00, funding for this program has been transferred to BLI 3050, Subhead 52PQ.

² Unit cost reduction reflects difference in cost between proprietary SA-2112 Red/Black Switch and Commercial Off the Shelf (COTS) Nondevelopmental Information (NDI) Element Management System (EMS) architecture.

³ Unit cost variances are due to the diverse types of ship sets being procured as well as the averaging of ship and shore procurements with varying quantities in one procurement cost code (NG239).

TMIP: Unit cost determined by platform configuration, for example CVN/LHD/LHA cost more than other ships.

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				SUBHEAD		
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						BLI: 3055 Ship & Shore Items Under \$5M				52NG		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
D5001	SINCGARS Ship System Upgrades (AN/SRC-54)	98	ITT	FFP	SSC CHS		Jun-98	Dec-98	[60]	[18]	Yes	
D5001	Ship System Upgrades (AN/SRC-54)	99	ITT	FFP	SSC CHS		Nov-98	May-99	[120]	[11]	Yes	
D5005/D5006	TD-1456/GRC FHMulticoupler	98	XETRON	FFP	CECOM: Ft. Monmouth, NJ		Mar-98	Jun-99	[49]	[58]	Yes	
D5005/D5006	TD-1456/GRC FHMulticoupler	99	XETRON	FFP	CECOM: Ft. Monmouth, NJ		Mar-99	Jul-00	[141]	[62]	Yes	
D5007	AN/GRM-122 Radio Test Set	98	ITT	FFP	CECOM: Ft. Monmouth, NJ		Mar-98	Jul-99	[12]	53	Yes	
D5007	AN/GRM-122 Radio Test Set	99	ITT	FFP	CECOM: Ft. Monmouth, NJ		Mar-99	Jul-00	[17]	[47]	Yes	
NG248	AN/GRM-122 Radio Test Set	00	ITT	FFP	CECOM: Ft. Monmouth, NJ		Mar-00	Jun-01	21	47	Yes	
D5008	Ship System (AN/SRC-54A)	99	ITT	FFP	CECOM: Ft. Monmouth, NJ		Mar-99	Jul-00	[19]	[35]	Yes	
D5009	Ship System (AN/SRC-54B)	99	ITT	FFP	CECOM: Ft. Monmouth, NJ		Mar-99	Jul-00	[218]	[62]	Yes	
D5010	Remote Control System (OK-637A)	99	ITT	FFP	CECOM: Ft. Monmouth, NJ		Mar-99	Jul-00	[162]	[8]	Yes	
D. REMARKS												

UNCLASSIFIED

February 1999

MODIFICATION TITLE: R-2368/URR HF Receiver
 COST CODE: NG184
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Replaces all functionally obsolete MF and HF receivers with a receiver capable of operating in a remote automated environment

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	319	3.9	107	1.3	0	0.2	205	1.7	94	0.8	210	1.8	130	1.1	172	1.5	144	1.3	0	0.0			1,381	13.7
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interim Contractor Support																								
Installation of Hardware*	125	0.6	174	0.5	67	0.5	60	0.3	205	0.8	94	0.5	210	1.0	130	0.7	172	0.9	144	0.8			1,381	6.6
PRIOR YR EQUIP	125	0.6	174	0.5	20	0.1																	319	1.2
FY 97 EQUIP					47	0.4	60	0.3															107	0.7
FY 98 EQUIP																							0	0.0
FY 99 EQUIP									205	0.8													205	0.8
FY 00 EQUIP											94	0.5											94	0.5
FY 01 EQUIP													210	1.0									210	1.0
FY 02 EQUIP															130	0.7							130	0.7
FY 03 EQUIP																	172	0.9					172	0.9
FY 04 EQUIP																			144	0.8			144	0.8
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.6		0.5		0.5		0.3		0.8		0.5		1.0		0.7		0.9		0.8		0.0		6.6
TOTAL PROCUREMENT COST		4.5		1.8		0.7		2.0		1.6		2.3		2.1		2.2		2.2		0.8		0.0		20.3

ADMINISTRATIVE LEADTIME: 6 mos

PROCUREMENT LEADTIME: 10 mos

CONTRACT DATES: FY 1998: FY 1999: Mar-99 FY 2000: Oct-99

DELIVERY DATES: FY 1998: FY 1999: Dec-99 FY 2000: Apr-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	366	20	20	20		100	105			46	48		
OUTPUT	366		20	20	20		100	105			46	48	

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT				100	110			64	66			80	92			70	74		0			1,381
OUTPUT				100	110			64	66			80	92			70	74		0			1,381

Notes/Comments
 FY98 funds used for production support

P-1 Shopping List-Item No 107-7 of 107-22

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

MODIFICATION TITLE: Red/Black Digital Switch/EMS
 COST CODE: NG237

MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Red/Black Digital Switch will provide automated and remote controls of digital circuits. The Element Management System (EMS) supports ADNS functionality beginning in FY99. Beginning in FY00, this program's funding has been transferred to BLI 3050, Subhead 52PQ.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	6	7.8	1	1.5	4	3.1	28	5.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	39	17.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	3	0.9	3	1.0	5	1.0	20	5.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	31	8.1	
PRIOR YR EQUIP	3	0.9	3	1.0																			6	1.9	
FY 97 EQUIP					1	0.1																	1	0.1	
FY 98 EQUIP					4	0.9																	4	0.9	
FY 99 EQUIP							20	5.2															20	5.2	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																						0	0.0	0	0.0
TOTAL INSTALLATION COST		0.9		1.0		1.0		5.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		8.1	
TOTAL PROCUREMENT COST		8.7		2.5		4.1		10.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		25.9	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 7 mos PROCUREMENT LEADTIME: 7 mos (4 mos for FY99 procurement)

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000:

DELIVERY DATES: FY 1998: Jul-98 FY 1999: Apr-99 FY 2000:

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

	1	2	3	4	1	2	3	4	1	2	3	4
--	---	---	---	---	---	---	---	---	---	---	---	---

INPUT 11 10 10

OUTPUT 11 10 10

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--

INPUT 0 31

OUTPUT 0 31

Notes/Comments
 The remaining 8 units procured in FY 99 will be installed in FY 00 through the combined subhead 52PQ (BLI 3050).
 FY99 marks the transition to Element Management System (EMS). We are procuring significantly more quantities in FY99 than in prior years so the production lead time has been shortened to facilitate installation in the same year.
 EMS is different than Red Black Digital Switch even though it is procured under the same cost code.

MODIFICATION TITLE: Maritime Cellular Information Exchange Systems (MCIXS) (formerly known as Battle Group Cellular Telephone/BG Cellular)
 COST CODE: NG238
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Technical improvement of existing MCIXS systems based on commercial system availability.
REMARKS: Exhibit reflects ECP change to the MCIXS (NG238) program

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	4	0.9	3	1.0	0	0.0	5	1.2	4	1.0	5	1.3	2	0.6	3	0.8	5	1.4	7	1.9	9	2.5	47	12.6	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	4	0.3	3	0.1	0	0.0	5	0.3	4	0.2	5	0.3	2	0.4	3	0.2	5	0.5	7	0.6	9	0.8	47	3.7	
PRIOR YR EQUIP	4	0.3																					4	0.3	
FY 97 EQUIP			3	0.1																			3	0.1	
FY 98 EQUIP					0	0.0																	0	0.0	
FY 99 EQUIP							5	0.3															5	0.3	
FY 00 EQUIP									4	0.2													4	0.2	
FY 01 EQUIP											5	0.3											5	0.3	
FY 02 EQUIP													2	0.4									2	0.4	
FY 03 EQUIP															3	0.2							3	0.2	
FY 04 EQUIP																	5	0.5					5	0.5	
FY 05 EQUIP																			7	0.6			7	0.6	
FY TC EQUIP																					9	0.8	9	0.8	
TOTAL INSTALLATION COST		0.3		0.1		0.0		0.3		0.2		0.3		0.4		0.2		0.5		0.6		0.8		3.7	
TOTAL PROCUREMENT COST		1.2		1.1		0.0		1.5		1.2		1.6		1.0		1.1		1.9		2.5		3.3		16.3	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: N/A PROCUREMENT LEADTIME: 4 mos

CONTRACT DATES: FY 1998: FY 1999: Apr-99 FY 2000: Oct-99

DELIVERY DATES: FY 1998: FY 1999: Jul-99 FY 2000: Jan-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 7 5 2 2 2 3

OUTPUT 7 5 2 2 2 3

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 2 2 1 2 3 2 3 2 9 47

OUTPUT 2 2 1 2 3 2 3 2 9 47

Notes/Comments

¹ FY 98 program cancelled to fund IT-21 efforts.

MODIFICATION TITLE: VIXS (Video Information Exchange System)-SHIP INSTALLATION
 COST CODE: NG239
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Provides multifunctional information exchange systems capable of interactive imagery and video teleconferencing.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	3	0.2	0	0.0	0	0.0	1	0.1	2	0.1	2	0.1	1	0.1	1	0.1	1	0.1	1	0.1	0	0.0	12	0.9
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	3	0.2	0	0.0	0	0.0	1	0.1	2	0.2	2	0.2	1	0.1	1	0.1	1	0.1	1	0.1	0	0.0	12	1.0
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP							1	0.1															0	0.0
FY 99 EQUIP									2	0.2													1	0.1
FY 00 EQUIP											2	0.2											2	0.2
FY 01 EQUIP													2	0.2									2	0.2
FY 02 EQUIP														1	0.1								1	0.1
FY 03 EQUIP																1	0.1						1	0.1
FY 04 EQUIP																	1	0.1					1	0.1
FY 05 EQUIP																		1	0.1				1	0.1
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.2		0.0		0.0		0.1		0.2		0.2		0.1		0.1		0.1		0.1		0.0		1.0
TOTAL PROCUREMENT COST		0.4		0.0		0.0		0.168		0.3		0.3		0.2		0.2		0.2		0.2		0.0		1.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: N/A PROCUREMENT LEADTIME: 5 Mos

CONTRACT DATES: FY 1998: FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: FY 1999: Apr-99 FY 2000: Apr-00

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

	1	2	3	4	1	2	3	4	1	2	3	4
--	---	---	---	---	---	---	---	---	---	---	---	---

INPUT 3 1 1 1 1

OUTPUT 3 1 1 1 1

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	--

INPUT 1 1 1 1 12

OUTPUT 1 1 1 1 12

Notes/Comments

MODIFICATION TITLE: VIXS (Video Information Exchange System)-SHORE INSTALLATION
 COST CODE: NG239
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Provides multifunctional information exchange systems capable of interactive imagery and video teleconferencing.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	0	0.0	5	0.7	6	0.8	2	0.9	3	0.7	5	0.5	5	0.7	3	0.7	0	0.0	29	5.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	5	0.3	6	0.2	2	0.6	3	0.7	5	0.4	5	0.4	3	0.5	0	0.0	29	3.1	
PRIOR YR EQUIP																									
FY 97 EQUIP																									0
FY 98 EQUIP																									0
FY 99 EQUIP							5	0.3																	5
FY 00 EQUIP								6	0.2																6
FY 01 EQUIP										2	0.6														2
FY 02 EQUIP												3	0.7												3
FY 03 EQUIP														5	0.4										5
FY 04 EQUIP																5	0.4								5
FY 05 EQUIP																		3	0.5						3
FY TC EQUIP																									0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.3		0.2		0.6		0.7		0.4		0.4		0.5		0.0		3.1	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		1.0		1.1		1.5		1.4		0.8		1.2		1.2		0.0		8.2	

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ADMINISTRATIVE LEADTIME: N/A

PROCUREMENT LEADTIME: 5 Mos

CONTRACT DATES: FY 1998: FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: FY 1999: Apr-99 FY 2000: Apr-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	0			3	2		2	2	2			1		1
OUTPUT	0			3	2		2	2	2			1		1

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		1	1	1		2	2	1		2	2	1		1	1	1	0	29
OUTPUT		1	1	1		2	2	1		2	2	1		1	1	1	0	29

Notes/Comments

P-1 Shopping List-Item No 107-11 of 107-22

UNCLASSIFIED

February 1999

MODIFICATION TITLE: Field Change Improvement Plan (FCIP)
 COST CODE: NG777
 MODELS OF SYSTEMS AFFECTED: Various C4I Systems
 DESCRIPTION/JUSTIFICATION: The FCIP upgrades C4I equipment on over 200 ships annually by installing field changes to correct equipment and personnel safety hazards, restore reliability, update operating parameters, correct inter-operability problems and replace obsolete components.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	2,616	2.1	4,689	3.7	7,950	5.4	7,720	5.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	22,975	16.9	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP	2,616		4,689	3.7																			7,305	3.7	
FY 98 EQUIP					7,950	5.4																	7,950	5.4	
FY 99 EQUIP							7,720	5.7															7,720	5.7	
FY 00 EQUIP									0	0.0													0	0.0	
FY 01 EQUIP										0	0.0												0	0.0	
FY 02 EQUIP											0	0.0											0	0.0	
FY 03 EQUIP												0	0.0										0	0.0	
FY 04 EQUIP														0	0.0								0	0.0	
FY 05 EQUIP																	0	0.0					0	0.0	
FY TC EQUIP																			0	0.0			0	0.0	
TOTAL INSTALLATION COST		2.1		3.7		5.4		5.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		16.9	
TOTAL PROCUREMENT COST		2.1		3.7		5.4		5.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		16.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES: FY 1998: FY 1999: FY 2000:
 DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	15,255		2530	2,645	2545								
OUTPUT	15,255		2530	2,645	2545								

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		22,975
OUTPUT																		22,975

Notes/Comments

¹ Field Change Improvement Plan (FCIP) will transfer to OMN beginning FY00

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

TMIP
 NG240
 TMIP
 TMIP is the infrastructure and software to support Navy and Marine Corps requirements for healthcare and C2 activities: clinical resources, logistics, decision support, etc.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									27	0.8	27	0.8	27	0.6	27	0.7	27	0.8	27	0.9	159	8.7	321	13.4	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	27	0.1	27	0.1	27	0.1	27	0.1	27	0.1	27	0.1	159	1.1	321	1.9	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP								27	0.1														27	0.2	
FY 99 EQUIP										27	0.1												27	0.2	
FY 00 EQUIP												27	0.1										27	0.1	
FY 01 EQUIP														27	0.1								27	0.1	
FY 02 EQUIP																27	0.1		27	0.1			27	0.1	
FY 03 EQUIP																		27	0.1				27	0.1	
FY TC EQUIP																				27	0.1		159	1.1	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.2		0.2		0.1		0.1		0.1		0.1		1.1		1.9	
TOTAL PROCUREMENT COST										1.0		1.0		0.8		0.8		0.9		1.0		9.8		15.2	
METHOD OF IMPLEMENTATION:																									

P-1 Shopping List Item No 107-2 of 0.0

ADMINISTRATIVE LEADTIME: 1 mos.

PROCUREMENT LEADTIME: 2 mos.

CONTRACT DATES: FY 1998: N/A FY 1999: N/A FY 2000: Oct-99

DELIVERY DATES: FY 1998: FY 1999: FY 2000: Nov-99

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT N/A 27 27

OUTPUT N/A 3 7 9 8 3 7 9 8

INSTALLATION SCHEDULE:	1	FY 02			FY 03			FY 04			FY 05			TC	TOTAL
		2	3	4	1	2	3	4	1	2	3	4			

INPUT 27 27 27 159 321

OUTPUT 3 7 9 8 3 7 9 8 6 7 7 7 159 321

Notes/Comments

P-1 Shopping List-Item No 107-13 of 107-22

Exhibit P-3a, Individual Modification Program

Unclassified
 Classification

MODIFICATION TITLE: HYDRA
 COST CODE: T7046/NG245
 MODELS OF SYSTEMS AFFECTED: AN/SRC-55
 DESCRIPTION/JUSTIFICATION: HYDRA is a wireless digital voice and data communications systems using COTS trunking technology.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment					[1]	[0.6]	[3]	[7.3]	5	11.3	2	4.3	6	6.2	3	4.1	6	8.4	8	9.4	24	36.0	58	87.6
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interim Contractor Support																								
Installation of Hardware*							[3]	[1.2]	5	1.9	2	0.7	6	0.9	3	0.5	6	1.1	8	1.4	24	0.0	57	7.7
PRIOR YR EQUIP																							0	0
FY 97 EQUIP																							0	0
FY 98 EQUIP																							0	0
FY 99 EQUIP							[3]	[1.2]	5	1.9	2	0.7	6	0.9	3	0.5	6	1.1	8	1.4	24	0.0	3	1
FY 00 EQUIP								5	1.9														5	2
FY 01 EQUIP										2	0.7												2	1
FY 02 EQUIP												6	0.9										6	1
FY 03 EQUIP														3	0.5								3	0
FY 04 EQUIP																6	1.1						6	1
FY 05 EQUIP																		8	1.4				8	1
FY TC EQUIP																					24	0.0	24	0
TOTAL INSTALLATION COST	0.0		0.0		0.0		[1.2]		1.9		0.7		0.9		0.5		1.1		1.4		0.0		57	7.7
TOTAL PROCUREMENT COST	0.0		0.0		[0.6]		[8.5]		13.2		5.0		7.1		4.6		9.5		10.8		36.0		95.3	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 5 Months PROCUREMENT LEADTIME: 6 Months

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Dec-98 FY 2000: Dec-99
 DELIVERY DATES: FY 1998: Mar-98 FY 1999: Apr-99 FY 2000: Jun-00

INSTALLATION SCHEDULE:	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	PY	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT			3				3	2				1	1																	
OUTPUT				3				5					2																	
INPUT				4	2			2	1			4	2					2	4	2			24		57					
OUTPUT					6				3				6						2	6			24		57					

Notes/Comments
 The FY98 buy is an upgrade and requires no actual installation.

UNCLASSIFIED

MODIFICATION TITLE: SINGGARS
 COST CODE: D5005/D5006/NG247
 MODELS OF SYSTEMS AFFECTED: Antenna Multiplexer TD-1456
 DESCRIPTION/JUSTIFICATION: Provides ships engaged in amphibious operations and naval gunfire support missions the capability to communicate with ground forces in a VHF-FM anti-jam mode.

February 1999

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity					[49]	[2.9]	[141]	[8.8]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	190	11.7	
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*					0	0.00	[40]	0.00	16	0.00	50	0.00	50	0.00	34	0.00	0	0.00	0	0.00	0	0.00	190	0.0	
PRIOR YR EQUIP																									
FY 97 EQUIP																									
FY 98 EQUIP							[40]	Note 1.	9	Note 1.															
FY 99 EQUIP									7	Note 1.	50	Note 1.	50	Note 1.	34	Note 1.									
FY 00 EQUIP																									
FY 01 EQUIP																									
FY 02 EQUIP																									
FY 03 EQUIP																									
FY 04 EQUIP																									
FY 05 EQUIP																									
FY TC EQUIP																									
TOTAL INSTALLATION COST	0	0.0	0	0.0	0	0.0	[40]	0.0	16	0.0	50	0.0	50	0.0	34	0.0	0	0.0	0	0.0	0	0.0	190	0.0	
TOTAL PROCUREMENT COST	0.0		0.0		[2.9]		[8.8]		0.0		0.0		0.0		0.0		0.0		0.0		0.0		11.7		

ADMINISTRATIVE LEADTIME: 6-9 months PROCUREMENT LEADTIME: 15-18 months

CONTRACT DATES:

FY 1998: Mar-98 FY 1999: Mar-99 FY 2000:

DELIVERY DATES:

FY 1998: Jun-99 FY 1999: Jul-00 FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

10 30 9 7 13 13 13 11

OUTPUT

10 30 9 7 13 13 13 11

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT

13 13 13 11 8 8 9 9 13 13 13 11 1 2 3 4 190

OUTPUT

13 13 13 11 8 8 9 9 13 13 13 11 1 2 3 4 190

Note 1. Installation costs are included in the costs to install AN/SRC-54A/B (D5008/NG249 and D5009/NG250).

P-1 Shopping List Item No 107-15 of 107-22

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

MODIFICATION TITLE: SINCGARS

February 1999

COST CODE: D5008/NG249

MODELS OF SYSTEMS AFFECTED: SINCGARS Ship System AN/SRC-54A

DESCRIPTION/JUSTIFICATION: Provides ships engaged in amphibious operations and naval gunfire support missions the capability to communicate with ground forces in a VHF-FM anti-jam mode.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity					[19]	[0.7]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	19	0.7
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware*			[2]	[0.11]	[5]	[0.08]	3	0.06	8	0.10	5	0.08	50	0.75	0	0.00	0	0.00	0	0.00	73	1.2
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP			[2]	[0.11]	[5]	[0.08]	3	0.06	8	0.10										18	0.3	
FY 99 EQUIP										5	0.08	50	0.75							55	0.8	
FY 00 EQUIP																				0	0.0	
FY 01 EQUIP																				0	0.0	
FY 02 EQUIP																				0	0.0	
FY 03 EQUIP																				0	0.0	
FY 04 EQUIP																				0	0.0	
FY 05 EQUIP																				0	0.0	
FY TC EQUIP																				0	0.0	
TOTAL INSTALLATION COST	0	0.00	0	0.00	[2]	[0.11]	[5]	[0.08]	3	0.06	8	0.10	5	0.08	50	0.75	0	0.00	0	0.00	73	1.2
TOTAL PROCUREMENT COST		0.00		0.00		[0.11]		[0.08]		0.06		0.10		0.08		0.75		0.00		0.00		1.88

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 6-9 months

PROCUREMENT LEADTIME: 15-18 months

CONTRACT DATES:

FY 1998:

FY 1999: Mar-99

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999: Jul-00

FY 2000:

INSTALLATION SCHEDULE:

	FY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	2	2	1	1	1		1	1	1	2	2	2	2																		
OUTPUT	2	2	1	1	1		1	1	1	2	2	2	2																		
INPUT		2	1	1	1	13	13	13	11																			73			
OUTPUT		2	1	1	1	13	13	13	11																			73			

Note 1. Installations include 54 quantities of upgraded AN/SRC-54 radios procured under cost code D5001/NG246. 18 installs are from the FY98 upgrades, and 36 installs are from the FY99 upgrades

P-1 Shopping List Item No 107-16 of 107-22

Exhibit P-3a, Individual Modification Program
Unclassified
Classification

UNCLASSIFIED

MODIFICATION TITLE: SINGGARS

February 1999

COST CODE: D5009/NG250

MODELS OF SYSTEMS AFFECTED: SINGGARS Ship System AN/SRC-54B

DESCRIPTION/JUSTIFICATION: Provides ships engaged in amphibious operations and naval gunfire support missions the capability to communicate with ground forces in a VHF-FM anti-jam mode.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity							[218]	[13.5]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	218	13.5
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment																										
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interim Contractor Support																										
Installation of Hardware*					[21]	[2.29]	[24]	[0.76]	32	0.59	100	3.09	72	2.27	32	0.96	0	0.00	0	0.00	0	0.00	0	0.00	281	6.9
PRIOR YR EQUIP																									0	0.0
FY 97 EQUIP																									0	0.0
FY 98 EQUIP					[21]	[2.29]																			21	0.0
FY 99 EQUIP							[24]	[0.76]	32	0.59	100	3.09	72	2.27	32	0.96									260	6.9
FY 00 EQUIP																									0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY 05 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST		0.00	0.0	0.00	[21]	[2.29]	[24]	[0.76]	32.0	0.59	100.0	3.09	72.0	2.27	32.0	0.96	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	281	6.9
TOTAL PROCUREMENT COST		0.00		0.00		[2.29]		[14.26]		0.59		3.09		2.27		0.96		0.00		0.00		0.00		0.00		Note 1

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 6-9 months

PROCUREMENT LEADTIME: 15-18 months

CONTRACT DATES:

FY 1998:

FY 1999: Mar-99

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999: Jul-00

FY 2000:

INSTALLATION SCHEDULE:

	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT	21	6	6	6	6	5	5	8	14	25	25	25	25																		
OUTPUT	21	6	6	6	6	5	5	8	14	25	25	25	25																		
INPUT		18	18	18	18	8	8	8	8																						
OUTPUT		18	18	18	18	8	8	8	8																						

Note 1. The FY98-01 installations include 49 quantities of upgraded AN/SRC-54 radios procured under cost code D5001/NG246. 21 installs are from the FY98 upgrades (21 installs equate to 42 radios), and 42 installs are from the FY99 upgrades (42 installs equate to 84 radios).

P-1 Shopping List Item No 107-17 of 107-22

Exhibit P-3a, Individual Modification Program
Unclassified
Classification

UNCLASSIFIED

MODIFICATION TITLE: SINCGARS

February 1999

COST CODE: D5010/NG251

MODELS OF SYSTEMS AFFECTED: SINCGARS Remote Control System OK-637A

DESCRIPTION/JUSTIFICATION: Provides ships engaged in amphibious operations and naval gunfire support missions the capability to communicate with ground forces in a VHF-FM anti-jam mode.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total				
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			
RDT&E																											
PROCUREMENT:																											
Kit Quantity							[162]	[1.3]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	162	1.3	
Installation Kits																											
Installation Kits Nonrecurring																											
Equipment																											
Equipment Nonrecurring																											
Engineering Change Orders																											
Data																											
Training Equipment																											
Support Equipment																											
Other																											
Intern Contractor Support																											
Installation of Hardware*							0	0.00	25	0.00	54	0.00	41	0.00	42	0.00	0	0.00	0	0.00	0	0.00	0	0.00	162	0.0	
PRIOR YR EQUIP																										0	0.0
FY 97 EQUIP																										0	0.0
FY 98 EQUIP																										0	0.0
FY 99 EQUIP									25	Note 1.	54	Note 1.	41	Note 1.	42	Note 1.									162	0.0	
FY 00 EQUIP																										0	0.0
FY 01 EQUIP																										0	0.0
FY 02 EQUIP																										0	0.0
FY 03 EQUIP																										0	0.0
FY 04 EQUIP																										0	0.0
FY 05 EQUIP																										0	0.0
FY TC EQUIP																										0	0.0
TOTAL INSTALLATION COST			0.0	0.0	0.0	0.0	[162]	0.0	25	0.0	54	0.0	41	0.0	42	0	0	0.0	0	0.0	0	0.0	0	0.0	162	0.0	
TOTAL PROCUREMENT COST			0.0	0.0	0.0	0.0	[1.3]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0

ADMINISTRATIVE LEADTIME: 6-9 months

PROCUREMENT LEADTIME: 15-18 months

CONTRACT DATES:

FY 1998:

FY 1999:

Mar-99

FY 2000:

FY 2001:

DELIVERY DATES:

FY 1998:

FY 1999:

Jul-00

FY 2000:

FY 2001:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT								25	13	14	13	14
OUTPUT								25	13	14	13	14

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT	11	11	11	8	12	12	12	6																	162
OUTPUT	11	11	11	8	12	12	12	6																	162

Note 1. Installation costs are included in the costs to install AN/SRC-54A/B cost codes D5008/NG249 and D5009/NG250.

P-1 Shopping List Item No 107-18 of 107-22

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED
CLASSIFICATION

APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE BLI: 3055 Ship & Shore Items Under \$5M																												SUBHEAD NO. 52NG											
		FISCAL YEAR 98														FISCAL YEAR 99														FISCAL YEAR 00											
COST CODE	ITEM/MANUFACTURER	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	CALENDAR YEAR 98												CALENDAR YEAR 99												CALENDAR YEAR 00											
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
		FY				T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P
	SINCGARS																																								
D5001	Ship System Upgrades (AN/SRC-54)	98	60		60																																				
D5001	Ship System Upgrades (AN/SRC-54)	99	120		120																																				
D5005/D5006	TD-1456/GRC FH Multicoupler	98	49		49																																				
D5005/D5006	TD-1456/GRC FH Multicoupler	99	141		141																																				
D5007	AN/GRM-122 Radio Test Set	98	12		12																																				
D5007	AN/GRM-122 Radio Test Set	99	17		17																																				
NG248	AN/GRM-122 Radio Test Set	00	21		21																																				
D5008	Ship System AN/SRC-54A	99	19		19																																				
D5009	Ship System AN/SRC-54B	99	218		218																																				
D5010	Remote Control System (OK-637A)	99	162		162																																				
¹ Beginning in FY00, funding for this program has been transferred to BLI 3050, Subhead 52PQ																																									

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

DATE: February 1999
(DOD EXHIBIT P-21A)

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT
 P-1 ITEM NOMENCLATURE: BLI: 3055 Ship & Shore Items Under \$5M
 SUBHEAD NO.: 52NG

COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR																												L A T E R		
				01							02							03																
				CALENDAR YEAR 01							CALENDAR YEAR 02							CALENDAR YEAR 03																
O	N	D	J	F	M	A	O	N	D	J	F	M	A	O	N	D	J	F	M	A	O	N	D	J	F	M	A							
C	O	E	A	E	A	P	C	O	E	A	E	A	P	C	O	E	A	E	A	P	C	O	E	A	E	A	P	O	C	T	O	C	O	T
T	V	C	N	B	R	R	T	V	C	N	B	R	R	T	V	C	N	B	R	R	T	V	C	N	B	R	R	P	R	Y	N	L	G	P
NG184	R2368/URR HF Receiver	99	0																												0			
		00	0																												0			
NG237	Red/Black DGTL Switch ¹	99	0																												0			
NG238	MCIXS	99	0																												0			
		00	0																												0			
NG239	VIXS	99	0																												0			
		00	0																												0			
	TMIP																																	
NG240	TMIP	00	0																												0			
	PORTABLE RADIOS																																	
																															0			
T7016	SINCGARS Manpack	99	0																												0			
T7029	SINCGARS Vehicle	99	42	7	7	7	7	7	7																						0			
T7039	CSEL	99	0																												0			
																															0			
T7046	HYDRA	99	0																												0			
NG245	HYDRA	00	0																												0			

¹ Beginning in FY00, funding for this program has been transferred to BLI 3050, Subhead 52PQ

OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

**UNCLASSIFIED
CLASSIFICATION**

PRODUCTION SCHEDULE

DATE

February 1999

(DOD EXHIBIT P-21A)

APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE															SUBHEAD NO.																	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				BLI: 3055 Ship & Shore Items Under \$5M															52NG																	
COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01					FISCAL YEAR 02					FISCAL YEAR 03					L A T E R																	
				CY00	CALENDAR YEAR 01				CALENDAR YEAR 02					CALENDAR YEAR 03																						
					O	N	D	J	F	M	A	M	J	J	A	S	O	N		D	J	F	M	A	M	J	J	A	S							
T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	
	SINCGARS																																			
D5001	Ship System Upgrades (AN/SRC-54)	98	0																																	0
D5001	Ship System Upgrades (AN/SRC-54)	99	0																																	0
D5005/D5006	TD-1456/GRC FH Multicoupler	98	0																																	0
D5005/D5006	TD-1456/GRC FH Multicoupler	99	105	12	12	12	12	12	12	12	9																									0
D5007	AN/GRM-122 Radio Test Set	98	0																																	0
D5007	AN/GRM-122 Radio Test Set	99	9	5	4																															0
NG248	AN/GRM-122 Radio Test Set	00	21									4	4	4	4	4	1																		0	
D5008	Ship System AN/SRC-54A	99	13	2	2	3	3	3																												0
D5009	Ship System AN/SRC-54B	99	143	25	25	25	25	25	18																											0
D5010	Remote Control System	99	117	15	15	15	15	15	15	12																										0

P-1 Shopping List Item No NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE Integrated Broadcast Service 3056		SUBHEAD D2AA		
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL	
QUANTITY												
COST (in millions)	0.0	0.0	\$10.2	0.0	0.0	0.0	0.0	0.0	0.0	Cont.	Cont.	

Narrative Description/Justification:

The Integrated Broadcast Service (IBS) provides warfighters with critical and highly perishable intelligence and information in a single correlated picture via a near-real-time, integrated dissemination architecture. IBS consolidates existing intelligence broadcast systems into a common-format, common-terminal, theater-tailored architecture. The IBS design incorporates new functionality in broadcast and information management, a new message format, and a new receiver. It fields Information Management Elements to geographic CINCs to perform the requirements set forth in the IBS Joint Operational Requirements Document.

In FY99, the IBS program also sustained the legacy broadcast systems in their continuing individual acquisition programs, including the TRAP Data Dissemination System (TDDS), Tactical Information Broadcast Service (TIBS), Automated M-22 Broadcast (AMB), and Long-range Information Networked Communication Services (LINCS).

TDDS improvements: Procure a software support facility for the Effectivity 2.0 deployment
TIBS improvements: Procure noise cancellation equipment for the TIBS UHF relay sites.

AMB improvements: Procure equipment for the Effectivity 3.0 deployment.

LINCS improvements: Assist in the tactical extension of systems and networks installed by LINCS during tactical exercise and contingency.

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CLASSIFICATION

COST ANALYSIS							DATE: Feb-99						
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE Integrated Broadcast Service				SUBHEAD D2AA					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS										
			PY		FY 1998		FY1999		FY 2000				
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
DA001	IBS TRAP TIBS Automated M-22 Broadcast LRI-Networked COMMS Service	A						5,400					
								1,644					
								1,284					
								1,900					
	TOTAL PROGRAM							10,228					

CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE *310700 Submarine Broadcast Support			SUBHEAD 52W4	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$7.5*	\$13.0*	\$36.4	\$32.0	\$20.6	\$4.4	\$14.2	\$19.6	Continuing	Continuing
<p>PROGRAM COVERAGE: *This program now includes OPN P-1 Line Item Submarine LF/VLF VME Receiver (314700) beginning in FY00. FY 98 through FY99 detail information is provided for budget comparability.</p> <p>The Submarine Broadcast System program was established to improve the reliability, efficiency and performance of the Extremely Low Frequency (ELF)/Very Low Frequency (VLF)/Low Frequency (LF) submarine broadcast system. These transmission mediums (ELF/VLF/LF) comprise the primary line of Fleet Ballistic Missile Command, Control and Communications (FBMC). Two (2) ELF, four (4) VLF and six (6) LF shorebased transmitter sites are Emergency Action Message (EAM) relay points providing primary connectivity between National Command Authorities (NCA) and SSBNs. Tasks are planned/ongoing to improve performance of ELF/VLF/LF broadcast capabilities consistent with changing operational requirements. The ELF Communications Ashore Robustness Program (ECARP) will provide upgrades to existing ELF transmitter systems by replacing degraded, obsolete and high maintenance items that could preclude reliable operation well into the next century. The SLVR system replaces antiquated and limited capability LF/VLF receivers on TRIDENT and SSN (688/Seawolf/New Attack) submarines and at selected shore sites.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>(1) Submarine Broadcast Upgrade: (W4008) Upgrades and replaces transmitters, equipment and antenna components at shore stations worldwide. The upgrades are necessary to replace obsolete and degraded equipment which will have an adverse impact on system operation, reliability and maintenance.</p> <p>(2) REM (Range Extension Mode): (W4001) Provides upgrades to increase ocean area coverage of the submarine broadcast to support littoral and special mission submarine operations without requiring costly modifications to increase transmitter output power.</p> <p>(3) VALUE (VLF Ashore Lifetime Upkeep Effort): (W4012) Provides upgrades to correct deficiencies in material condition and logistics support of existing VLF/LF transmitter systems at shore stations worldwide that could preclude reliable operation to the year 2025.</p> <p>(4) NON-FMP Equipment Installation: (W4776) Provides installation support such as Base Electronic System Engineering Plans (BESEP). For Submarine Broadcast Upgrade ((W4008).</p> <p>(5) SLVR: (W40XX) A Mission Critical piece of C3I equipment onboard submarines and procurements are planned through FY01 to change out the legacy shipboard LF/VLF systems. It replaces 20 - 30 year old technology limited VLF receiver systems and provides flexibility for change in addition to reductions in space and weight. This approach will modernize the existing systems to a standard design and eliminates the need for supporting numerous configurations of LF/VLF receiver systems, thus minimizing total cost of ownership/maintenance cost to the Fleet. To be successful the commercial components must be procured during the brief period of FY98 thru FY01 to insure a single generation of COTS is used for SLVR.</p> <p>INSTALLING AGENTS: The equipment will be installed by the In-Service Engineering Activity (ISEA).</p>											

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COST ANALYSIS													DATE February 1999				
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE *310700 Submarine Broadcast Support						SUBHEAD 52W4				
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS														
			PY				FY 1998			FY 1999			FY 2000				
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST						
	Submarine Broadcast Systems																
W4008	Submarine Broadcast Upgrades	A					2	2,492	4,983								
W4011	REM	A					VAR		2,379	VAR		2,596	VAR				2,708
W4012	**VALUE	A								1	10,225	10,225	1	12,178			12,178
W4776	NON-FMP INSTALLATION	A							94			154					
	Submarine LF/VLF VME Receiver																
LF001	Submarine LF/VLF VME Receiver	A					[15]	[490.2]	[7,353]	[44]	[375.5]	[16,524]					
W40XX	Submarine LF/VLF VME Receiver	A											47	350			16,443
LF776	Non FMP Installation (Shore)	A										[576]					
W40XX	Non FMP Installation (Shore)	A															877
LF777	FMP Installation Ships	A															
W40XX	FMP Installation Ships	A															683
W4830	Production Support	A															3,472
<p>*This program now includes OPN P-1 Line Item Submarine LF/VLF VME Receiver (314700) beginning in FY00. FY 98 through FY99 detail information is provided for budget comparability.</p>																	
TOTAL CONTROL									7,456	12,975			36,361				

Remarks:

**Unit cost varies by site due to differing equipment configurations at each location.

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				SUBHEAD		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						310700 Submarine Broadcast Support				52W4		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
W4008	Submarine Broadcast Upgrades *	98	Various	C/FFP	Various		Nov-97	May-98	1	2,492	Yes	
		98		FFP				SSC SD	Jul-99	1	2,492	Yes
W4012	**VALUE	99	TBD	C/CPIF	SSC Chas	Jul-98	Feb-99	Feb-01	1	10,225	Yes	
		00	TBD	C/CPIF	SSC Chas	Option	Nov-99	Nov-01	1	12,178	Yes	
LF001	Submarine LF/VLF VME Receiver	98	DBA Systems, Melbourne, FL SECHAN, Lititz, PA	FFP	SSC SAN DIEGO	Apr-98	Jul-98	Mar-99	13	490.2	N/A	
LF001		98		FFP	SSC SAN DIEGO		Jul-98	Jun-99	2	490.2		
LF001		99		TBD	FFP/OPT	SSC SAN DIEGO	N/A	Mar-99	Dec-99	44		375.5
W40XX	Submarine LF/VLF VME Receiver	00	TBD	FFP/OPT	SSC SAN DIEGO	N/A	Jan-00	Jul-00	47	350		

D. REMARKS

*A second FY 98 Upgrade line was added to account for one upgrade delivery occurring in FY 99.
 **Unit cost varies by site due to differing equipment configurations at each location.

UNCLASSIFIED

February-99

MODIFICATION TITLE: Submarine Broadcast Upgrade

COST CODE: W4008

MODELS OF SYSTEMS AFFECTED: Various

DESCRIPTION/JUSTIFICATION: Upgrades and replaces submarine broadcast equipment and antenna components worldwide.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	6	8.9	1	3.0	2	5.0											4	8.9	3	9.4			16	35.2	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	6	0.4	1	0.1	1	0.1	1	0.2	0	0	0	0	0	0	0	0	0	0	4	0.1	3	0.1	16	1.0	
PRIOR YR EQUIP	6	0.4																					6	0.4	
FY 97 EQUIP			1	0.1																			1	0.1	
FY 98 EQUIP					1	0.1	1	0.2															2	0.3	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																			4	0.1			4	0.1	
FY 05 EQUIP																					3	0.1	3	0.1	
FY TC EQUIP																									
TOTAL INSTALLATION COST		0.4		3.1		0.1		0.2		0.0		0.0		0.0		0.0		0.0		0.1		0.1		1.0	
TOTAL PROCUREMENT COST		9.3		3.1		5.1		0.2		0.0		0.0		0.0		8.9		9.5		0.1		0.1		36.2	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: Various

PROCUREMENT LEADTIME: Various

CONTRACT DATES:

FY 1998: Nov-97 Jan-99

FY 1999: N/A

FY 2000: N/A

DELIVERY DATES:

FY 1998: May-98 Jul-99

FY 1999: N/A

FY 2000: N/A

INSTALLATION SCHEDULE:

FY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	8			1									
OUTPUT	8			1									

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL									
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4											
INPUT																											
OUTPUT																											

Notes/Comments

UNCLASSIFIED

February-99

MODIFICATION TITLE: VALUE

COST CODE: W4012

MODELS OF SYSTEMS AFFECTED: VLF/LF transmitter systems

DESCRIPTION/JUSTIFICATION: Corrects deficiencies in material condition and logistics support of existing VLF/LF transmitter systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							1	10.2	1	12.2	1	13.1	1	15.4	1	3.4							5	54.3	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	1	0.2	1	0.2	1	0.2	1	0.1	0	0.0	5	0.9	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP										1	0.2												1	0.2	
FY 00 EQUIP												1	0.2										1	0.2	
FY 01 EQUIP															1	0.2							1	0.2	
FY 02 EQUIP																	1	0.2					1	0.2	
FY 03 EQUIP																			1	0.1			1	0.1	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST	0.0		0.0		0.0		0.0		0.0		0.2		0.2		0.2		0.2		0.1		0.0		0.0	0.9	
TOTAL PROCUREMENT COST	0.0		0.0		0.0	1.0	10.2	1.0	12.2	2.0	13.3	2.0	15.6	2.0	3.6	1.0	3.6	1.0	0.2	1.0	0.1	0.0	0.0	55.2	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 8 mos.

PROCUREMENT LEADTIME: 24 mos.

CONTRACT DATES:

FY 1998: N/A

FY 1999: Feb-99

FY 2000: Nov-99

DELIVERY DATES:

FY 1998: N/A

FY 1999: Feb-01

FY 2000: Nov-01

INSTALLATION SCHEDULE:

FY	FY 98				FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	0															
OUTPUT	0															

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT	1				1				1				1						5
OUTPUT	1				1				1				1						5

Notes/Comments

P-1 Shopping List-Item No 109-5 of 109-9

Exhibit P-3a, Individual Modification Program
Unclassified
Classification

UNCLASSIFIED

February-99

MODIFICATION TITLE: SLVR
 COST CODE: LF001/W40XX
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: NON-FMP SHORE INSTALLATIONS

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment					[15]	[7.4]	[16]	[6.0]	8	2.8	9	3.2											48	19.4	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*							[15]	[0.6]	16	0.9	8	0.3	9	0.5	0	0.0	0	0.0	0	0.0	0	0.0	48	2.2	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP							[15]	[0.6]															15	0.6	
FY 99 EQUIP									16	0.9													16	0.9	
FY 00 EQUIP											8	0.3											8	0.3	
FY 01 EQUIP													9	0.5									9	0.5	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		[0.6]		0.9		0.3		0.5		0.0		0.0		0.0		0.0		2.2	
TOTAL PROCUREMENT COST		0.0		0.0		[1.0]		[8.8]		3.7		3.5		0.5		0.0		0.0		0.0		0.0		21.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 mos. PROCUREMENT LEADTIME: 11 mos.

CONTRACT DATES: FY 1998: Jul-98 Jul-98 FY 1999: Mar-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: Mar-99 Jun-99 FY 1999: Dec-99 FY 2000: Jul-00

INSTALLATION SCHEDULE: PY 1 2 3 4 1 2 3 4 1 2 3 4

INPUT 0 2 4 9 1 3 6 6 3 2 2 1

OUTPUT 0 2 4 9 1 3 6 6 3 2 2 1

INSTALLATION SCHEDULE: 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 TC TOTAL

INPUT 2 2 2 3 48

OUTPUT 2 2 2 3 48

Notes/Comments

UNCLASSIFIED

February-99

MODIFICATION TITLE: SLVR
 COST CODE: LF001/W40XX
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: FMP SHIP INSTALLATIONS

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							[28]	[10.5]	39	13.7	31	10.9											98	35.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*					0	0.0	0	0	28	0.7	39	1.3	31	0.9	0	0.0	0	0.0	0	0.0	0	0.0	98	2.9	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP									28	0.7													28	0.7	
FY 00 EQUIP										39	1.3												39	1.3	
FY 01 EQUIP												31	0.9										31	0.9	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.7		1.3		0.9		0.0		0.0		0.0		0.0		2.9	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		14.3		12.2		0.9		0.0		0.0		0.0		0.0		38.0	

ADMINISTRATIVE LEADTIME: 3 mos. PROCUREMENT LEADTIME: 11 mos.

CONTRACT DATES: FY 1998: FY 1999: Mar-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: FY 1999: Dec-99 FY 2000: Jul-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	0					6	12	10		13	8	9	9
OUTPUT	0					6	12	10		13	8	9	9

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT		13	12	6																			98
OUTPUT		13	12	6																			98

Notes/Comments

P-1 Shopping List-Item No 109-7 of 109-9

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

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PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE
February 1999

APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT **P-1 ITEM NOMENCLATURE** *310700 Submarine Broadcast Support **SUBHEAD NO.** 52W4

COST CODE	ITEM/MANUFACTURER/PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03												L A T E R			
				CY00			CALENDAR YEAR 01									CALENDAR YEAR 02									CALENDAR YEAR 03																		
				O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S				
				C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E				
W4008	Submarine Broadcast Upgrade	98	0																																								
		99	0																																								0
																																											0
W4012	VALUE	99	1			1																																				0	
		00	1											1																												0	
LF001/W40XX																																											
	Submarine LF/VLF VME Receiver	98	0																																								0
		99	0																																								0
		00	47	3	4	3	4	3	4	3	4	3																														0	

OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE 313000 SUBMARINE COMMUNICATIONS			SUBHEAD 52L0	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$41.5	\$60.3	\$85.4	\$68.0	\$64.3	\$77.4	\$85.7	\$104.1	Continuing	Continuing
<p>PROGRAM COVERAGE: The Submarine Communications Program will incorporate a multiplicity of technical advances that address existing attack submarine communications problem areas (e.g. environmental demands on antenna equipment while at speed and depth; replacement of obsolete communications equipment; replacement of message handling equipment, and equipment that will enable submarines to better communicate with the Battle Group Fleet. The following is a list of equipment and a brief description of their functions for all equipment planned for procurement.</p> <p>BASEBAND DISTRIBUTION SYSTEM (BBS) - (L0027) Consists of switching hardware and controller that will allow flexible distribution of baseband signals throughout the submarine Radio Room. The Baseband Switch is a Non-Developmental Item (NDI) that will automate SSN 688 class assets, provide remotely controlled switching operation, allow preset configurations for quick reaction times, reduce needed rack space, and recover fleet configuration control.</p> <p>ANTENNA MODIFICATIONS - (L0035) Modifications to antenna systems in order to provide Very Low Frequency (VLF) performance, Mid Frequency/High Frequency (MF/HF) efficiency, and UHF DAMA and control unit reliability. All SSN/SSBN classes are affected by these modifications.</p> <p>TIME and FREQUENCY DISTRIBUTION SYSTEM/DUAL PACKAGE CESIUM - (L0078) The TFDS/DPC provides time and frequency input to communications, electronic warfare, periscope, navigation, combat and ship control systems aboard SSN 688, SSN21, and SSBN 726 class submarines. The TFDS/DPC hardware will be capable of automatic or manual selection of host system standards and Global Positioning Satellite (GPS) receivers.</p> <p>OE - 538/BRC ANTENNA GROUP (IMPROVED AN/BRA-34) - (L0080) Provides SSN submarines with a mast mounted, multi-functional antenna to include High Frequency (HF) broadband and Fleet Satellite communications (FLTSATCOM) Demand Access Multiple Access (DAMA) operation. RDT&E Program Element - PE 0604503N pertains.</p> <p>SUBMARINE COMMUNICATIONS SUPPORT SYSTEM RADIO ROOM (SCSS) - (L0084) The SSN SCSS Radio Room will consist of an open system, multimedia, circuit sharing architecture that will serve as the shipboard automated communications control system. Procurement in this line is for the radio room communications racks, chassis, common power supplies and ancillary components required to integrate the fast-attack submarine's communication equipment.</p> <p>SUBMARINE ANTENNA DISTRIBUTION SYSTEM (SADS) - (L0086) The SADS program replaces the existing manually operated antenna RF patch panels. Manual patching prevents the rapid reconfiguration of communications circuits required to support submarine operations in a Joint or Battle Group environment. The SADS will allow highly flexible and automated routing of signals and information between the radio room and various antenna systems. RDT&E Program Element - PE 0604503N pertains.</p>											

BUDGET ITEM JUSTIFICATION SHEET		DATE	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	313000 SUBMARINE COMMUNICATIONS	52L0	
<p>SHF/EHF HIGH DATA RATE SATELLITE COMMUNICATIONS ANTENNAS - (L0087) The Submarine HDR antenna will provide submarines with antennas that have the bandwidth, gain, and flexibility to meet the stated COMSUBLANT/COMSUBPAC requirements for HDR communications in the SHF and EHF frequency. RDT&E (N) Program Element - PE 0604503N pertains.</p> <p>TRIDENT SUBMARINE COMMUNICATIONS SUPPORT SYSTEM RADIO ROOM (TRIDENT SCSS) - (L0089) The Trident SCSS Radio Room will consist of an open system, multimedia, circuit sharing architecture that will serve as the shipboard automated communications control system. Procurement in this line is for the radio room communications racks, chassis, common power supplies and ancillary components required to integrate the ballistic missile submarine's communication equipment.</p> <p>SUBMARINE PC UPGRADE - (L0094) Funds procurement of PCs for submarines and submarine shore facilities in support of POM00 IT-21 BAM. Procurements start in FY00.</p> <p>EHF PERISCOPE MODIFICATIONS - (L0095) Funds procurement and installation of EHF periscope modification kits. The modifications will augment and enhance the communication capability of the HDR Follow-On Terminal contract award of March 1998.</p> <p>DESIGN SERVICES ALLOCATION (DSA) - Design work and engineering associated with ship alterations.</p>			

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COST ANALYSIS													DATE		
													February 1999		
APPROPRIATION ACTIVITY						P-1 ITEM NOMENCLATURE						SUBHEAD			
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						313000 SUBMARINE COMMUNICATIONS						52L0			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS												
			QTY	PY			FY 1998			FY 1999			FY 2000		
TOTAL COST					QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
L0027	BASEBAND SWITCH	A					12	486	5,836	8	511	4,088	8	569	4,554
L0035	ANTENNA MODIFICATIONS	A					VAR		2,138	VAR		2,750	VAR		3,127
L0078	TFDS/DPC	A					12	163	1,956	12	166	1,989	10	178	1,779
L0080	OE-538/BRC	B					3	4,350	13,051	10	964	9,639	15	763	11,438
L0084	SCSS RADIO ROOM	A					VAR		3,029	VAR		4,989	VAR		4,705
L0086	SADS	B					VAR		544		0	0	4	414	1,655
L0087	HIGH DATA RATE ANTENNA	B					1	7,827	7,827	7	3,474	24,316	13	2,339	30,411
L0089	TRIDENT SCSS RADIO ROOM	A					VAR		388				VAR		421
L0094	SUB PC UPGRADE	A											VAR		2,757
L0095	EHF PERISCOPE MODIFICATIONS	A											8	1,300	10,400
L0777	INSTALLATION EQUIPMENT								6,775			12,562			14,121
	FMP INSTALL						VAR		6,174	VAR		11,800	VAR		13,342
	DSA								601			762			779
	TOTAL CONTROL								41,544			60,333			85,368

*L0080 OE-538/BRC FY98 funding included a one time \$8.0M plus-up for MINI-DAMA.

*L0086 SADS: FY98 funding used for production engineering support.

*L0086 SADS: FY99 funding reallocated to emergent higher priority requirements.

*L0095 EHF Periscope Modifications (MODs) is a one-time plus up to field top priority C41 MOD kits.

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						313000 SUBMARINE COMMUNICATIONS					52L0	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
L0027	BASEBAND SWITCH	99	L-3 Communications	C/FFP/OPT	SPAWAR		Dec-98	May-99	8	511	YES	N/A
		00	L-3 Communications	C/FFP/OPT	SPAWAR		Dec-99	May-00	8	569	YES	N/A
L0078	TFDS/DPC	99	Brandywine Com., CA	C/FFP/OPT	SSC-SD		Dec-98	Aug-99	12	166	YES	N/A
		00	Brandywine Com., CA	C/FFP/OPT	SSC-SD		Dec-99	Aug-00	10	178	YES	N/A
L0080	OE-538/BRC	99	TBD	C/FFP/OPT	NUWC	Feb-99	Jun-99	Jun-00	10	964	YES	N/A
		00	TBD	C/FFP/OPT	NUWC		Dec-99	Dec-00	15	763	YES	N/A
L0087	HIGH DATA RATE ANTENNA	98	Raytheon, MA	C/FFP/OPT	SPAWAR		Jun-98	Sep-99	1	7,827	YES	N/A
		99	Raytheon, MA	C/FFP/OPT	SPAWAR		Feb-99	Feb-00	7	3,474	YES	N/A
		00	Raytheon, MA	C/FFP/OPT	SPAWAR		Feb-00	Feb-01	13	2,339	YES	N/A
L0095	EHF PERISCOPE MODIFICATIONS	00	Raytheon, MA	C/FFP/OPT	SPAWAR		Dec-99	Jun-01	8	1,300	N/A	N/A
D. REMARKS												

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CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	
B. APPROPRIATION/BUDGET ACTIVITY											February 1999	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE				SUBHEAD		
						313000 SUBMARINE COMMUNICATIONS				52L0		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
L0086	SADS	00	TBD	C/FFP/OPT	NUWC	Dec-99	Jun-00	Mar-01	4	414	YES	N/A
D. REMARKS												

MODIFICATION TITLE: Baseband Switch (BBS)
 COST CODE: L0027
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of Baseband Switch

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	16	13.6	14	7.7	12	5.8	8	4.1	8	4.6			0.5	7	4.6	12	7.9						77	48.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	4	3.2	2	4.4	12	5.1	20	8.3	12	4.9	8	3.3	0	0.0	0	0.0	(See Note 1) 5	0.0	(See Note 1) 7	0.0	7	0.0	77	29.2	
PRIOR YR EQUIP	4	3.2	2	4.4	10	4.2																	16	11.8	
FY 97 EQUIP					2	0.9	12	4.9															14	5.8	
FY 98 EQUIP							4	1.7	8	3.3													12	5.0	
FY 99 EQUIP							4	1.7	4	1.6													8	3.3	
FY 00 EQUIP											8	3.3											8	3.3	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																	5						7	0.0	
FY 04 EQUIP																			2				12	0.0	
FY 05 EQUIP																			5			7	0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		3.2		4.4		5.1		8.3		4.9		3.3		0.0		0.0		0.0		0.0		0.0		29.2	
TOTAL PROCUREMENT COST		16.8		12.1		10.9		12.4		9.5		3.3		0.5		4.6		7.9		0.0		0.0		78.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 12 mos. PROCUREMENT LEADTIME: 18 mos.

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: May-98 FY 1999: May-99 FY 2000: May-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
P-1 Shopping List-Item No 110-1 of 110-16																																			
INPUT	18	5	5	5	5	5	5	2					3	3	2																				
OUTPUT	18	5	5	5	5	5	5	2					3	3	2																				
P-1 Shopping List-Item No 110-6 of 110-16																																			
INPUT																																			
OUTPUT																																			

Notes/Comments: 1) Installation funding for (5) BBS in FY04, (7) BBS in FY05 and (7) BBS "To Complete" for equipment procured in FY03 and FY04 are covered by Trident SCSS Radio Room (Cost Code L0089). Procurement quantities are represented on BBS P-3A with associated installation cost represented on Trident SCSS Radio Room (Cost Code L0089) P-3A. Installation funding presented on BBS P-3A represents SSN installations only.

MODIFICATION TITLE: Time&Frequency Distribution System (TFDS)
 COST CODE L0078
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of Time&Frequency Distribution System

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment		0.3	14	1.9	12	2.0	12	2.0	10	1.8	6	0.9	2	0.8	17	2.6		0.3		0.1			73	12.7	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	14	0.5	12	0.4	12	0.4	10	0.3	6	0.2	0	0.0	(See Note 1) 5	0.0	(See Note 1) 7	0.0	7	0.0	73	1.8	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP					14	0.5																	14	0.5	
FY 98 EQUIP							12	0.4															12	0.4	
FY 99 EQUIP									12	0.4													12	0.4	
FY 00 EQUIP											10	0.3											10	0.3	
FY 01 EQUIP													6	0.2									6	0.2	
FY 02 EQUIP																							2	0.0	
FY 03 EQUIP															0	0.0						3	0.0	7	0.0
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.5		0.4		0.4		0.3		0.2		0.0		0.0		0.0		0.0		1.8	
TOTAL PROCUREMENT COST		0.3		1.9		2.5		2.4		2.2		1.2		1.0		2.6		0.3		0.1		0.0		14.5	

ADMINISTRATIVE LEADTIME: 9 month PROCUREMENT LEADTIME: 17 mos

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Aug-98 FY 1999: Aug-99 FY 2000: Aug-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL						
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
		P-1 Shopping List-Item No 110-1 of 110-16																																			
INPUT	14	6	6			6	6			5	5																										
OUTPUT	14	6	6			6	6			5	5																										
INPUT		3	3							2	3											3	4							7							
OUTPUT		3	3							2	3											3	4							7							

Notes/Comments: 1) Installation funding for (5) TFDS/DPC in FY04, (7) TFDS/DPC in FY05 and (7) TFDS/DPC "To Complete" for equipment procured in FY03 and FY04 are covered by Trident SCSS Radio Room (Cost Code L0078). Procurement quantities are represented on TFDS/DPC P-3A with associated installation cost represented on Trident SCSS Radio Room (Cost Code L0089) P-3A.

P-1 Shopping List-Item No 110-7 of 110-16

MODIFICATION TITLE: OE-538/BRC
 COST CODE: L0080
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of OE-538/BRC

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

	FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$				
RDT&E		1.7		0.6				0.1		0.4		0.4		0.4									3.6			
PROCUREMENT:				2.5		13.1																				
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment			1	0.7	3	10.0	10	9.6	15	11.4	9	7.3	7	5.9	12	9.8	20	16.3	18	15.2			95	86.2		
Equipment Nonrecurring				1.0		1.2																				
Engineering Change Orders																										
Data																										
Training Equipment				0.4		0.6																				
Support Equipment				0.4		0.4																				
Other						0.5																				
Interm Contractor Support						0.4																				
Installation of Hardware*	0	0.0	0	0.0	1	0.4	3	0.8	10	1.2	14	1.5	8	0.9	6	0.7	12	1.3	18	1.4	17	1.1	(See Note 2)	89	9.3	
PRIOR YR EQUIP					1	0.4																				
FY 97 EQUIP					1	0.4																				
FY 98 EQUIP							3	0.8																		
FY 99 EQUIP									10	1.2																
FY 00 EQUIP											14	1.5														
FY 01 EQUIP													8	0.9												
FY 02 EQUIP															6	0.7										
FY 03 EQUIP																	12	1.3								
FY 04 EQUIP																			18	1.4						
FY 05 EQUIP																					17	1.1				
FY TC EQUIP																							0			
TOTAL INSTALLATION COST		0.0		0.0		0.4		0.8		1.2		1.5		0.9		0.7		1.3		1.4		1.1				9.3
TOTAL PROCUREMENT COST		0.0		2.5		13.5		10.4		12.6		8.8		6.8		10.5		17.6		16.6		1.1				95.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 12 mos PROCUREMENT LEADTIME: 24 mos

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Jun-99 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Dec-98 FY 1999: Jun-00 FY 2000: Dec-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
		P-1 Shopping List-Item No 110-1 of 110-16																													
INPUT	1		3				3	7			6	6	2																		
OUTPUT	1		3				3	7			6	6	2																		

Notes/Comments: 1) Two OE-538/BRC antennas comprise one installation on TRIDENT class submarines. This reduces the effective cost per installation in FY04, FY05 and TC.
 2) Six (6) OE-528/BRC units are assigned to a rotatable pool to accommodate equipment refurbishment and do not require installation funding. Pool assets are procured as follows: one in FY00, one in FY01, one in FY02, two in FY04, and one in FY05.

P-1 Shopping List-Item No 110-8 of 110-16

MODIFICATION TITLE: High Data Rate Antenna (Sub HDR)
 COST CODE: L0087
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of High Data Rate Antenna (Sub HDR)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E		13.2		6.6		4.0		0.5																	24.3	
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment					1	7.8	7	24.3	13	30.4	13	22.5	11	22.2	12	22.3						3	9.0		(See Note 1)	
Equipment Nonrecurring																									60*	
Engineering Change Orders																									138.5	
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																									(See Note 1)	
Installation of Hardware*	0	0.0	0	0.0	0	0.0	1	1.2	7	6.8	13	12.2	13	11.7	11	9.6	5	4.3	0	0.0	3	3.0			53 48.8	
PRIOR YR EQUIP																									0 0.0	
FY 97 EQUIP																									0 0.0	
FY 98 EQUIP							1	1.2																	1 1.2	
FY 99 EQUIP									7	6.8															7 6.8	
FY 00 EQUIP											13	12.2													13 12.2	
FY 01 EQUIP													13	11.7											13 11.7	
FY 02 EQUIP															11	9.6									11 9.6	
FY 03 EQUIP																	5	4.3							5 4.3	
FY 04 EQUIP																			0	0.0					0 0.0	
FY 05 EQUIP																									0 0.0	
FY TC EQUIP																						3	3.0		3 3.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		1.2		6.8		12.2		11.7		9.6		4.3		0.0					3.0	
TOTAL PROCUREMENT COST		0.0		0.0		7.8		25.5		37.2		34.7		33.9		31.9		4.3		0.0						48.8
METHOD OF IMPLEMENTATION:																										187.3

ADMINISTRATIVE LEADTIME: 12 mos PROCUREMENT LEADTIME: 24 mos

CONTRACT DATES: FY 1998: Jun-98 FY 1999: Feb-99 FY 2000: Feb-00

DELIVERY DATES: FY 1998: Sep-99 FY 1999: Feb-00 FY 2000: Feb-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 1 2 3 2 2 5 6

OUTPUT 1 1 3 3 1 4 6

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 3 4 6 2 3 3 3 2 3 3 3 3 3 3 3 3 3

OUTPUT 2 2 3 6 3 3 3 3 2 3 1 1 1 1 1 1 1 3

Notes/Comments: 1) Seven (7) HDR units are assigned to a rotatable pool to accommodate equipment refurbishment and do not require installation funding.

MODIFICATION TITLE: TRIDENT SCSS Radio Room
 COST CODE: L0089
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of TRIDENT SCSS Radio Room

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E											1.0		5.8		0.9		0.5		0.5					8.7	
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*																									
PRIOR YR EQUIP	0	0.0	0	0.0	0	0.0			0	0.0	0	0.0	0	0.4	0	0.7	(See Note 1)	(See Note 1)			7	15.8	19	44.9	
FY 97 EQUIP																									0
FY 98 EQUIP																									0
FY 99 EQUIP																									0
FY 00 EQUIP																									0
FY 01 EQUIP																									0
FY 02 EQUIP																									0
FY 03 EQUIP																									0
FY 04 EQUIP																									0
FY 05 EQUIP																									0
FY TC EQUIP																									0
TOTAL INSTALLATION COST	0.0		0.0		0.0		1.2		0.0		0.0		0.4		0.7		11.0		15.8		15.8		15.8		44.9
TOTAL PROCUREMENT COST	0.0		3.0		0.4		1.2		0.4		0.0		1.4		1.5		18.2		36.0		15.8		15.8		77.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 12 months PROCUREMENT LEADTIME: 24 months

CONTRACT DATES: FY 1998: N/A FY 1999: N/A FY 2000: N/A

DELIVERY DATES: FY 1998: N/A FY 1999: N/A FY 2000: N/A

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 99 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4

INPUT

OUTPUT

INSTALLATION SCHEDULE: 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 FY 04 1 2 3 4 FY 05 1 2 3 4 TC TOTAL

INPUT 2 3 3 4 7 19

OUTPUT 2 3 3 4 7 19

Notes/Comments: 1) Reflects installations of Trident SCSS Radio Room equipment funded under Baseband Switch (Cost Code L0027), Submarine Antenna Distribution System (Cost Code L0086), Dual Package Cesium (Cost Code L0094), and SCSS Radio Room (Cost Code L0084). One Trident SCSS Radio Room installation consists of one BBS, one SADS, one DPC and ancillary equipment.

UNCLASSIFIED

February 1999

MODIFICATION TITLE: EHF Periscope Modifications
 COST CODE: L0095
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of EHF Periscope Modifications

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									8	10.4														8	10.4
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*											8	3.0												8	3.0
PRIOR YR EQUIP																								0	0.0
FY 97 EQUIP																								0	0.0
FY 98 EQUIP																								0	0.0
FY 99 EQUIP																								0	0.0
FY 00 EQUIP											8	3.0												8	3.0
FY 01 EQUIP																								0	0.0
FY 02 EQUIP																								0	0.0
FY 03 EQUIP																								0	0.0
FY 04 EQUIP																								0	0.0
FY 05 EQUIP																								0	0.0
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		3.0		0.0		0.0		0.0		0.0		0.0		0.0	3.0
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		10.4		3.0		0.0		0.0		0.0		0.0		0.0		0.0	13.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 mos PROCUREMENT LEADTIME: 18 mos

CONTRACT DATES: FY 1998: N/A FY 1999: N/A FY 2000: Dec-99

DELIVERY DATES: FY 1998: N/A FY 1999: N/A FY 2000: Jun-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT													2	6
OUTPUT													2	6

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT																									8
OUTPUT																									8

Notes/Comments

P-1 Shopping List-Item No 110-11 of 110-16

Exhibit P-3A

UNCLASSIFIED
 CLASSIFICATION

MODIFICATION TITLE: Submarine Antenna Distribution System (SADS)
 COST CODE L0086
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of Submarine Antenna Distribution System (SADS)

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

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E		1.8		1.8		1.5		0.2		0.4		0.6		0.5										6.8		
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment																										
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.5	3	1.2	7	2.6	(See Note 1)	(See Note 1)	(See Note 1)	(See Note 1)	(See Note 1)	(See Note 1)	(See Note 1)	74	21.6	
PRIOR YR EQUIP																								0	0.0	
FY 97 EQUIP																								0	0.0	
FY 98 EQUIP																								0	0.0	
FY 99 EQUIP								0	0.0															0	0.0	
FY 00 EQUIP										4	1.5													4	1.5	
FY 01 EQUIP																								3	1.2	
FY 02 EQUIP													3	1.2										7	2.6	
FY 03 EQUIP															7	2.6								14	4.0	
FY 04 EQUIP																	14	4.0						2	0.0	
FY 05 EQUIP																			19	4.4			3	0.0	24	4.4
FY TC EQUIP																							22	7.9	0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		1.5		1.2		2.6		4.0		4.4		7.9		22	7.9	21.6
TOTAL PROCUREMENT COST		0.0		0.0		0.5		0.0		1.6		2.8		4.0		8.0		13.4		4.4		17.8				52.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 12 mos PROCUREMENT LEADTIME: 21 mos

CONTRACT DATES: FY 1998: N/A FY 1999: N/A FY 2000: Jun-00

DELIVERY DATES: FY 1998: N/A FY 1999: N/A FY 2000: Mar-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT										1	3		
OUTPUT											2	2	

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT	3				4	3			4	6	6			4	7	7	1	25		74
OUTPUT	2	1				4	3		3	5	7	1		3	7	7	2	25		74

Notes/Comments: 1) Installation funding for (5) SADS in FY04, (7) SADS in FY05 and (7) SADS "To Complete" for equipment procured in FY03, FY04 and FY05 are covered by Trident SCSS Radio Room (Cost Code L0089). Procurement quantities are represented on SADS P-3A with associated installation cost represented on Trident SCSS Radio Room (Cost Code L0089) P-3A. Installation funding presented on SADS P-3A represents SSN installations only.

2) L0086 SADS: FY98 effort reflects production engineering, scheduling/planning, and ILS.

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE																									DATE												
(DOD EXHIBIT P-21A)																									February 1999												
APPROPRIATION/BUDGET ACTIVITY												P-1 ITEM NOMENCLATURE												SUBHEAD NO.													
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT												313000 SUBMARINE COMMUNICATIONS												5210													
COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01											FISCAL YEAR 02											FISCAL YEAR 03											L A S T E R
				CY00		CALENDAR YEAR 01					CALENDAR YEAR 02						CALENDAR YEAR 03																				
		O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
		T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P
L0087	HIGH DATA RATE ANTENNA	98	0																																		
		99	0																																		
		00	13				1	1	1	2	2	2	2																								
L0095	EHF PERISCOPE MODIFICATIONS	00	8							2	2	2	2																								
L0086	SADS	00	4				1	1	1	1																											

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

**UNCLASSIFIED
CLASSIFICATION**

BUDGET ITEM JUSTIFICATION SHEET									DATE		
APPROPRIATION/BUDGET ACTIVITY									SUBHEAD		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT									52LF		
P-1 ITEM NOMENCLATURE									314700 Submarine LF/VLF VME Receiver		
PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL	
QUANTITY											
COST (in millions)		\$7.4	\$17.1								
<p>NOTE: Submarine LF/VLF VME Receiver (314700) transfers to the Submarine Broadcast Support Program (310700) in FY00. Detailed budget justification material for FY98 and FY99 is included in the Submarine Broadcast Support Program for budget comparability.</p> <p>PROGRAM COVERAGE:</p> <p>The Submarine Low Frequency/Very Low Frequency (LF/VLF) VMEbus Receiver (SLVR) (LF001) is an open architecture hybrid radio receiver system that operates in the VLF/LF frequency range (14 to 160 KHz). SLVR receives tactical and strategic messages and allows submarines to receive the messages while submerged. The SLVR design includes Commercial Off The Shelf (COTS), Non-Developmental Items (NDI) and custom components. The SLVR design maximizes the simplicity of implementing future technology upgrades through the incorporation of new generation VMEbus modules and Navy Standard and other available software to the maximum extent possible. The SLVR system replaces antiquated and limited capability LF/VLF receivers on TRIDENT and SSN (688/Seawolf/New Attack) submarines and at selected shore sites. It will receive U.S. and joint NATO LF/VLF tactical and strategic message traffic in support of Joint Strike, Surveillance, SEW/Intelligence, and Littoral Warfare mission areas, as well as the Strategic Deterrence mission area. SLVR P3I to be implemented includes noise reduction processing which increases the effectiveness of SLVR and is necessary to maintain capability with a reduced shore transmit infrastructure.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>SLVR (LF001) is a Mission Critical piece of C3I equipment onboard submarines and procurements are planned through FY01 to change out all the legacy shipboard systems. It replaces 20 - 30 year old technology limited VLF receiver systems and provides flexibility for change in addition to reductions in space and weight. This approach will modernize the existing systems to a standard design and eliminates the need for supporting numerous configurations of LF/VLF receiver systems, thus minimizing total cost of ownership/maintenance cost to the Fleet. To be successful the commercial components must be procured during the brief period of FY98 thru FY01 to insure a single generation of COTS is used for SLVR.</p>											

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
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APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE SATCOM Ship Terminals 321000			SUBHEAD 52NN	
---	--	--	--	--	--	--	---	--	--	-----------------	--

	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$117.4	\$151.6	\$237.7	\$184.0	\$196.0	\$141.3	\$88.7	\$42.9	Continuing	Continuing

PROGRAM COVERAGE: The Satellite Communications (SATCOM) Ship Terminals P-1 line provides funds for procurement of shipboard terminal equipment for ship-to-ship, ship-to-shore and ship-to-aircraft tactical communications via earth orbiting relay satellites in the ultra high frequency (UHF), super high frequency (SHF), and extremely high frequency (EHF) bands. This includes radio frequency (RF) equipment and baseband equipment assembled and grouped into systems and subsystems structured to address specific naval communications requirements. These systems provide processors and peripheral equipment that control the RF links for message traffic, direct data transfer and secure voice communications. They are selected and oriented by communications traffic levels, types of communications and operational missions. These procurements are scheduled to meet the satellite communications requirements established by the Chief of Naval Operations (CNO) in the Fleet Communications Planning and Programming documents. These programs are part of the Joint Maritime Communications System (JMCOMS) to provide a communications architecture that will provide seamless, rapid and reliable switching and transfer of large volumes of information (voice, video, data or imagery).

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:
MINI-DAMA: Demand Assigned Multiple Access (DAMA) quadruples the UHF satellite channel capacity through multiplexing, thus providing adequate satellite access to meet the present user requirements without increasing the number of satellites in the constellation. The shipboard DAMA system consists of multiplexers, control monitor groups, and radios. Equipment will be installed on all SATCOM equipped ships during regular overhaul, restricted availability and by alteration installation teams (AIT). Mini-DAMA is the second phase of the UHF DAMA program. It provides a miniaturized version of the TD-1271B/U as well as incorporating UHF SATCOM and Line of site (LOS) transceiver capability. Mini-DAMA also uses 5 kHz or 25 kHz satellite channels and can operate in DAMA or non-DAMA modes. The Mini-DAMA configuration was transitioned from MIL-SPEC to commercial open system architecture. The production variant will be delivered with either a one or a two channel configuration. The cost is essentially the same and references to quantities in this budget represent the number of channels, whether they are in one chassis or two. The standard submarine configuration requires two channels whether with one chassis or two.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE
		February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
	SATCOM Ship Terminals	321000 52NN
<p>Special Intelligence Communications(SI COMMS): Sensitive Compartmented (SCI)Automated Digital Network System (ADNS) SCI ADNS/TACINTEL II + has been designated as an evolutionary program allowing for continued growth and expansion paralleling technology changes. It provides the mechanism for phased implementation of both planned improvements and those which surface through advancing technology. SCI ADNS/TACINTELL II + provides for the real-time exchange of TACTICAL SCI Data to Afloat operational commanders. The cornerstone of this program is the versatility and growth potential of the processing and networking equipment which will provide the network centric communications for the SI community. The premise of using Commercial off-the-shelf (COTS), Government off-the-shelf (GOTS), non developmental items (NDI) and existing systems to meet the requirements for Special Intelligence Communications will continue to be followed. To realize the Joint Maritime Communications systems (JMCOMS)/ADNS architecture FY00 funds will procure the SCI ADNS equipment necessary to implement the IT-21 architecture to provide SI Communications to the Fleet. Impact of no ship SI COMMS is that the ability to detect , identify and prosecute hostile threats and provide warnings of grave danger to U.S. interests will be lost</p> <p>5/25 KHz SATCOM : Numerous pieces of SATCOM terminal equipment are required to satisfy special communications needs. This line includes procurement of off-the shelf non-developmental Items (NDI) for replacement of obsolete satellite communications terminals and baseband equipment. FY00 funds continue the procurement of the COTS/NDI Digital Modular Radio (DMR) follow-on to the AN/WSC-3 transceivers. DMR will provide the framework for meeting the planned future SATCOM communications requirements in the 0 to 2 GHz spectrum.</p> <p>EHF TERMINALS: This program provides for the acquisition of the Navy's EHF Satellite Communications Program (NESP) terminals in four semi-concurrent phases. Phase I of the NESP program provides Low Data Rate (LDR) jam resistant, low probability of intercept EHF SATCOM terminals for submarines, surface ships, and shore stations in the electromagnetic threat environment projected into the next decade. This requirement is contained in the NESP NDCP dated Apr 89 and the Joint Requirements Oversight Committee (JROC) validated Milstar ORD of Jun 92. There is a requirement to procure a total of 280 operational ship and sub terminals (OPN and SCN), plus five life cycle support systems already bought. This requirement was recently updated per the CNO ltr, Ser N631/8U556125 dated 11 Jun 98.</p> <p>Phase II of the NESP program procures Navy EHF Communications Controllers (NECCs), as part of the ADNS strategy to provide for the exchange of computer-to-computer tactical communications over the survivable EHF satellite links. NECC provides for network management; multiplexing and channel sharing; resource management; communications management and planning; network control and monitoring; and communications protocols such as circuit switching and packet switching. NECC requirements are outlined in the NESP NDCP dated Apr 89 and must be fully fielded with deploying battle groups and shore sites to support tactical information exchange over EHF SATCOM.</p>		

Exhibit P-40, Budget Item Justification

Unclassified
Classification

BUDGET ITEM JUSTIFICATION SHEET		DATE	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE		SUBHEAD
	SATCOM Ship Terminals	321000	52NN
<p>Phase III of the NESP program provides for the procurement of Full Milstar LDR Operational Capabilities (FMLOC). FMLOC efforts include Agile Beam Management (ABM), Over-the-Air-Rekey (OTAR), and In-Band Control (IBC) capabilities required by the JROC validated Milstar ORD. Additionally, the Processor Upgrade Program (PUP) must be implemented to support the terminal throughput and memory requirements of the Phase III capabilities. All of these Phase III efforts will provide essential EHF operational communications capabilities with the current Milstar satellites. Similarly, IBCs will provide interoperable voice communications on all EHF satellites (Milstar, UHF Follow-On (UFO), and FLTSAT EHF Package (FEP)). Phase III also includes procurement of Interim Polar modification kits. An EHF polar communications capability is available using an EHF package on a classified host in the Molniya orbit. To use this polar capability, terminals will require minor modifications. In addition, shore gateways are necessary to provide connectivity from the Interim Polar satellite to other EHF satellite constellations.</p> <p>Phase IV of the NESP program consists of a Medium Data Rate (MDR) capability which will provide the only protected (jam resistant and low probability of intercept/detection) MDR communications from 4.8 kilobits per second (Kbps) to 1.544 megabits per second (Mbps) to all major fleet combatants with Milstar Satellites 3-6. To meet the Navy's requirement for MDR capable terminals, MDR appliquéés will be procured and retrofitted into existing LDR terminals and the balance of the requirements will be procured as part of the Follow-On Terminal contract award of 20 Mar 98. Follow-on terminals will also have Phase III FMLOC capabilities incorporated into their baseline. The requirement for MDR is outlined in the JROC validated Milstar ORD and must be fielded by FY 99 in order to support the launch schedule of the first Milstar II satellite. By OPNAV paper, Ser N631D/703-693-0024 dated 16 September, the Program Office was directed to accelerate the MDR upgrade program to meet fleet needs. Prior to receiving the MDR appliqué, existing NESP terminals must have Phase III upgrades due to the processing throughput and memory requirements of MDR.</p> <p>SHF SHIP SYSTEMS: The Navy has been expanding its use of SHF for communications in support of Navy Tactical and Joint Task Forge (JTF) Operating Forces Afloat through a phased implementation plan. In FY00, the AN/WSC-6(V)2 and AN/WSC-6(V)4 are being modified to a standard AN/WSC-6(V)5 configuration to provide dual Radio Frequency (RF) circuit and current technology controller capabilities to flag capable platforms and large combatants. The new-production AN/WSC-6(V)7, a state-of-the-art, modular terminal, is being installed on Airborne electronic grid and information system (AEGIS) platforms to parallel the launching of the Service Life extension program (SLEP) Defense Satellite Communications systems (DSCS) satellites. A variant of this terminal is expected to replace the AN/WSC-(V)1 on the Surveillance Towed Array Sensor System (SURTASS) vessels. The ultimate goal is to continue expanding the SHF SATCOM capability to other combatants, combat logistics force ships, and the mine countermeasures support ship, through a combination of modifications to existing production SATCOM terminals and provisioning of additional AN/WSC-6(V) terminal variants matched in capability to individual ship mission requirements. Also procured is ancillary hardware related to Automated Digital Multiplexing System (ADMS). Under the submarine high data rate (SUB HDR) program, the Navy is exploring the technical feasibility of DSCS support of wideband capabilities for attack submarines.</p>			

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE		SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Ship Terminals	321000	52NN
<p>COMMERCIAL SATELLITES: Lessons learned from Desert Storm documented the necessity of an alternate commercial communications service for logistics and operations support requirements to reduce the saturation of communications on the military tactical satellites. ASD(C3I) in a letter of 8 Nov 1993, directed the use of commercial satellite (COMMERSAT) to augment current and future Military Satellite Communications (MILSATCOM) systems. This relieves the congestion on military tactical satellite communications systems while enhancing the overall Navy tactical communications capacity and reducing the competition with tactical data on the limited tactical satellite assets. The COMMERSAT program will use commercial off-the-shelf (COTS)/non-developmental item (NDI) equipment, software, and service with minimal adaptation for the naval environment. Variants of the commercially available International Maritime Satellite (INMARSAT) terminals will be procured in the next few years. The various types are required to satisfy different requirements on flagships, aircraft carriers, amphib ships, combatants and auxiliary ships. There will also be INMARSAT "B" upgrades, and dual INMARSAT B upgrades and mod kits to modify the earlier "A" versions. FY00 funds will continue procurement of C and Ku wide band SATCOM terminals for carriers and large deck amphibs components, supporting ancillary hardware related to Automated Digital Multiplexing System (ADMS) and personal communications system (PCS), and INMARSAT terminals and high speed data (HSD) kits for network centric warfare on combatants. The COMMERSAT Operational Requirements Document (ORD) mandates INMARSAT "M" terminals on Mine Counter-Measures ships.</p> <p>Global Broadcast Service (GBS): This is the Navy ship portion of the joint program with the Air Force as Executive Service. The GBS will augment other Military Satellite Communications (MILSATCOM) systems and provide a continuous, high speed, one way information flow of high volume data to units ashore, afloat or special operations. GBS will support routine operations, training and military exercises, special activities, crises, situational awareness, weapons targeting, reconnaissance and the transition to and conduct of opposed operations short of nuclear war. GBS will provide the capability of quickly disseminating large information products to various joint and small combat and combat support elements. FY00 funds are a continuation to procure receiving equipment in various configurations customized to each type of ship for Phase II of the GBS program in support of UHF follow-on satellite launches numbers 8, 9, and 10. For ship and submarine procurements, antennas and ancillary equipment such as Asynchronous Transfer Mode (ATM) in-line encryptors will be procured through a SPAWAR contract. Shipboard and receive broadcast management equipment will be procured through an Air Force contract. An Operational Requirements Document (ORD) was signed on 7 April 97.</p> <p>INSTALLATION OF EQUIPMENT: This sub-line provides funding to shipyards and alteration installation teams (AIT) at Navy field activities for installation of equipment procured for ships and submarines.</p> <p>EXPLANATION OF PROGRAM CHANGE: N/A</p>			

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COST ANALYSIS													DATE February 1999			
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE SATCOM Ship Terminals					SUBHEAD 321000 52NN					
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			PY			FY 1998			FY 1999			FY 2000				
			QTY	TOTAL COST		QTY	COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
NN101	Mini-DAMA	A									14	358	5,006			
NN103	SCI ADNS Build One/Carry On Build One	A				15	86	1,286			25	67	1,671	35	61	2,149
NN103	SCI ADNS Build Two & Three /Carry On Build Two	A												48	25	1,178
NN103	SCI ADNS Carry On TAC II+	A												7	7	49
NN105	5/25 KHz SATCOM-AN/PSC-5 EMUT (Spit Fire)	A				50	29	1,471			48	29	1,371			
NN105	5/25 KHz SATCOM--AN/WSC-3 Mod Kits	A				324	3	856								
NN105	5/25 KHz SATCOM-OE-82 Mod Kits	A				145	7	1,057			14	12	167			
NN105	5/25 KHz SATCOM-UHF Modems	A				145	38	5,540			25	40	1,004			
NN105	5/25 KHz SATCOM-DMR	B				24	347	8,323			132	122	16,072	282	115	32,541
NN106	SHF Terminals--AN/WSC-6(V)5 mod kits	A				8	778	6,227			8	707	5,657	4	724	2,897
NN106	SHF Terminals--7 Ft Antenna	A				2	267	534			3	258	775			
NN106	SHF Terminals--AN/WSC-6(V)7	A				1	2391	2,391			12	1309	15,709	23	1172	26,950
NN107	EHF Terminals--AN/USC-38(V)	A				1	17577	17,577			2	6403	12,805	8	1790	14,317
NN107	EHF Terminals--NECC	A				18	112	2,012			45	122	5,477	36	110	3,957
NN107	EHF Terminals--MDR	A				30	426	12,781			55	316	17,406	45	567	25,520
NN112	Comm. Satellite--INMARSAT M	A				7	33	228			10	33	330	5	40	200
NN112	Comm. Satellite--INMARSAT B	A				15	42	625			36	42	1,506	74	43	3,200
NN112	Comm. Satellite--C band/CWSP	B				6	1411	8,465			3	1719	5,158	8	1300	10,400
NN112	Comm. Satellite--INMARSAT B HSD KITS	A				29	54	1,566			36	43	1,541	50	44	2,200
NN117	Global Broadcast Service-- Single (Receive Suite)	B				8	635	5,082			3	338	1,013	5	353	1,763
NN117	Global Broadcast Service--Dual (Receive Suite)	B				5	516	2,581			12	465	5,583	7	464	3,248
NN117	Global Broadcast Service--Sub (Receive Suite)	B									10	178	1,777	12	186	2,227
NN999	Production Support															7,451
NN777	Install Equipment FMP							38,835					51,538			97,475
	Install							35,558					46,949			92,388
	DSA							3,277					4,589			5,087
	TOTAL CONTROL							117,437					151,566			237,722

Remarks:

NN117 GBS - Unit cost varies due to quantity discounts afforded by other Services buys per year.

NN117 GBS - Additionally, unit cost reflects variances in the composite quantities of different equipment types procured each FY which is driven by IT-21 Fleet Requirements.

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PROCUREMENT HISTORY AND PLANNING											A. DATE			
											February 1999			
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SATCOM Ship Terminals					321000		52NN	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE		
NN101	Mini Dama	99	TITAN, San Diego, CA	C/FPI (OPT)	SPAWAR		Jul-99	Jul-00	14	358	YES	N/A		
NN103	SCI ADNS Build One/Carry On Build One	99	SSC San Diego, CA	WX	SPAWAR		Dec-98	Mar-99	25	67	YES	N/A		
		00	SSC San Diego, CA	WX	SPAWAR		Dec-99	Mar-00	35	61	YES	N/A		
NN103	SCI ADNS Build Two & Three /Carry On Build Two	00	SSC San Diego, CA	WX	SPAWAR		Dec-99	Mar-00	48	25	YES	N/A		
NN103	SCI ADNS Carry On TAC II+	00	SSC San Diego, CA	WX	SPAWAR		Dec-99	Mar-00	7	7	YES	N/A		
NN105	5/25 KHz SATCOM--AN/PSC-5 EMUT (Spit Fire)	97	HDC (Magnovox) Ft. Wayne, IN	FP (OPT)	PM SPAWAR		Mar-97	Dec-98	180	27	YES	N/A		
		98	HDC (Magnovox) Ft. Wayne, IN	FP (OPT)	PM SPAWAR		Mar-98	Dec-99	50	29	YES	N/A		
		99	Raytheon	FP (OPT)	PM SPAWAR		Mar-99	Dec-00	48	29	YES	N/A		
D. REMARKS														

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Exhibit P-5A, Procurement History and Planning
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PROCUREMENT HISTORY AND PLANNING											A. DATE	
B. APPROPRIATION/BUDGET ACTIVITY											SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT											52NN	
C. P-1 ITEM NOMENCLATURE											321000	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NN105	5/25 KHz SATCOM --AN/WSC-3 Mod Kits	98	ViaSat, Carlsbad, CA	FFP	SPAWAR		Nov-97	Apr-98	324	3	YES	N/A
NN105	5/25 KHz SATCOM--OE-82 Mod Kits	99	SSC San Diego, CA	WX	SPAWAR		Nov-98	May-99	14	12	YES	N/A
NN105	5/25 KHz SATCOM--UHF Modems	99	ViaSat, Carlsbad, CA	IDIQ (OPT)	SPAWAR		Nov-98	Jun-99	25	40	YES	
NN105	5/25 KHz SATCOM--DMR	98	Motorola, Raytheon	FFP/IDIQ	SPAWAR	Mar-98	Sep-98	Apr-99	24	399	YES	
		99	Motorola, Raytheon	FFP/IDIQ	SPAWAR	Mar-98	Jun-99	Mar-00	132	122	YES	
		00	TBD	FFP/IDIQ	SPAWAR		Dec-99	Aug-00	282	115	YES	
D. REMARKS												

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Exhibit P-5A, Procurement History and Planning
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PROCUREMENT HISTORY AND PLANNING											A. DATE			
											February 1999			
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD			
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SATCOM Ship Terminals					321000		52NN	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE		
NN106	SHF Terminals--AN/WSC-6(V)5 mod kits	98	SSC, SAN DIEGO, CA	WX	SPAWAR		Jan-98	Jan-99	8	778	YES			
		99	SSC, SAN DIEGO, CA	WX	SPAWAR		Jan-99	Jan-00	8	707	YES			
		00	SSC, SAN DIEGO, CA	WX	SPAWAR		Jan-00	Jan-01	4	724	YES			
NN106	SHF Terminals--7 Ft Antenna	99	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Jan-99	Oct-99	3	258	YES			
NN106	SHF Terminals--AN/WSC-6(V)7	99	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Jan-99	Jan-00	12	1,309	YES			
		00	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Oct-99	Oct-00	23	1,172	YES			
NN107	EHF Terminals--AN/USC-38(V)	98	Raytheon, Boston, MA	C/FFP	SPAWAR	Jul-97	Mar-98	Sep-99	1	17,577	YES			
		99	Raytheon, Boston, MA	C/FFP/OPT	SPAWAR		Mar-99	Sep-00	2	6,403	YES			
		00	Raytheon, Boston, MA	C/FFP/OPT	SPAWAR		Nov-99	May-01	8	1,790	YES			
D. REMARKS														
1/FY98 EHF terminals - AN/USC-38(V) is for first production unit for follow-on terminal.														
FY 97-FY99 EHF Terminal- AN/USC-38(V) includes FMLOC														
SHF-FY01 installations are lower due to the lower individual platform cost of installing the (V)7 on ship types scheduled, i.e. AOE's, LPDs, and LSDs.														

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PROCUREMENT HISTORY AND PLANNING											A. DATE			
											February 1999			
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD			
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SATCOM Ship Terminals					321000		52NN	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE		
NN107	EHF Terminals--NECC	98	SSC-San Diego, CA	WX	SPAWAR		Dec-97	Jun-98	18	112	YES			
		99	SSC-San Diego, CA	WX	SPAWAR		Dec-98	Jun-99	45	122	YES			
		00	SSC-San Diego, CA	WX	SPAWAR		Dec-99	Jun-00	36	110	YES			
NN107	EHF Terminals--MDR	98	Raytheon, Marlborough, MA	SS	SPAWAR	Oct-97	Jan-98	Jun-99	30	426				
		99	Raytheon, Marlborough, MA	SS (OPT)	SPAWAR		Nov-98	Apr-00	55	316				
		00	Raytheon, Marlborough, MA	SS (OPT)	SPAWAR		Nov-99	Apr-01	45	567				
NN112	Comm. Satellite--INMARSAT M	99	Raytheon	FFP	SPAWAR	Jun-98	Mar-99	Jun-99	10	33	YES	N/A		
		00	UNKNOWN	UNKNOWN	SPAWAR		Jan-00	Mar-00	5	40	YES	N/A		
NN112	Comm. Satellite--INMARSAT B	99	Mackay Comm. Edison, NJ	C/FP (OPT)	SPAWAR		Nov-98	Feb-99	36	42	YES	N/A		
		00	Mackay Comm. Edison, NJ	C/FP (OPT)	SPAWAR		Nov-99	Feb-00	74	43	YES	N/A		
D. REMARKS FY99 EHF Terminal-NECC included MDR capability. FY 97-FY99 EHF Terminal- includes FMLOC FY00 - FY04 EHF terminals - MDR includes antenna procurement FY04 EHF Terminals-MDR funding is for antennas only.														

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PROCUREMENT HISTORY AND PLANNING											A. DATE			
											February 1999			
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SATCOM Ship Terminals					321000		52NN	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE		
NN112	Comm. Satellite--C band/CWSP	98	Harris Corp., Melbourne, FL	C/FP	SPAWAR	Feb-98	Jul-98	Jan-99	6	1,411	YES	N/A		
		99	Harris Corp., Melbourne, FL	C/FP(OPT)	SPAWAR		Jan-99	Oct-99	3	1,719	YES	N/A		
		00	Harris Corp., Melbourne, FL	C/FP(OPT)	SPAWAR		Jan-00	Oct-00	8	1,300	YES	N/A		
NN112	Comm. Satellite--INMARSAT B HSD KITS	99	Mackay Comm. Edison, NJ	C/FP	SPAWAR		Nov-98	Feb-99	36	43	YES	N/A		
		00	Mackay Comm. Edison, NJ	C/FP	SPAWAR		Nov-99	Feb-00	50	44	YES	N/A		
NN117	Global Broadcast Service-- Single (Receive Suite)	98	Raytheon, Marlborough, MA	C/FFP/C/CPAF	SPAWAR/USAF		Jan-98	Nov-98	8	635	YES	N/A		
		99	Raytheon, Marlborough, MA	C/FFP/C/CPAF	SPAWAR/USAF		Dec-98	Sep-99	3	338	YES	N/A		
		00	Raytheon, Marlborough, MA	C/FFP/C/CPAF	SPAWAR/USAF		Dec-99	Sep-00	5	353	YES	N/A		
NN117	Global Broadcast Service--Dual (Receive Suite)	98	Raytheon, Marlborough, MA	C/FFP/C/PAF	SPAWAR/USAF		Jan-98	Dec-98	5	516	YES	N/A		
		99	Raytheon, Marlborough, MA	C/FFP/C/PAF	SPAWAR/USAF		Dec-98	Sep-99	12	465	YES	N/A		
		00	Raytheon, Marlborough, MA	C/FFP/C/PAF	SPAWAR/USAF		Dec-99	Sep-00	7	464	YES	N/A		
NN117	Global Broadcast Service--Sub (Receive Suite)	99	Raytheon, Marlborough, MA	C/FFP/C/PAF	SPAWAR/USAF	Sep97/May97	Dec-98	Sep-99	10	178	YES	N/A		
		00	Raytheon, Marlborough, MA	C/FFP/C/PAF	SPAWAR/USAF		Dec-99	Sep-00	12	186	YES	N/A		
D. REMARKS														
NN117 GBS- NRE Cost and ATM on-line encryptors version for FY97 & FY98 account for high unit cost.														
NN117 GBS - Unit cost varies due to quantity discounts afforded by other Services buys per year														
NN117 GBS - Additionally, unit cost reflects variances in the composite quantities of different equipment types procured each FY which is driven by IT-21 Fleet requirements														

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Exhibit P-5A, Procurement History and Planning
Unclassified
Classification

MODIFICATION TITLE: **SATCOM Ship Terminals 321000 NN101, Mini-DAMA**
 MODELS OF SYSTEMS AFFECTED: AN/USC-42(V)
 DESCRIPTION/JUSTIFICATION: Provides 5KHz and 25KHz UHF Communications capability for submarines and other disadvantaged users.

Note: The quantity represents the number of channels regardless of single or dual channel units.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment	63	17.9	0	0.0	0	0.0	14	5.0																77	22.9	
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Intern Contractor Support																										
Installation of Hardware*	26	2	19	2.5	18	3.9	14	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	10.4	
PRIOR YR EQUIP	26	2	19	2.5	18	3.9																		63	8.4	
FY 95 EQUIP																									0	0
FY 96 EQUIP																									0	0
FY 97 EQUIP																									0	0
FY 98 EQUIP																									0	0
FY 99 EQUIP							14	2.0																	14	2
FY 00 EQUIP																									0	0
FY 01 EQUIP																									0	0
FY 02 EQUIP																									0	0
FY 03 EQUIP																									0	0
FY TC EQUIP																									0	0
TOTAL INSTALLATION COST		2.0		2.5		3.9		2.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		10.4	
TOTAL PROCUREMENT COST		19.9		2.5		3.9		7.0		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		33.3	

ADMINISTRATIVE LEADTIME: PROCUREMENT LEADTIME: 12 Mo.

CONTRACT DATES: FY 1998: FY 1999: Jul-99 FY 2000:

DELIVERY DATES: FY 1998: FY 1999: Jul-00 2/ FY 2000:

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

INPUT 63 14

OUTPUT 63 14

INSTALLATION SCHEDULE: PY FY 02 FY 03 FY 04 FY 05 TC TOTAL

INPUT 77

OUTPUT 77

Note: Quantities represent number of channels regardless of single or dual channel units
 1/ This represents Total Inventory objective.

UNCLASSIFIED

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

SATCOM Ship Terminals
 NN103
SCI ADNS Build One/Carry On Build One
 Provides Shipboard reception and transmission of multi-functional data using various data networks linking battle group commanders with intelligence databases.

321000

Feb-99

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment requiring installation	106	1.1	18	2.5	15	1.3	25	1.7	28	2.1	3	0.8	1	0.5	0	0.0	0	0.0	0	0.0	0	0.0	196	10.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other- Equipment requiring no installation									7		8		6										21		
Interm Contractor Support																									
Installation of Hardware*	106	12.7	18	2.4	15	1.4	25	1.0	28	0.6	3	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	196	18.3	
PRIOR YR EQUIP	106	12.7																					106	12.7	
FY 97 EQUIP			18	2.4																			18	2.4	
FY 98 EQUIP					15	1.4																	15	1.4	
FY 99 EQUIP							25	1.0															25	1.0	
FY 00 EQUIP									28	0.6													28	0.6	
FY 01 EQUIP											3	0.1											3	0.1	
FY 02 EQUIP													1	0.1									1	0.1	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		12.7		2.4		1.4		1.0		0.6		0.1		0.1		0.0		0.0		0.0		0.0		18.3	
TOTAL PROCUREMENT		13.8		4.9		2.7		2.7		2.7		0.9		0.6		0.0		0.0		0.0		0.0		28.3	

1/
2/
3/

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1 MO PROCUREMENT LEADTIME: 3 MO

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Mar-98 FY 1999: Mar-99 FY 2000: Mar-00

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

INPUT 139 4 12 9 7 12 9 2 1

OUTPUT 139 4 12 9 7 12 9 1 2

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

INPUT 1 196

OUTPUT 1 196

Notes/Comments

- 1/ FY00 7 Units are Carry on /No Installation required
- 2/ FY01 8 Units are Carry on /No Installation required
- 3/ FY02 6 Units are Carry on /No Installation required

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN103
 MODELS OF SYSTEMS AFFECTED: **SCI ADNS Build Two & Three /Carry On Build Two**
 DESCRIPTION/JUSTIFICATION: Provides Shipboard reception and transmission of multi-functional data using various data networks linking battle group commanders with intelligence databases.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment requiring installation	0	0.0	0	0.0	0	0.0	0	0.0	41	1.2	17	0.7	5	0.4	30	1.0	0	0.0	0	0.0	0	0.0	93	3.2	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other- Equipment requiring no installation									7		7		7											21	
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	41	0.8	17	0.5	5	0.1	30	0.5	0	0.0	0	0.0	0	0.0	93	1.9	
PRIOR YR EQUIP																								0	0.0
FY 97 EQUIP																								0	0.0
FY 98 EQUIP																								0	0.0
FY 99 EQUIP																								0	0.0
FY 00 EQUIP									41	0.8														41	0.8
FY 01 EQUIP											17	0.5												17	0.5
FY 02 EQUIP													5	0.1										5	0.1
FY 03 EQUIP															30	0.5								30	0.5
FY 04 EQUIP																								0	0.0
FY 05 EQUIP																								0	0.0
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.8		0.5		0.1		0.5		0.0		0.0		0.0		1.9	
TOTAL PROCUREMENT		0.0		0.0		0.0		0.0		2.0		1.2		0.5		1.5		0.0		0.0		0.0		5.1	

1/
2/
3/

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1998: FY 1999: FY 2000: Dec-99

DELIVERY DATES: FY 1998: FY 1999: FY 2000: Mar-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT						14	14	13			6	6	5
OUTPUT						7	14	13		7	4	6	5

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		2	3		10	10	10											
OUTPUT	2		2	3	5	10	10		5									

Notes/Comments

- 1/ FY 00 7 Units are Carry on/ No Installation required
- 2/ FY 01 7 Units are Carry on/ No Installation required
- 3/ FY 02 7 Units are Carry on/ No Installation required

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals **5/25 KHz SATCOM** 321000
 COST CODE: NN105
 MODELS OF SYSTEMS AFFECTED: **Generic Front-end Communications Processor (GFCP)**
 DESCRIPTION/JUSTIFICATION: Provides computer interface for shipboard terminal equipment

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	13	0.3	13	0.4	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	26	0.7	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	13	2.9	13	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	26	3.1	
PRIOR YR EQUIP			13	2.9																			13	2.9	
FY 97 EQUIP					13	0.2																	13	0.2	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		2.9		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		3.1	
TOTAL PROCUREMENT		0.3		3.3		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		3.8	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 6 mo. PROCUREMENT LEADTIME: 6 mo

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	26												
OUTPUT	26												

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																			26
OUTPUT																			26

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 5/25 KHz SATCOM 321000
 COST CODE: NN105
 MODELS OF SYSTEMS AFFECTED: AN/USC-42(V)
 DESCRIPTION/JUSTIFICATION: Provides 5KHz and 25 KHz UHF radio transceiver communications capability for mine countermeasures ships

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	8	1.9	18	4.9	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	26	6.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	26	5.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	26	5.1	
PRIOR YR EQUIP					8	1.6																	8	1.6	
FY 97 EQUIP					18	3.5																	18	3.5	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		5.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		5.1	
TOTAL PROCUREMENT		1.9		4.9		5.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		11.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

18-24 mos

CONTRACT DATES:

FY 1998:

FY 1999:

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999:

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT												
OUTPUT												

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		
OUTPUT																		

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN105
 MODELS OF SYSTEMS AFFECTED: 5/25 KHz SATCOM --AN/WSC-3 Mod Kits
 DESCRIPTION/JUSTIFICATION: Provides 5KHz and 25 KHz UHF bandwidth capability in existing UHF radios

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment	0	0.0	0	0.0	324	0.9	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	324	0.9
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*	0	0.0	0	0.0	271	0.2	53	0.04	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	324	0.2
PRIOR YR EQUIP																									0	0.0
FY 97 EQUIP																									0	0.0
FY 98 EQUIP					271	0.2	53	0.04																	324	0.2
FY 99 EQUIP																									0	0.0
FY 00 EQUIP																									0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY 05 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.2
TOTAL PROCUREMENT		0.0		0.0		1.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.1

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 4 mo PROCUREMENT LEADTIME: 3 mo.

CONTRACT DATES: FY 1998: Nov-97 FY 1999: N/A FY 2000: N/A

DELIVERY DATES: FY 1998: Apr-98 FY 1999: N/A FY 2000: N/A

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 99 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4

INPUT 271 53

OUTPUT 271 53

INSTALLATION SCHEDULE: 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 FY 04 1 2 3 4 FY 05 1 2 3 4 TC TOTAL

INPUT 324

OUTPUT 324

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN105
 MODELS OF SYSTEMS AFFECTED: 5/25 KHz SATCOM--OE-82 Mod Kits
 DESCRIPTION/JUSTIFICATION: Provides OE-82 antenna systems with the capability to transmit and receive at a bandwidth of 5KHz as well as 25KHz

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment	0	0.0	122	2.3	145	1.1	14	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	281	3.5
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*	0	0.0	88	2.2	137	1.0	56	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	281	3.6
PRIOR YR EQUIP																									0	0.0
FY 97 EQUIP			88	2.2	34	0.2																			122	2.4
FY 98 EQUIP					103	0.8	42	0.3																	145	1.1
FY 99 EQUIP							14	0.1																	14	0.1
FY 00 EQUIP																									0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY 05 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST		0.0		2.2		1.0		0.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		3.6
TOTAL PROCUREMENT		0.0		4.5		2.1		0.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		7.1

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

6 mo.

CONTRACT DATES:

FY 1998: Nov-97

FY 1999: Nov-98

FY 2000:

DELIVERY DATES:

FY 1998: Feb-98

FY 1999: May-99

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	225	26	16	14								
OUTPUT	225	26	16	14								

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		281
OUTPUT																		281

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN105
 MODELS OF SYSTEMS AFFECTED: 5/25 KHz SATCOM--UHF Modems
 DESCRIPTION/JUSTIFICATION: Provides the modulation demodulation capability at 5 KHz bandwidth in the UHF spectrum

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment	0	0.0	154	5.4	145	5.5	25	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	324	11.9
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*	0	0.0	83	4.2	188	3.1	53	1.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	324	9.0
PRIOR YR EQUIP																									0	0.0
FY 97 EQUIP			83	4.2																					154	5.1
FY 98 EQUIP					71	0.9																			145	3.1
FY 99 EQUIP					117	2.2	28	0.9																	25	0.8
FY 00 EQUIP							25	0.8																	0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY 05 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST		0.0		4.2		3.1		1.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		9.0
TOTAL PROCUREMENT		0.0		9.6		8.6		2.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		20.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 6 mos. PROCUREMENT LEADTIME: 6-7 mos.

CONTRACT DATES: FY 1998: Nov-97 FY 1999: Nov-98 FY 2000:

DELIVERY DATES: FY 1998: Apr-98 FY 1999: Jun-99 FY 2000:

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 99 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4

INPUT 271 18 10 15 10

OUTPUT 271 18 10 15 10

INSTALLATION SCHEDULE: 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 FY 04 1 2 3 4 FY 05 1 2 3 4 TC TOTAL

INPUT 324

OUTPUT 324

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN105
 MODELS OF SYSTEMS AFFECTED: 5/25 KHz SATCOM--DMR
 DESCRIPTION/JUSTIFICATION: Provides 5KHz and 25 KHz UHF bandwidth capability and will eventually replace the aging AN/WSC-3 radios

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	24	9.6	132	16.1	282	32.5	93	11.1	262	30.9	334	38.3	157	17.2	45	5.4	0	0.0	1329	161.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	24	2.9	172	8.5	282	14.7	93	4.3	262	13.2	334	16.4	162	8.0	0	0.0	1329	68.0	
PRIOR YR EQUIP																							0	0.0	0
FY 97 EQUIP																							0	0.0	0
FY 98 EQUIP					24	2.9																	24	2.9	24
FY 99 EQUIP							132	6.7															132	6.7	132
FY 00 EQUIP							40	1.8			242	12.5										40	1.8	282	
FY 01 EQUIP										40	2.2	53	2.5									40	2.2	93	
FY 02 EQUIP											40	1.8			222	11.2						40	1.8	262	
FY 03 EQUIP														40	2.0			294	14.1				40	2.0	334
FY 04 EQUIP																	40	2.3			117	5.7	40	2.3	157
FY 05 EQUIP																			45	2.3			45	2.3	45
FY TC EQUIP																							0	0.0	0
TOTAL INSTALLATION COST		0.0		0.0		0.0		2.9		8.5		14.7		4.3		13.2		16.4		8.0		0.0		68.0	
TOTAL PROCUREMENT		0.0		0.0		9.6		19.0		41.0		25.8		35.2		51.5		33.6		13.4		0.0		229.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

7 Months

CONTRACT DATES: FY 1998: Sep-98 FY 1999: Jun-99 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Apr-99 FY 1999: Mar-00 FY 2000: Aug-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01					
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT				24			66	66	40			82	80	80	40
OUTPUT				24			66	66	40			82	80	80	40

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL													
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4															
INPUT				53				40				74	74	74	40				98	98	98	40				39	39	39	45		1329
OUTPUT				53				40				74	74	74	40				98	98	98	40				39	39	39	45		1329

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--AN/WSC-6(V)5 mod kits
 DESCRIPTION/JUSTIFICATION: High data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	4	9.6	6	7.1	8	6.2	8	5.7	4	2.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	30	31.5	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	13.5	4	5.4	6	1.1	8	4.3	8	1.7	4	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	30	26.8	
PRIOR YR EQUIP		13.5	4	5.4																			4	18.9	
FY 97 EQUIP					6	1.1																	6	1.1	
FY 98 EQUIP							8	4.3															8	4.3	
FY 99 EQUIP									8	1.7													8	1.7	
FY 00 EQUIP											4	0.8											4	0.8	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		13.5		5.4		1.1		4.3		1.7		0.8		0.0		0.0		0.0		0.0		0.0		26.8	
TOTAL PROCUREMENT		23.1		12.5		7.3		10.0		4.6		0.8		0.0		0.0		0.0		0.0		0.0		58.3	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 6 Months PROCUREMENT LEADTIME: 10-12 Months

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: Jan-99 FY 1999: Jan-00 FY 2000: Jan-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	10		4	4			4	2	2		2	2	
OUTPUT	10			3	3			4	2		2	2	2

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		30
OUTPUT																		30

Notes/Comments
FY99 installations are on platforms without pre-existing equipment to modify therefore unit cost is higher for installations.

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--7 Ft Antenna
 DESCRIPTION/JUSTIFICATION: High data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	5	1.5	2	0.5	3	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	2.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	5	0.6	2	0.6	3	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	1.9	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP					5	0.6																	5	0.6	
FY 98 EQUIP							2	0.6															2	0.6	
FY 99 EQUIP									3	0.7													3	0.7	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.6		0.6		0.7		0.0		0.0		0.0		0.0		0.0		0.0		1.9	
TOTAL PROCUREMENT		0.0		1.5		1.1		1.4		0.7		0.0		0.0		0.0		0.0		0.0		0.0		4.7	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MO PROCUREMENT LEADTIME: 9 MO

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000:

DELIVERY DATES: FY 1998: Oct-98 FY 1999: Oct-99 FY 2000:

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 99 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4

INPUT 5 2 3

OUTPUT 5 2 1 2

INSTALLATION SCHEDULE: 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 FY 04 1 2 3 4 FY 05 1 2 3 4 TC TOTAL

INPUT 10

OUTPUT 10

Notes/Comments

Installation unit costs vary due to varying ship class installs

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN106
 MODELS OF SYSTEMS AFFECTED: SHF Terminals--AN/WSC-6(V7)
 DESCRIPTION/JUSTIFICATION: Provides high data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	3	5.0	1	2.4	12	15.7	23	27.0	23	26.0	12	17.1	0	0.0	0	0.0	0	0.0	1	1.3	75	94.5	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	3	0.7	1	1.2	12	18.0	23	14.4	23	28.1	12	11.0	0	0.0	0	0.0	1	1.1	75	74.5	
PRIOR YR EQUIP					3	0.7																	0	0.0	
FY 97 EQUIP							1	1.2															3	0.7	
FY 98 EQUIP								1	1.2														1	1.2	
FY 99 EQUIP									12	18.0													12	18.0	
FY 00 EQUIP											23	14.4											23	14.4	
FY 01 EQUIP													23	28.1									23	28.1	
FY 02 EQUIP															12	11.0							12	11.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							1	1.1	
TOTAL INSTALLATION COST		0.0		0.0		0.7		1.2		18.0		14.4		28.1		11.0		0.0		0.0		1.1		74.5	
TOTAL PROCUREMENT		0.0		5.0		3.1		16.9		45.0		40.4		45.2		11.0		0.0		0.0		2.4		169.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MO PROCUREMENT LEADTIME: 12 MO

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000: Oct-99

DELIVERY DATES: FY 1998: Jan-99 FY 1999: Jan-00 FY 2000: Oct-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT	3		1				4	4	4		6	6	6	5																	
OUTPUT	3			1				4	4		4	6	6	6																	
INPUT		6	6	6	5		4	4	4																1	75					
OUTPUT		5	6	6	6		5	4	4	4															1	75					

Notes/Comments

FY01-03 installations vary due to the lower individual platform cost of installing the (V)7 on ship types scheduled, i.e. AOE's, LPDs, and LSDs.

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN107
 MODELS OF SYSTEMS AFFECTED: EHF Terminals--AN/USC-38(V)
 DESCRIPTION/JUSTIFICATION: Provides full Milstar LDR operational capabilities (FMLOC) with jam resistant, low probability of intercept satellite communications connectivity between ships, shore and submarines in an electromagnetic threat.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	193	345.3	0	10.7	1	17.6	2	12.8	8	14.3	8	12.5	7	10.2	3	4.5	2	3.7	0	0.0	0	0.0	224	431.5	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	105	142.2	38	36.4	8	6.0	10	14.1	15	18.6	12	9.4	11	9.1	6	5.0	4	3.5	2	1.8	0	0.0	211	246.1	
PRIOR YR EQUIP	105	142.2	38	36.4	8	6.0	9	13.1	15	18.6	5	4.3											180	220.6	
FY 97 EQUIP																								0	0.0
FY 98 EQUIP							1	1.0																1	1.0
FY 99 EQUIP											2	1.4												2	1.4
FY 00 EQUIP										5	3.7													8	6.3
FY 01 EQUIP													3	2.6										8	6.5
FY 02 EQUIP												8	6.5											8	6.5
FY 03 EQUIP														6	5.0			1	0.8					7	5.8
FY 04 EQUIP																	3	2.7						3	2.7
FY 05 EQUIP																			2	1.8				2	1.8
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST		142.2		36.4		6.0		14.1		18.6		9.4		9.1		5.0		3.5		1.8		0.0		246.1	
TOTAL PROCUREMENT		487.5		47.1		23.6		26.9		32.9		21.9		19.3		9.5		7.2		1.8		0.0		677.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

18 mo

CONTRACT DATES: FY 1998: Mar-98 FY 1999: Mar-99 FY 2000: Nov-99

DELIVERY DATES: FY 1998: Sep-99 FY 1999: Sep-00 FY 2000: May-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL	
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT	151	3	3	3	1	5	5	5		4	3	2	3																			
OUTPUT	151		3	3	3	1	5	5	5			4	3	2																		
INPUT		3		4	4			3	3			2	2											2								
OUTPUT		3	3		4	4			3	3			2		2										2							

Notes/Comments

1/ FY97 funding provides for FMLOC. FY98 funding provides for 1st production unit for follow-on terminal (FOT).
 2/ Differences between procured quantity (224) and installed quantity (211) is due to 13 OPN ship procured terminals installed with SCN funds.

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN107
 MODELS OF SYSTEMS AFFECTED: **EHF Terminals--NECC**
 DESCRIPTION/JUSTIFICATION: Provides for network management; multiplexing and channel sharing; resource management; communications management and planning; network control and monitoring; circuit switching and packet switching.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	14	1.5	36	4.0	18	2.0	45	5.5	36	4.0	20	2.3	19	2.5	25	3.0	8	0.9	0	0.0	0	0.0	221	25.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	14.0	1.4	33.0	3.0	9.0	4.1	34.0	3.3	45.0	4.2	34.0	3.3	19.0	1.9	25.0	2.6	8.0	0.7	0.0	0.0	0.0	0.0	221	24.5	
PRIOR YR EQUIP	14	1.4																					14	1.4	
FY 97 EQUIP			33	3.0																			36	4.4	
FY 98 EQUIP					6	2.7																	18	3.8	
FY 99 EQUIP							12	1.1															22	2.2	
FY 00 EQUIP									23	2.2													22	2.0	
FY 01 EQUIP											14	1.3											20	2.0	
FY 02 EQUIP													19	1.9											
FY 03 EQUIP															25	2.6									
FY 04 EQUIP																	8	0.7							
FY 05 EQUIP																									
FY TC EQUIP																									
TOTAL INSTALLATION COST		1.4		3.0		4.1		3.3		4.2		3.3		1.9		2.6		0.7		0.0		0.0		24.5	
TOTAL PROCUREMENT		2.9		7.0		6.1		8.8		8.2		5.6		4.4		5.6		1.6		0.0		0.0		50.3	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

6-8 mo

CONTRACT DATES:

FY 1998: Dec-97

FY 1999: Dec-98

FY 2000: Dec-99

DELIVERY DATES:

FY 1998: Jun-98

FY 1999: Jun-99

FY 2000: Jun-00

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01				
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	56	6	6	6	16	15	8	6	16	12	2	6	14
OUTPUT	56	6	6	6	16	15	8	6	16	12	2	6	14

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4										
INPUT			6	13			8	17			8														221	
OUTPUT			6	13			8	17			8															221

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN107
 MODELS OF SYSTEMS AFFECTED: **EHF Terminals--MDR**
 DESCRIPTION/JUSTIFICATION: Upgrades the existing AN/USC-38 low data rate terminal into a medium data rate terminal

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	30	12.8	55	17.4	45	25.5	20	8.1	24	14.5	14	17.0	1/0	8.7	0	0.0	0	0.0	188	104.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	8	3.8	53	21.1	40	19.8	39	20.4	34	17.8	14	16.1	1/0	6.9	0	0.0	188	105.9	
PRIOR YR EQUIP																							0	0	
FY 97 EQUIP																							0	0	
FY 98 EQUIP					8	3.8			22	8.8													30	13	
FY 99 EQUIP									31	12.3													55	24	
FY 00 EQUIP											16	8.0											45	23	
FY 01 EQUIP													29	15.2									20	11	
FY 02 EQUIP													10	5.2									24	13	
FY 03 EQUIP															10	5.3							14	16	
FY 04 EQUIP																	14	16.1					0	7	
FY 05 EQUIP																			0	6.9			0	0	
FY TC EQUIP																							0	0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		3.8		21.1		19.8		20.4		17.8		16.1		6.9		0.0		105.9	
TOTAL PROCUREMENT		0.0		0.0		12.8		21.2		46.6		27.9		34.9		34.8		24.8		6.9		0.0		210.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

12-16 mo

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: Jun-99 FY 1999: Apr-00 FY 2000: Apr-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT			6	2	11	11	16	15	12	12	8	8																			
OUTPUT			6	2	11	11	16	15	12	12	8	8																			
INPUT		15	14	5	5	5	5	12	12	8	6																	188			
OUTPUT		15	14	5	5	5	5	12	12	8	6																	188			

Notes/Comments

1/: FY04 includes antenna procurement only.
 FY05 installation is for antennas only.

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN112
 MODELS OF SYSTEMS AFFECTED: **Comm. Satellite--INMARSAT M**
 DESCRIPTION/JUSTIFICATION: For smaller ships INMARSAT M provides the capability for Official phones, STU III, Debit Card Crew Phones, Internet, E-Mail, PC to PC, Video Teleconferencing and Facsimile.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	8	0.2	0	0.0	7	0.2	10	0.3	5	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	30	1.0
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	8	0.3	0	0.0	7	0.2	10	0.3	5	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	30	0.9
PRIOR YR EQUIP	8	0.3																					8	0.3
FY 97 EQUIP																							0	0.0
FY 98 EQUIP					7	0.2																	7	0.2
FY 99 EQUIP							10	0.3															10	0.3
FY 00 EQUIP									5	0.1													5	0.1
FY 01 EQUIP																							0	0.0
FY 02 EQUIP																							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.3		0.0		0.2		0.3		0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.9
TOTAL PROCUREMENT		0.5		0.0		0.4		0.6		0.3		0.0		0.0		0.0		0.0		0.0		0.0		1.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1 MO PROCUREMENT LEADTIME: 3 MO

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Mar-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: Mar-98 FY 1999: Jun-99 FY 2000: Mar-00

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 99 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4

INPUT 15 3 3 4 2 2 1

OUTPUT 11 4 3 3 4 2 2 1

INSTALLATION SCHEDULE: 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 TC TOTAL

INPUT 30

OUTPUT 30

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN112
 MODELS OF SYSTEMS AFFECTED: **Comm. Satellite--INMARSAT B**
 DESCRIPTION/JUSTIFICATION: Provides upgrade to the older INMARSAT A terminals giving ships the capability for Official phones, STU III, Debit Card Crew Phones, Internet, E-Mail, PC to PC, Video Teleconferencing and Facsimile.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	16	1.3	15	0.9	15	0.6	36	1.5	74	3.2	55	2.3	63	4.7	42	3.1	15	1.1	15	1.1	0	0.0	346	19.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	16	1.0	29	2.7	36	2.4	62	3.9	43	3.1	63	6.3	48	5.1	22	2.2	21	2.2	6	0.6	346	29.5	
PRIOR YR EQUIP			16	1.0																			16	1.0	
FY 97 EQUIP					15	1.4																	15	1.4	
FY 98 EQUIP					14	1.3	1	0.1															15	1.4	
FY 99 EQUIP							35	2.3	1	0.1													36	2.4	
FY 00 EQUIP									61	3.8													74	4.7	
FY 01 EQUIP											13	0.9											55	2.3	
FY 02 EQUIP											30	2.2	25	2.5									63	4.7	
FY 03 EQUIP													38	3.8	25	2.7							63	6.5	
FY 04 EQUIP															23	2.4	19	1.9					42	4.3	
FY 05 EQUIP																	3	0.3	12	1.2			15	1.5	
FY TC EQUIP																			9	1.0	6	0.6	15	1.6	
TOTAL INSTALLATION COST		0.0		1.0		2.7		2.4		3.9		3.1		6.3		5.1		2.2		2.2		0.6		29.5	
TOTAL PROCUREMENT		1.3		1.9		3.3		3.9		7.1		5.4		11.0		8.2		3.3		3.3		0.6		49.3	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MO

PROCUREMENT LEADTIME: 4 MO

CONTRACT DATES: FY 1998: May-98 FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: Aug-98 FY 1999: Feb-99 FY 2000: Feb-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	45	1	11	11	13	1	20	21	20	13	9	11	10
OUTPUT	45	1		11	11	13	1	20	21	20	13	9	11

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	19	15	15	14	16	16	16		7	7	8		7	7	7		6	346
OUTPUT	10	19	15	15	14		16	16	16		7	7	8		7	7	13	346

Notes/Comments

FY98 installation includes design drawings and overseas installs.

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN112
 MODELS OF SYSTEMS AFFECTED: **Comm. Satellite--C band/CWSP**
 DESCRIPTION/JUSTIFICATION: Provides C and Ku wide band SATCOM terminals supporting capabilities such as Automated Digital Multiplexing System (ADMS). Telemedicine, official and unofficial phones, public affairs officer information, imagery, Meteorology and Oceanography Command (METOC).

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	8	11.5	0	9.6	6	8.5	3	5.2	8	10.4	15	20.0	4	5.8	0	0.0	0	0.0	0	0.0	0	0.0	44	70.9	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	7	5.2	1	4.6	0	2.4	6	3.7	8	7.0	10	9.3	12	11.9	0	0.0	0	0.0	0	0.0	0	0.0	44	44.1	
PRIOR YR EQUIP	7	5.2	1	4.6																			8	9.8	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP					2.4		6	3.7															6	6.1	
FY 99 EQUIP									3	2.6													3	2.6	
FY 00 EQUIP									5	4.4	3	2.8											8	7.2	
FY 01 EQUIP											7	6.5	8	8.0									15	14.5	
FY 02 EQUIP													4	3.9									4	3.9	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		5.2		4.6		2.4		3.7		7.0		9.3		11.9		0.0		0.0		0.0		0.0		44.1	
TOTAL PROCUREMENT		16.7		14.2		10.9		8.9		17.4		29.3		17.7		0.0		0.0		0.0		0.0		115.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MO PROCUREMENT LEADTIME: 9 MO

CONTRACT DATES: FY 1998: Jul-98 FY 1999: Jan-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: Jan-99 FY 1999: Oct-99 FY 2000: Oct-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	8		5	1		3	3	2		6	2	2	
OUTPUT	8		5	1		3	3	2		6	2	2	

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
INPUT	6	6																						44
OUTPUT		6	6																					44

Notes/Comments

No terminals were procured with FY 97 funds, only mod kits to upgrade existing terminals, baseband equipment, material for three major shipboard spensons. Installation in FY97 was for one terminal bought in FY96 plus ancillary hardware bought in FY97. FY98 procurement cost higher due to NRE; FY98 install costs reflect pre-installation costs for the FY99 install.

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN112
 MODELS OF SYSTEMS AFFECTED: **Comm. Satellite--INMARSAT B HSD KITS**
 DESCRIPTION/JUSTIFICATION: Provides upgrade to the INMARSAT B terminals giving ships the capability for simultaneous official phones, STU III, debit card crew phones, internet, e-mail, PC to PC, video teleconferencing and facsimile over a 64 kbps channel.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	29	1.6	36	1.5	50	2.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	115	5.3	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	29	1.9	36	3.1	35	3.3	15	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	115	9.7	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP					29	1.9																	29	1.9	
FY 99 EQUIP							36	3.1															36	3.1	
FY 00 EQUIP									35	3.3	15	1.4											50	4.7	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		1.9		3.1		3.3		1.4		0.0		0.0		0.0		0.0		0.0		9.7	
TOTAL PROCUREMENT		0.0		0.0		3.5		4.6		5.5		1.4		0.0		0.0		0.0		0.0		0.0		15.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MO

PROCUREMENT LEADTIME: 4 MO

CONTRACT DATES: FY 1998: May-98 FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: Aug-98 FY 1999: Feb-99 FY 2000: Feb-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	29	12	12	12	8	12	15	15					
OUTPUT	29		12	12	12		8	12	15	15			

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		115
OUTPUT																		115

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN117
 MODELS OF SYSTEMS AFFECTED: **Global Broadcast Service-- Single (Receive Suite)**
 DESCRIPTION/JUSTIFICATION: GBS with **single** antenna configuration: Commercial off the shelf (COTS) receive only satellite communications terminals with a single antenna, modems and ancillary hardware and processing equipmen

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	0	0.0	5	1.9	8	5.1	3	1.0	5	1.8	7	2.4	25	7.4	1	1.5	23	8.9	8	5.2	160	54.4	245	89.6
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.6	5	1.0	8	0.9	3	0.5	5	0.9	12	2.1	20	3.6	1	0.2	23	5.1	168	21.4	245	36.3
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP				0.6	5	1.0																	5	1.6
FY 98 EQUIP						8	0.9																8	0.9
FY 99 EQUIP								3	0.5														3	0.5
FY 00 EQUIP										5	0.9												5	0.9
FY 01 EQUIP												7	1.2										7	1.2
FY 02 EQUIP												5	0.9										25	4.5
FY 03 EQUIP														20	3.6								1	0.2
FY 04 EQUIP																1	0.2						23	5.1
FY 05 EQUIP																							8	1.4
FY TC EQUIP																							160	20.0
TOTAL INSTALLATION COST		0.0		0.6		1.0		0.9		0.5		0.9		2.1		3.6		0.2		5.1		21.4		36.3
TOTAL PROCUREMENT		0.0		2.5		6.1		1.9		2.3		3.3		9.5		5.1		9.1		10.3		75.8		125.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MO PROCUREMENT LEADTIME: 6 MO

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Nov-98 FY 1999: Sep-99 FY 2000: Sep-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT	5	2	4	2	1	1	1					1	2	2																				
OUTPUT	5		2	4	2		1	1	1					1	2	2																		
INPUT		3	3	3	3	5	5	5	5	1												5	6	6	6					168		245		
OUTPUT			3	3	3	3	5	5	5	5	1												5	6	6					174		245		

Notes/Comments
FY03 - 05 procurement unit costs reflect varying quantity discounts due to low number of units procured. In addition, FY02 ends the Air Force procurement further affecting quantity discounts.
Installation costs vary with ship class, and all FY's involve a mix of ship class installs.
NRE cost and ATM on-line encryptors version for FY98 account for high unit cost.
FY97 install funding includes detailed NAVSEA shipboard documentation and drawings.
Unit cost varies due to quantity discounts afforded by other Services buys per year
Additionally, unit cost reflects variances in the composite quantities of different equipment types procured each FY which is driven by IT-21 Fleet requirements
FY03 reflects minimum quantity for last year of contract

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN117
 MODELS OF SYSTEMS AFFECTED: **Global Broadcast Service--Dual (Receive Suite)**
 DESCRIPTION/JUSTIFICATION: GBS with **dual** antenna configuration: Commercial off the shelf (COTS) receive only satellite communications terminals with a single antenna, modems and ancillary hardware and processing equipment

321000

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	3	1.7	5	2.6	12	5.6	7	3.2	6	2.7	5	1.9	0	0.0	0	0.0	0	0.0	17	12.8	55	30.5	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.4	0	0.0	8	1.3	12	2.8	7	1.7	6	1.3	5	1.2	0	0.0	0	0.0	17	3.9	55	12.6	
PRIOR YR EQUIP				0.4																			0	0.4	
FY 97 EQUIP							3	0.5															3	0.5	
FY 98 EQUIP							5	0.8															5	0.8	
FY 99 EQUIP									12	2.8													12	2.8	
FY 00 EQUIP											7	1.7											7	1.7	
FY 01 EQUIP													6	1.3									6	1.3	
FY 02 EQUIP															5	1.2							5	1.2	
FY 03 EQUIP																	5	1.2					0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.4		0.0		1.3		2.8		1.7		1.3		1.2		0.0		0.0		3.9		12.6	
TOTAL PROCUREMENT		0.0		2.1		2.6		6.9		6.0		4.4		3.2		1.2		0.0		0.0		16.7		43.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 mos.

PROCUREMENT LEADTIME: 9 mos.

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Dec-98 FY 2000: N/A

DELIVERY DATES: FY 1998: Dec-98 FY 1999: Sep-99 FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 3 1 3 1 3 3 3 3 2 2 2 1

OUTPUT 3 1 3 1 3 3 3 3 3 2 2 2

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 2 2 1 1 2 1 1 1 17 55

OUTPUT 1 2 2 1 1 2 1 1 1 17 55

Notes/Comments

Unit cost varies due to quantity discounts afforded by other Services buys per year
 Additionally, unit cost reflects variances in the composite quantities of different equipment types procured each FY which is driven by IT-21 Fleet requirements
 FY97 install funding includes detailed NAVSEA shipboard documentation and drawings.

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

MODIFICATION TITLE: SATCOM Ship Terminals 321000
 COST CODE: NN117
 MODELS OF SYSTEMS AFFECTED: **Global Broadcast Service-- Submarine (Receive Suite)**
 DESCRIPTION/JUSTIFICATION: GBS with **submarine** configuration: Commercial off the shelf (COTS) receive only satellite communications terminals with a SubHdr antenna modification, modems and ancillary hardware and processing equipment

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	0	0.0	10	1.8	12	2.2	12	2.2	11	1.7	2	1.6	0	0.0	0	0.0	19	3.5	66	13.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	1	0.1	9	0.8	12	1.1	12	1.0	11	1.0	2	0.2	0	0.0	19	1.6	66	5.8	
PRIOR YR EQUIP																									
FY 97 EQUIP				0.0	0	0.0																		0	0.0
FY 98 EQUIP																								0	0.0
FY 99 EQUIP							1	0.1	9	0.8														10	0.9
FY 00 EQUIP											12	1.1												12	1.1
FY 01 EQUIP													12	1.0										12	1.0
FY 02 EQUIP														12	1.0									11	1.0
FY 03 EQUIP															11	1.0								2	0.2
FY 04 EQUIP																	2	0.2						0	0.0
FY 05 EQUIP																			0	0.0				0	0.0
FY TC EQUIP																					0	0.0		0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		1.3		0.8		1.1		1.0		1.0		0.2		0.0		1.6		19	1.6
TOTAL PROCUREMENT		0.0		0.0		0.0		3.1		3.0		3.3		2.7		2.6		0.2		0.0		5.1		19	1.6

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MO PROCUREMENT LEADTIME: 6 MO

CONTRACT DATES: FY 1998: FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: FY 1999: Sep-99 FY 2000: Sep-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT				1		3	3	3		3	3	3	3
OUTPUT				1		3	3	3		3	3	3	3

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	3	3	3	3	3	3	3	2	1	1							19	66
OUTPUT	3	3	3	3	3	3	3	2	1	1							19	66

Notes/Comments
FY99 unit cost appears lower than actuals due to IT-21 Plus-up not included in controls
Unit cost varies due to quantity discounts afforded by other Services buys per year
Additionally, unit cost reflects variances in the composite quantities of different equipment types procured each FY which is driven by IT-21 Fleet requirements
FY03 unit cost is due to limited quantity procurement

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

DATE
February 1999

(DOD EXHIBIT P-21A)

APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE																	SUBHEAD NO.																														
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SATCOM Ship Terminals																	321000		52NN																												
COST CODE	ITEM/MANUFACTURER	S E R V FY	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98																	FISCAL YEAR 99							FISCAL YEAR 00																					
						CALENDAR YEAR 98																	CALENDAR YEAR 99							CALENDAR YEAR 00																					
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S										
						C	O	E	A	E	A	P	A	U	U	L	G	P	T	V	C	A	E	A	P	A	U	U	L	G	P	T	V	C	A	E	A	P	A	U	U	L	G	P							
NN105	5/25 KHz SATCOM--AN/PSC-5 EMUT (Spit Fire	97	180		180																					15	15	15	15	15	15	15	15	15	15	15															
		99	48		48																																														
NN105	5/25 KHz SATCOM--AN/WSC-3 Mod Kits	98	324		324	A							45	45	45	45	45	46																																	
NN105	5/25 KHz SATCOM--OE-82 Mod Kits	99	14		14																																														

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES					Total	Unit of Measure	
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT				

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE																													DATE							
(DOD EXHIBIT P-21A)																													February 1999							
APPROPRIATION/BUDGET ACTIVITY														P-1 ITEM NOMENCLATURE												SUBHEAD NO.										
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT														SATCOM Ship Terminals												321000			52NN							
COST CODE	ITEM/MANUFACTURER	FY	S E R V	PROC QTY	ACCEP PRIOR TO	BAL DUE AS OF	FISCAL YEAR 98												FISCAL YEAR 99												FISCAL YEAR 00					
							CALENDAR YEAR 98												CALENDAR YEAR 99												CALENDAR YEAR 00					
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
NN105	5/25 KHz SATCOM--UHF Modems																																			
		99		25		25																														
NN105	5/25 KHz SATCOM--DMR																																			
		98		24		24																														
		99		132		132																														
		00		282		282																														
NN106	SHF Terminals--AN/WSC-6(V)5 mod kits																																			
		98		8		8																														
		99		8		8																														
		00		4		4																														

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

DATE
February 1999

(DOD EXHIBIT P-21A)

APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE SATCOM Ship Terminals																				SUBHEAD NO. 52NN			
					FISCAL YEAR 98										FISCAL YEAR 99										FISCAL YEAR 00			
COST CODE	ITEM/MANUFACTURER	S E R V	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	PY97					CALENDAR YEAR 98					CALENDAR YEAR 99					CALENDAR YEAR 00							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
NN107	EHF Terminals--NECC																											
									A																			
			98	18	18																							
			99	45	45																							
			00	36	36																							
NN107	EHF Terminals--MDR																											
			98	30	30				A																			
			99	55	55																							
			00	45	45																							
NN112	Comm. Satellite--INMARSAT M																											
			99	10	10																							
			00	5	5																							

OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP

ITEM	Manufacturer's Name and Location								

UNCLASSIFIED
CLASSIFICATION

COST CODE		ITEM/MANUFACTURER/ PROCUREMENT YEAR		FISCAL YEAR	CARRY OVER	PRODUCTION SCHEDULE																														DATE												
						(DOD EXHIBIT P-21A)																														February 1999												
						APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT												P-1 ITEM NOMENCLATURE SATCOM Ship Terminals												321000						SUBHEAD NO. 52NN												
FISCAL YEAR 01															FISCAL YEAR 02															FISCAL YEAR 03															L A T E R			
CY00			CALENDAR YEAR 01												CALENDAR YEAR 02												CALENDAR YEAR 03																					
O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S													
C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	R
NN101	Mini Dama	99	5	3	2																																				0							
NN103	SCI ADNS Build One/Carry On Build One																																									0						
		99	0																																						0							
		00	0																																						0							
NN103	SCI ADNS Build Two & Three /Carry On Build Two																																									0						
		00	0																																							0						
NN103	SCI ADNS Carry On TAC II+																																									0						
		00	0																																							0						

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

DATE
February 1999

(DOD EXHIBIT P-21A)

APPROPRIATION/BUDGET ACTIVITY OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE SATCOM Ship Terminals															SUBHEAD NO. 52NN							
COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01					FISCAL YEAR 02					FISCAL YEAR 03					L A T E R							
				CALENDAR YEAR 01					CALENDAR YEAR 02					CALENDAR YEAR 03												
				O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C		J A N	F E B	M A R	A P R	M A Y	J U N	J U L
NN112	Comm. Satellite--INMARSAT B																									
		99	0																							
		00	13	4	4	5																				0
NN112	Comm. Satellite--C band/CWSP																									
		98	0																							0
		99	0																							0
		00	8	2	2	2	2																			0
NN112	Comm. Satellite--INMARSAT B HSD KITS																									
		99	0																							0
		00	15	5	5	5																				0

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

NAVMAT FORM 7110/4 (REVISED 11/77)

BUDGET ITEM JUSTIFICATION SHEET										DATE			
APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE		SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT										SATCOM SHORE TERMINALS		322000 52NP	
	PY		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL	
QUANTITY													
COST (in millions)			\$5.7	\$70.7	\$65.7	\$37.8	\$31.6	\$27.3	\$10.6	\$1.8	Continuing	Continuing	
<p>PROGRAM COVERAGE: The Satellite Communications (SATCOM) Shore Terminals P-1 line provides funds for procurement of shore based equipment for shore-to-shore and shore-to-ship tactical communications via earth orbiting relay satellites operating in the Ultra High Frequency (UHF), Super High Frequency (SHF), and Extremely High Frequency (EHF) bands. This includes Radio Frequency (RF) equipment and baseband equipment assembled and grouped into systems and subsystems structured to address specific Naval communications requirements. These systems provide processors and peripheral equipment that control the RF links for message traffic, direct data transfer and secure voice communications. They are selected and oriented by communications traffic levels, types of communications and operational missions. These shore terminals provide the satellite communications interface between the at-sea fleet and the shore establishment communications network and are an integral part of the Joint Maritime Communications System (JMCOMS).</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>Special Intelligence Communications (SI COMMS): The shore terminal interface for Sensitive Compartmented Information (SCI)/Automated Digital Network System (ADNS)/Tactical Intelligence Information Exchange (TACINTEL II+) will use commercial off-the-shelf (COTS), Government off-the-shelf (GOTS), Non-developmental items (NDI) and existing systems to meet the requirements for SI COMMS. The equipment necessary to replace the outdated TACINTEL systems developed in the early 1970s was procured with funds through FY97. The equipment also began the realization of the JMCOMS/ADNS architecture. FY00 funds will continue to procure the SCI ADNS/TACINTEL II+ equipment necessary to implement the IT-21 architecture to provide SI COMMS to the Fleet. SCI ADNS provides for a real-time exchange of Tactical SCI COMMS to afloat operational commanders. Impact of no shore SCI ADNS is that ships cannot attain their network services.</p> <p>SHF Terminals: This line provides SHF shore based equipment for high data rate communications with Fleet units via the Defense Satellite Communications Systems (DSCS). Shore based terminals have an operational requirement to support joint, theater and Navy unique command, control, communications, support and intelligence circuits for voice, data, video and imagery to the extent they are required on SHF platforms. FY98 funds were reprogrammed per CNO N6 Letter Ser N6E/8U555113 of 05 Feb 98 for SHF DSCS Site Terminal at Navy Site 10, Bahrain. The FY99 and FY00 funds procure and install one AN/WSC-6(V)7 trainer plus one AN/WSC-6(V)5 mod kit for upgrading existing SHF shore based modems and procurement of Universal Modem Systems (UMS) to support fleet requirements. Also procured is ancillary hardware to Automated Digital Multiplexing System (ADMS). Under the submarine high data rate (SUB-HDR) program, the Navy is exploring the technical feasibility of DSCS support of wideband capabilities for attack submarines.</p>													

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE SATCOM SHORE TERMINALS
		322000
		SUBHEAD 52NP
<p>EHF Terminals: This program provides for the acquisition of the Navy's EHF Satellite Communications Program (NESP) terminals in four semi-concurrent phases. Phase I of the NESP program provides Low Data Rate (LDR) jam resistant, low probability of intercept EHF SATCOM terminals for submarines, surface ships, and shore stations in the electromagnetic threat environment projected into the next decade. This requirement is contained in the NESP NDCP dated Apr 89 and the JROC validated Milstar ORD of Jun 92. There is a requirement to procure a total of 43 operational shore terminals, four transportable terminals, thirteen SCAMPS (Several Channel Anti-jam Man Pack) to provide multi-channel portable communications, and ten trainers. This requirement was recently updated per the CNO ltr, Ser N631/8U556125 dated 11 Jun 98.</p> <p>Phase II of the NESP program procures Navy EHF Communications Controllers (NECCs), as part of the ADNS strategy to provide for the exchange of computer-to-computer tactical communications over the survivable EHF satellite links. NECC provides for network management; multiplexing and channel sharing; resource management; communications management and planning; network control and monitoring; and communications protocols such as circuit switching and packet switching. NECC requirements are outlined in the NESP NDCP dated Apr 89 and must be fully fielded with deploying battle groups and shore sites to support tactical information exchange over EHF SATCOM.</p> <p>Phase III of the NESP program provides for the procurement of Full Milstar LDR Operational Capabilities (FMLOC). FMLOC efforts include Agile Beam Management (ABM), Over-the-Air-Rekey (OTAR), and In-Band Control (IBC) capabilities required by the JROC validated Milstar ORD. Additionally, the Processor Upgrade Program (PUP) must be implemented to support the terminal throughput and memory requirements of the Phase III capabilities. All of these Phase III efforts will provide essential EHF operational communications capabilities with the current Milstar satellites. Similarly, IBCs will provide interoperable voice communications on all EHF satellites (Milstar, UHF Follow-On (UFO), and FLTSAT EHF Package (FEP)). Phase III also includes procurement of Interim Polar modification kits. An EHF polar communications capability is available using an EHF package on a classified host in the Molniya orbit. To use this polar capability, terminals will require minor modifications. In addition, shore gateways are necessary to provide connectivity from the Interim Polar satellite to other EHF satellite constellations.</p> <p>Phase IV of the NESP program consists of a Medium Data Rate (MDR) capability which will provide the only protected (jam resistant and low probability of intercept/detection) MDR communications from 4.8 kilobits per second (Kbps) to 1.544 megabits per second (Mbps) to all major fleet combatants with Milstar Satellites 3-6. To meet the Navy's requirement for MDR capable terminals, MDR appliques will be procured and retrofitted into existing LDR terminals and the balance of the requirements will be procured as part of the Follow-On Terminal contract award of 20 Mar 98. Follow-on terminals will also have Phase III FMLOC capabilities incorporated into their baseline. The requirement for MDR is outlined in the JROC validated Milstar ORD and must be fielded by FY 99 in order to support the launch schedule of the first Milstar II satellite. By OPNAV paper, Ser N631D/703-693-0024 dated 16 September, the Program Office was directed to accelerate the MDR upgrade program to meet fleet needs. Prior to receiving the MDR applique, existing NESP terminals must have Phase III upgrades due to the processing throughput and memory requirements of MDR.</p> <p>FY 98 funds will be used to continue the procurement of NECCs, FMLOC equipment, and begin procurement of MDR retrofit appliques. FY 99 funds will be used to continue procurement of MDR retrofit appliques, SCAMPS, NECCs and FMLOC equipment. The procurement of MDR retrofit appliques, NECCs, FMLOC, will continue in FY00. FY 00 funds will also be used to begin procurement of Follow-On Terminals.</p> <p>Global Broadcast Service: This is the Navy shore portion of the joint program with the Air Force as Executive Service. The GBS will augment other Military Satellite Communications (MILSATCOM) systems and provide a continuous, high speed, one way information flow of high volume data to units ashore, afloat or special operations. GBS will support routine operations, training and military exercises, special activities, crises, situational awareness, weapons targeting, reconnaissance and the transition to and conduct of opposed operations short of nuclear war. GBS shore terminals will provide the capability of quick dissemination of large information products to various Navy fixed sites and small combat and combat support elements. FY00 continues procurement of shore site terminals at NCTAMS/MOC/MAC/MICFAC, CINC, SPAWAR and other Navy locations. In the shore GBS terminal, components will be procured from the GBS Joint Program Office (Air Force) contract and include the GBS antenna and receiver, and transportable terminals. A Mission Need Statement for GBS was signed, 3 AUG 1995, and a Joint Operational Requirements Document (JORD) was signed 7 April 1997. For shore procurements, antennas and ancillary equipment such as Asynchronous Transfer Mode (ATM) in-line encryptors will be procured.</p>		

BUDGET ITEM JUSTIFICATION SHEET		DATE
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE SATCOM SHORE TERMINALS	February 1999 322000 52NP
<p>JMINI Control System: The Joint Ultra High Frequency (UHF) Military Satellite Communications Network Integrated Control System (JMINI) is a joint interest program with the Navy designated as the lead service as directed by the Military Communications Electronics Board (MCEB). The JMINI Control System will provide dynamic centralized control of joint 5-kHz and 25-kHz UHF military satellite communications (MILSATCOM) voice and data resources (channels and Time Division Multiple Access (TDMA) time slots) via a globally integrated system of four control stations to be located at each of the three Naval Computer and Telecommunications Area Master Station (NCTAMS) sites plus Naval Computer and Telecommunications Station (NCTS) Guam. The globally integrated system consists of two major subsystems. The first subsystem provides communications resource planning and management via secure Wide Area Network (WAN) connections between the control stations and remote users and is known as the Network Management System (NMS). A total of 14 NMS units are required, one at each control station plus ten remote units to be installed at ORD-defined locations. The second subsystem provides the RF connectivity (modems, radios, antennas) between the NMS and the UHF MILSATCOM user terminals worldwide and is known as the Channel Controller. There are 156 channel controllers required per control station. Funds in FY99 begin procurement of the Digital Modular Radio (DMR), which serves as the JMINI Control System Channel Controller and procures the first two control station NMS units. Funds in FY00 continue procurement of the DMR channel controller hardware and the other two control station NMS units and begin installation of the system.</p> <p>INSTALLATION AGENT: Various</p>		

**UNCLASSIFIED
CLASSIFICATION**

COST ANALYSIS										DATE February 1999	
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE SATCOM SHORE			SUBHEAD 52NP		
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
NP103	SI-COMMS - SCI ADNS Build 2 and Build 3	A	15	55	832	1	91	91	3	90	271
NP103	SI-COMMS - TACINTEL II+	A				18	17	307			
NP108	SHF Terminals --AN/WSC-6(V)7	A	1	255	255	1	1,167	1,167	1	1,131	1,131
NP108	SHF Terminals --AN/WSC-6(V)5 Mod Kit	A				1	261	261	1	677	677
NP109	EHF Terminals --NECC	A	3	110	331	5	123	613	18	103	1,861
NP109	EHF Terminals --Interim Polar Gateway	A									
NP109	EHF Terminals --MDR Appliques	A	2	379	758	5	883	4,414	17	765	13,006
NP109	EHF Terminals --AN/USC-38(V)3	A				13	658	8,556	6	1,648	9,890
NP117	Global Broadcast Service	B				12	111	1,334	8	117	938
NP118	JMINI Control System - NMS	A			1,379	2	6,223	12,446	2	5,889	11,777
NP118	JMINI Control System - DMR	B				342	115	39,446	32	108	3,459
NP776	Non-FMP Installation	A			2,178			2,067			20,510
NP999	Production Support										2,190
	TOTAL CONTROL				5,733			70,702			65,710

Remarks:

1/ The unit cost reflected for SHF Terminals--AN/WSC-(V)5 mod kit varies from FY99 to FY00 due to ancillary equipment, including antenna and baseband items, at the proposed FTC site differing from those located at the proposed SPAWAR System Center Lab site.

2/ EHF Terminals--AN/USC-38(V)3 unit cost varies as FY99 funding procures thirteen (13) Several Channel Anti-jam Man Packs (SCAMP's) while units procured in FY00 are operational shore terminals

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				SUBHEAD		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SATCOM SHORE TERMINALS				322000	52NP	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NP103	SI-COMMS - SCI ADNS Build 2 and Build 3	99	SSC, SAN DIEGO, CA	WX	SPAWAR		Dec-98	Mar-99	1	91		
		00	SSC, SAN DIEGO, CA	WX	SPAWAR		Dec-99	Mar-00	3	90		
NP103	SI-COMMS - TACINTEL II+	99	SSC, SAN DIEGO, CA	WX	SPAWAR		Dec-98	Mar-99	18	17		
NP108	SHF Terminals --AN/WSC-6(V)7	99	Raytheon, Boston, MA	C/FFP	SPAWAR	Apr-97	Jan-99	Oct-99	1	1,167		
		00	Raytheon, Boston, MA	C/FFP	SPAWAR		Jan-00	Oct-00	1	1,131		
NP108	SHF Terminals --AN/WSC-6(V)5 Mod Kit	99	SSC-San Diego, CA	WX	SPAWAR	Oct-98	Jan-99	Jan-00	1	261		
		00	SSC-San Diego, CA	WX	SPAWAR		Jan-00	Jan-01	1	677		
D. REMARKS												
1/ The unit cost reflected for SHF Terminals--AN/WSC-6(V)5 mod kit varies from FY99 to FY00 due to ancillary equipment, including antenna and baseband items, at the proposed FTC site differing from those located at the proposed SPAWAR System Center lab site.												

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DD FORM 2446, JUN 87

Exhibit P- 5A, Budget Item Justification
Unclassified
Classification

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE			
											February 1999			
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD			
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SATCOM SHORE TERMINALS					322000		52NP	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE		
NP109	EHF Terminals --NECC	99	SSC-San Diego, CA	WX	SPAWAR		Dec-98	Jun-99	5	123	Yes	1/		
		00	SSC-San Diego, CA	WX	SPAWAR		Dec-99	Jun-00	18	103	Yes			
NP109	EHF Terminals --MDR Appliques	98	Raytheon, Marlborough, MA	SS/FFP	SPAWAR	Oct-97	Jan-98	Jun-99	2	379	Yes	2/		
		99	Raytheon, Marlborough, MA	SS/FFP	SPAWAR		Nov-98	Apr-00	5	883	Yes			
		00	Raytheon, Marlborough, MA	SS/FFP	SPAWAR		Nov-99	Apr-01	17	765	Yes			
NP109	EHF Terminals --AN/USC-38(V)3	99	Raytheon, Marlborough, MA	C/FFP	SPAWAR/Army		Nov-98	May-00	13	658	Yes	3/		
		00	Raytheon, Marlborough, MA	C/FFP	SPAWAR		Nov-99	May-01	6	1,648	Yes			
NP117	Global Broadcast Service	99	Raytheon, Marlborough, MA	C/FFP/C/CPAF	SPAWAR/USAF		Nov-98	Aug-99	12	111	Yes			
		00	Raytheon, Marlborough, MA	C/FFP/C/CPAF	SPAWAR/USAF		Nov-99	Aug-00	8	117	Yes			
D. REMARKS														
1/ FY99 EHF Terminals - NECC includes MDR capability.														
2/ FY98 - FY02 EHF Terminals - MDR includes antenna procurement.														
3/ AN/USC-38(V)3 unit cost varies as FY99 funding procures thirteen (13) Several Channel Anti-jam Man Packs (SCAMP's) while units procured in FY00 are operational shore terminals.														

DD FORM 2446, JUN 87

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING										DATE					
										February 1999					
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE				SUBHEAD					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SATCOM SHORE TERMINALS				322000			52NP		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE			
NP118	JMINI Control System - NMS	99 00	SAIC, San Diego, CA SAIC, San Diego, CA	IDIQ IDIQ	SPAWAR SPAWAR		Oct-98 Oct-99	Oct-99 Oct-00	2 2	6,223 5,889	Yes Yes				
NP118	JMINI Control System - DMR	99 00	TBD TBD	IDIQ IDIQ	SPAWAR SPAWAR		Jun-99 Dec-99	Feb-00 Aug-00	342 32	115 108	Yes Yes				

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D. REMARKS

1/ NMS units procured in FY 99 and FY00 are for NCTAMS installation and require substantially more functionality/complexity than units procured in FY01 - FY03 (remote units).

DD FORM 2446, JUN 87

UNCLASSIFIED

FEB-99

MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP103
 MODELS OF SYSTEMS AFFECTED: SI-COMMS - SCI ADNS Build 2 and Build 3
 DESCRIPTION/JUSTIFICATION: Provides Shipboard reception and transmission of multi-functional data using various data networks linking battle group commanders with intelligence databases.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	5	0.3	15	0.8	1	0.1	3	0.3	3	0.3	3	0.3	0	0.0	0	0.0	0	0.0	0	0.0	30	2.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	5	0.3	15	0.4	1	0.1	3	0.2	3	0.2	3	0.2	0	0.0	0	0.0	0	0.0	0	0.0	30	1.4	
PRIOR YR EQUIP			5	0.3																			0	0.0	
FY 97 EQUIP					15	0.4																	5	0.3	
FY 98 EQUIP							1	0.1															15	0.4	
FY 99 EQUIP									3	0.2													1	0.1	
FY 00 EQUIP											3	0.2											3	0.2	
FY 01 EQUIP													3	0.2									3	0.2	
FY 02 EQUIP															3	0.2							3	0.2	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.3		0.4		0.1		0.2		0.2		0.2		0.0		0.0		0.0		0.0		1.4	
TOTAL PROCUREMENT		0.0		0.6		1.2		0.2		0.5		0.5		0.5		0.0		0.0		0.0		0.0		3.4	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 Months

PROCUREMENT LEADTIME: 3 Months

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Mar-98 FY 1999: Mar-99 FY 2000: Mar-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	20		1				1	2			1	2	
OUTPUT	20			1				1	2			1	2

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL					
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4							
INPUT			1	2																				30
OUTPUT				1	2																			30

Notes/Comments

MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP103
 MODELS OF SYSTEMS AFFECTED: SI-COMMS - TACINTEL II+
 DESCRIPTION/JUSTIFICATION: Provides Shipboard reception and transmission of multi-functional data using various data networks linking battle group commanders with intelligence databases.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	0	0.0	18	0.3	0	0.0	2	0.03	3	0.05	0	0.0	0	0.0	0	0.0	0	0.0	23	0.4	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	18	0.2	0	0.0	2	0.1	3	0.2	0	0.0	0	0.0	0	0.0	0	0.0	23	0.5	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP							18	0.2															18	0.2	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP										2	0.1												2	0.1	
FY 02 EQUIP												3	0.2										3	0.2	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	
TOTAL PROCUREMENT	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 Months PROCUREMENT LEADTIME: 3 Months

CONTRACT DATES: FY 1998: N/A FY 1999: Dec-98 FY 2000: N/A

DELIVERY DATES: FY 1998: N/A FY 1999: Mar-99 FY 2000: N/A

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01														
		1	2	3	4	1	2	3	4	1	2	3	4											
INPUT	0		9	9							1	1												
OUTPUT	0			9	9								1	1										

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
INPUT		3																						23
OUTPUT			3																					23

Notes/Comments

UNCLASSIFIED

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MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP108
 MODELS OF SYSTEMS AFFECTED: SHF Terminals --AN/WSC-6(V)7
 DESCRIPTION/JUSTIFICATION: AN/WSC-6(V)X terminals provide training and technical support for high data rate SHF satellite communications for inter and intra service message, data, voice and video transmission.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	1	0.3	1	1.2	1	1.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	2.6	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	1	0.4	0	0.0	1	0.3	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	1.5	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP					1	0.4																	1	0.4	
FY 99 EQUIP									1	0.3													1	0.3	
FY 00 EQUIP											1	0.8											1	0.8	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.4		0.0		0.3		0.8		0.0		0.0		0.0		0.0		0.0		1.5	
TOTAL PROCUREMENT		0.0		0.0		0.7		1.2		1.4		0.8		0.0		0.0		0.0		0.0		0.0		4.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME: 10 Months

CONTRACT DATES: FY 1998: Mar-98 FY 1999: Jan-99 FY 2000: Jan-00
 DELIVERY DATES: FY 1998: Sep-98 FY 1999: Oct-99 FY 2000: Oct-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT	1					1				1																					
OUTPUT	1						1																								

Notes/Comments

1/ The FY98 plus up of \$255K was provided to procure one radome for the AN/GSC-52 antenna at Navy Site 10. \$445K is provided for Installation of SHF DSCS terminal at Navy Site 10. FY01 install unit cost is increased due to unique characteristics at shore sites.

MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP108
 MODELS OF SYSTEMS AFFECTED: SHF Terminals --AN/WSC-6(V)5 Mod Kit
 DESCRIPTION /JUSTIFICATION: AN/WSC-6(V)4 terminals provide training and technical support for high data rate SHF satellite communications for inter and intra service message, data, voice and video transmission.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	0	0.0	1	0.3	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	1/
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP								1	0.2														1	0.2	
FY 00 EQUIP										1	0.7												1	0.7	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.2		0.7		0.0		0.0		0.0		0.0		0.0		0.9	
TOTAL PROCUREMENT		0.0		0.0		0.0		0.3		0.9		0.7		0.0		0.0		0.0		0.0		0.0		1.8	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 months PROCUREMENT LEADTIME: 10 - 12 Months

CONTRACT DATES: FY 1998: N/A FY 1999: Jan-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: N/A FY 1999: Jan-00 FY 2000: Jan-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT					1					1				
OUTPUT								1					1	

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
INPUT																								2
OUTPUT																								2

Notes/Comments

1/ The unit cost reflected for the (V)5 mod kit varies from FY99 to FY00 due to ancillary equipment, including antenna and baseband items, at the proposed FTC site differing from those located at the proposed SPAWAR System Center Lab site.

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MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP109
 MODELS OF SYSTEMS AFFECTED: Navy EHF Communications Controllers (NECC)
 DESCRIPTION/JUSTIFICATION: Jam resistant, low probability of intercept satellite communications connectivity between shore stations, submarines, and surface ships in electromagnetic threat.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	9	0.9	3	0.3	5	0.6	18	1.9	13	1.4	5	0.6	4	0.5	0	0.0	0	0.0	0	0.0	57	6.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	9	0.8	3	0.3	5	0.4	18	1.8	13	1.3	5	0.5	4	0.4	0	0.0	0	0.0	0	0.0	57	5.5	
PRIOR YR EQUIP			9	0.8																			0	0.0	
FY 97 EQUIP					3	0.3																	9	0.8	
FY 98 EQUIP							5	0.4															3	0.3	
FY 99 EQUIP									18	1.8													5	0.4	
FY 00 EQUIP											13	1.3											18	1.8	
FY 01 EQUIP													5	0.5									13	1.3	
FY 02 EQUIP															4	0.4							5	0.5	
FY 03 EQUIP																	4	0.4					4	0.4	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.8		0.3		0.4		1.8		1.3		0.5		0.4		0.0		0.0		0.0		5.5	
TOTAL PROCUREMENT		0.0		1.7		0.6		1.0		3.7		2.7		1.1		0.9		0.0		0.0		0.0		11.6	

METHOD OF IMPLEMENTATION: Various ADMINISTRATIVE LEADTIME: Various PROCUREMENT LEADTIME: 6-8 Months

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Jun-98 FY 1999: Jun-99 FY 2000: Jun-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT	12			3	2				4	14					4	9															
OUTPUT	12			3	2				4	14					4	9															
INPUT				5					4																		0	57			
OUTPUT				5					4																		0	57			

Notes/Comments

MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP109
 MODELS OF SYSTEMS AFFECTED: **Medium Data Rate (MDR) Appliques for AN/USC-38(V), retrofit kits, and production support**
 DESCRIPTION/ JUSTIFICATION: Jam resistant, low probability of intercept satellite communications connectivity between shore stations, submarines, and surface ships in an electromagnetic threat.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	2	0.8	5	4.4	17	13.0	8	3.5	7	3.0	0	0.0	0	0.0	0	0.0	0	0.0	39	24.7	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0.0	0.0	0.0	0.0	0.0	0.0	2	0.4	5	2.0	10	3.8	10	3.7	12	5.6	0	0.0	0.0	0.0	0.0	0.0	39	15.5	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP							2	0.4															2	0.4	
FY 99 EQUIP									5	2.0													5	2.0	
FY 00 EQUIP											10	3.8	7	2.6									17	6.4	
FY 01 EQUIP												3	1.1			5	2.2						8	3.3	
FY 02 EQUIP															7	3.4							7	3.4	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.4		2.0		3.8		3.7		5.6		0.0		0.0		0.0		15.5	
TOTAL PROCUREMENT		0.0		0.0		0.8		4.8		15.0		7.3		6.7		5.6		0.0		0.0		0.0		40.0	

METHOD OF IMPLEMENTATION:

Various ADMINISTRATIVE LEADTIME: Various PROCUREMENT LEADTIME: 17 Months

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: Jun-99 FY 1999: Apr-00 FY 2000: Apr-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 0 2 3 2 6 4

OUTPUT 0 2 3 2 6 4

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 7 2 1 4 1 4 3 39

OUTPUT 7 2 1 4 1 4 3 39

Notes/Comments
 1/ FY98 MDR install is for two modems only.
 2/ FY02 includes antenna procurement.

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MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP109
 MODELS OF SYSTEMS AFFECTED: AN/USC-38(V)3 including EHF FMLOC, and production support.
 DESCRIPTION/JUSTIFICATION: Jam resistant, low probability of intercept satellite communications connectivity from shore stations to submarines and surface ships in an electromagnetic threat.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment requiring installation	34	74.6	0	4.2	0	0.0	13	8.6	6	9.9	7	11.6	0	0.0	0	0.0	0	4.7	0	0.8	0	0.0	60	114.3	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other - Equipment not requiring installation							13																13		
Interm Contractor Support																									
Installation of Hardware*	21	31.5	8	2.4	1	0.8	1	0.7	3	2.4	1	0.8	5	3.9	7	6.1	0	0.0	0	0.0	0	0.0	47	48.6	
PRIOR YR EQUIP	21	31.5	8	2.4	1	0.8	1	0.7	3	2.4													34	37.8	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP										1	0.8	5	3.9										6	4.7	
FY 01 EQUIP															7	6.1							7	6.1	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		31.5		2.4		0.8		0.7		2.4		0.8		3.9		6.1		0.0		0.0		0.0		48.6	
TOTAL COST		106.1		6.6		0.8		9.3		12.3		12.4		3.9		6.1		4.7		0.8		0.0		162.9	

METHOD OF IMPLEMENTATION: Various ADMINISTRATIVE LEADTIME: PROCUREMENT LEADTIME: 18 months

CONTRACT DATES: FY 1998: N/A FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: N/A FY 1999: May-00 FY 2000: May-01

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

INPUT 30 1 2 3 4 1 2 3 4 1 2 3 4

OUTPUT 30 1 2 3 4 1 2 3 4

INSTALLATION SCHEDULE: PY FY 02 FY 03 FY 04 FY 05 TC TOTAL

INPUT 3 2 4 3 1 2 3 4 1 2 3 4 47

OUTPUT 1 3 2 4 3 1 2 3 4 1 2 3 4 47

Notes/Comments
 1/ AN/USC-38(V)3 unit cost varies as FY99 funding procures thirteen (13) Several Channel Anti-jam Man Packs (SCAMP's) while FY00 units are operational shore terminals.
 2/ FY04/FY05 funding is for advanced MILSATCOM compatibility & joint baseband compatibility.

MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP117
 MODELS OF SYSTEMS AFFECTED: Global Broadcast Service, commercial off-the shelf (COTS) receive only satellite communications terminals with antennas, modems, and ancillary hardware and processing equipment
 DESCRIPTION/JUSTIFICATION: Navy portion of joint services program to deliver continuous, high speed, one way information flow of high volume data to ship and shore units and special operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Equipment is all commercial off-the-shelf (No development required)
 FINANCIAL PLAN: (\$ in millions)

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RD&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment requiring installation	0	0.0	4	3.1	0	0.0	12	1.3	8	0.9	22	2.6	10	1.2	4	0.5	6	0.7	2	0.5	46	15.3	114	26.1
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other - Equipment not requiring installation							8		3		12		8		4		3						38	
Interim Contractor Support																								
Installation of Hardware (See note below)	0	0.0	0	0.4	2	0.2	2	0.2	4	0.5	5	0.6	10	1.3	2	0.2	0	0.0	3	0.5	48	10.0	76	13.8
PRIOR YR EQUIP																								
FY 97 EQUIP				0.4	2	0.2	2	0.2															4	0.8
FY 98 EQUIP																							0	0.0
FY 99 EQUIP									4	0.5													4	0.5
FY 00 EQUIP											5	0.6											5	0.6
FY 01 EQUIP													10	1.3									10	1.3
FY 02 EQUIP															2	0.2							2	0.2
FY 03 EQUIP																	0	0.0					0	0.0
FY 04 EQUIP																			3	0.5			3	0.5
FY 05 EQUIP																					2	0.3	2	0.3
FY TC EQUIP																					46	9.7	46	9.7
TOTAL INSTALLATION COST	0.0		0.4		0.2		0.2		0.5		0.6		1.3		0.2		0.0		0.5		10.0		13.4	
TOTAL COST	0.0		3.5		0.2		1.5		1.4		3.2		2.4		0.7		0.7		1.0		25.3		36.5	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 4 Months PROCUREMENT LEADTIME: 9 Months

CONTRACT DATES: FY 1998: N/A FY 1999: Nov-98 FY 2000: Nov-99

DELIVERY DATES: FY 1998: N/A FY 1999: Aug-99 FY 2000: Aug-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	2	1	1			1	1	1	1	2	1	1	1																		
OUTPUT	2		1	1						1	2	1	1																		
INPUT		3	3	2	2	1	1							1	1	1														48	76
OUTPUT		1	3	3	2	2	1	1														1	1	1						48	76

Notes/Comments

1/ FY97 procurements include ancillary training equipment in addition to 4 receive suites and 6 antennas.

2/ Beginning in FY99, the 38 unit delta between the 114 procured and the 76 installed is due to the fact that no installation is required for transportable ground receive terminals (TGRT) which are used as training and backup units.

UNCLASSIFIED

FEB-99

MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP118
 MODELS OF SYSTEMS AFFECTED: Joint MILSATCOM Network Integrated (JMINT) Control System/Network Management System (NMS)
 DESCRIPTION/JUSTIFICATION: The Network Management System (NMS) component of the JMINT Control System provides communications resource planning and management via secure WAN connections between the control stations and remote user. Will provide dynamic centralized control of joint operable 5 KHz and 25 KHz ultra high frequency military satellite communications.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	0	1.4	2	12.4	2	11.8	4	3.8	3	2.9	3	2.9	0	0.0	0	0.0	0	0.0	14	35.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	2	0.2	2	0.2	4	0.4	6	0.6	0	0.0	0	0.0	0	0.0	14	1.4	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP								2	0.2														2	0.2	
FY 00 EQUIP										2	0.2												2	0.2	
FY 01 EQUIP												4	0.4										4	0.4	
FY 02 EQUIP														3	0.3								3	0.3	
FY 03 EQUIP														3	0.3								3	0.3	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.2		0.2		0.4		0.6		0.0		0.0		0.0		1.4	
TOTAL PROCUREMENT		0.0		0.0		1.4		12.4		12.0		4.0		3.3		3.5		0.0		0.0		0.0		36.5	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1 Month PROCUREMENT LEADTIME: 12 Months

CONTRACT DATES: FY 1998: FY 1999: Oct-98 FY 2000: Oct-99

DELIVERY DATES: FY 1998: FY 1999: Oct-99 FY 2000: Oct-00

INSTALLATION SCHEDULE: PY FY 99 FY 00 FY 01

INPUT 1 2 3 4 1 2 3 4 1 2 3 4

OUTPUT 1 1 1 1 1 1

INSTALLATION SCHEDULE: FY 02 FY 03 FY 04 FY 05 TC TOTAL

INPUT 2 2 3 3 1 2 3 4 14

OUTPUT 2 2 3 3 14

Notes/Comments
 1/ Funds in FY98 provide for production support and installation planning efforts.

MODIFICATION TITLE: SATCOM Shore Terminals 322000
 COST CODE: NP118
 MODELS OF SYSTEMS AFFECTED: Joint MILSATCOM Network Integrated Control System/Digital Modular Radio (DMR)
 DESCRIPTION/JUSTIFICATION: Channel controller hardware (radio/modem/antenna) to meet ORD-mandated satellite channel access requirement. Will provide dynamic centralized control of joint operable 5 KHz and 25 KHz ultra high frequency military satellite comm

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	0	0.0	0	0.0	0	0.0	342	39.4	32	3.5	35	3.8	105	11.3	58	6.3	28	3.0	0	0.0	0	0.0	600	67.3	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	374	12.9	30	1.1	39	1.4	107	3.7	50	1.7	0	0.0	0	0.0	600	20.8	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP									342	11.8													342	11.8	
FY 00 EQUIP									32	1.1													32	1.1	
FY 01 EQUIP										30	1.1												35	1.3	
FY 02 EQUIP												5	0.2										105	3.6	
FY 03 EQUIP												34	1.2		71	2.4							58	2.0	
FY 04 EQUIP															36	1.3	22	0.7					28	1.0	
FY 05 EQUIP																	28	1.0					0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		12.9		1.1		1.4		3.7		1.7		0.0		0.0		20.8	
TOTAL PROCUREMENT		0.0		0.0		0.0		39.4		16.4		4.9		12.7		10.0		4.7		0.0		0.0		88.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME: 8 Months

CONTRACT DATES: FY 1998: N/A FY 1999: Jun-99 FY 2000: Dec-99

DELIVERY DATES: FY 1998: N/A FY 1999: Feb-00 FY 2000: Aug-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01															
		1	2	3	4	1	2	3	4	1	2	3	4												
INPUT					171	171	32																		
OUTPUT					171	171	32																		

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT	5			34	71			36	22			28													600
OUTPUT	5			34	71			36	22			28													600

Notes/Comments

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE: Joint Communications Support Element (JCSE) 330200				SUBHEAD 52L4	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$2.5	\$3.3	\$3.7	\$3.5	\$3.4	\$3.0	\$3.1	\$3.2	Cont.	Cont.
<p>PROGRAM COVERAGE: This line represents the Navy's share of the Joint Communications Support Element (JCSE) Program. This program is jointly funded by Army, Navy, Marine Corps and Air Force. Funds procure various communications equipment including the following: Ultra High Frequency (UHF) Satellite Communications (SATCOM) Demand Assigned Multiple Access (DAMA) radios, Extremely High Frequency (EHF) Secure, Mobile, Antijam, Reliable Tactical Terminals (SMART-T), Super High Frequency (SHF) Tri-band Advanced Range Extension Terminals (STAR-T), Deployable Global Command and Control System (D-GCCS), C4 Extension Package, Integrated Digital Network Exchange (IDNX) upgrades, Asynchronous Transfer Mode (ATM) interface, Defense Message System (DMS) Tactical, Joint Worldwide Intelligence Communication System (JWICS), Communications Security (COMSEC) Secure Telephone Equipment (STE) STU-III's and KY-68s, Joint Defense Information Infrastructure Control System-Deployable (JDIICS-D), Personal Communications Systems (PCS) to provide seamless integration of commercial cellular service to the tactical network, manpack multi-mode multi-band radios for the quick reaction element, 20 foot quick reaction satellite antenna replacements, cellular phone systems serving between 300-400 subscribers, Contractor Off the Shelf (COTS) replacements for SB-3614AT small switchboards, next generation multi-media switches and high data rate tactical satellite terminals, assorted switches, transit cases, multiplexers and antennas.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: FY 00 through FY 05 funds will be provided to the lead Service for the Navy's share of the JCSE Program as required by JCS.</p> <p>INSTALLATION AGENT: N/A</p>											

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COST ANALYSIS													DATE February 1999			
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE Joint Communications Support Element (JCSE) 330200						SUBHEAD 52L4				
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS													
			QTY	PY				FY 1998			FY 1999			FY 2000		
				TOTAL COST				QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
L4001	JCSE Modernization	A						1	2,504	2,504	1	3,349	3,349	1	3,703	3,703
L4002	Production Support	A								0			0			0
TOTAL CONTROL										2,504			3,349			3,703

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BUDGET ITEM JUSTIFICATION SHEET					DATE Jan-99				
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-2					P-1 Nomenclature FY 2000/2001 President's Budget BLI: 3306 NSIPS				
	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete
QUANTITY									
COST (in thousands)	\$20.0	\$7.7	\$5.0	\$2.7	\$6.4	\$21.6	\$16.6	\$14.4	CONT

PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS: The Navy Standard Integrated Personnel System (NSIPS) is a special-interest, major Automated Information System (AIS) to collect, process and distribute personnel and pay data within Navy and to various corporate level activities within DoD. NSIPS will achieve the integration of active, reserve, and retired military personnel systems within the Navy, improve the military personnel tracking process, consolidate processes and systems within life cycle areas of military personnel, and the functionality of existing Navy source data collection requirements. NSIPS will operate on shore and afloat servers, client workstations, stand-alone workstations, portable stand-alone workstations, LANs and miscellaneous hardware and will maintain regional data warehouses as well as an all-Navy archival data warehouse.

The FY 1998 funds finance the New Orleans area Reserve infrastructure which includes the following:

Application Control Center (ACC)/Enterprise Management (EM) Facility provides the means for end-to-end management of all information technology (IT) assets. The facility will provide for the correlation and reporting of information about software and hardware events to system administrative and other appropriate support personnel, and execute system corrections and policy changes issued by administrative and support personnel. ACC/EM Facility provides a common repository of system information, a user interface that will be used to manage and monitor Department of Defense (DoD), Department of Navy (DoN), and Commander, Naval Reserve Force (COMNAVRESFOR) IT assets. The ACC/EM Facility provides an oversight capability into workstation and remote server configuration, and a method for updating operating system and applications to maintain software currency and configuration standardization.

Migration System Support is to evaluate and maintain current personnel/manpower legacy systems for migration to NSIPS and the DoD objective systems and to establish requirements databases and developmental platforms for software incentive projects within the Navy and DoD.

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BUDGET ITEM JUSTIFICATION SHEET		DATE	Jan-99
APPROPRIATION/BUDGET ACTIVITY		P-1 Nomenclature FY 2000/2001 President's Budget	
Other Procurement, Navy/BA-2		BLI: 3306	NSIPS
PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS (Cont):			
<p>University of New Orleans (UNO) facility is to provide initial outfitting equipment, communications, local area network equipment, hardware, and related infrastructure supporting requirements for information systems facilities.</p> <p>Cable Plant Upgrade is to provide communications and LAN improvements to existing Naval Support Activity and Naval Air Station facilities.</p> <p>FY 1999 through 2000 NSIPS funding is for hardware and software at all reserve sites and PSDs supporting reserve sites and for required hardware for the Electronic Field Service Record functionality to replace the hard copy military personnel service record used in the field allowing for more efficient documentation of information normally placed into a service record and increasing the efficiency in record transfers between activities.</p> <p>FY 1999 through 2000 ACC/EM funding is for additional software and hardware (workstations, headquarters and field servers, etc.) to facilitate automated, distributed software delivery, asset management, and server performance monitoring.</p>			

P5 Exhibit

CLASSIFICATION

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Jan-99

Appropriation/Budget Activity

Other Procurement, Navy/BA-2

			FY 1998	FY 1999	FY 2000
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST	TOTAL COST	TOTAL COST
VAR	NSIPS Equipment	3306		\$7675.0	\$1008.0
	Application Control Center		\$7250.0		\$4014.0
	Migration System Support		\$1072.0		
	UNO Facility		\$7300.0		
	Cable Plant Upgrade		\$4400.0		
	TOTAL		\$20022.0	\$7675.0	\$5022.0

PROCUREMENT HISTORY AND PLANNING

APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE NSIPS EQUIPMENT
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LINE ITEM FISCAL YEAR	CONTRACTOR	CONTRACT METHOD TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DEL	QTY	UNIT COST	SPECS AVAIL NOW	SPEC REV. REQ'D	IF YES, WHEN AVAIL
<u>FY 1998</u>										
ACC	LOGICON INC.	IDIQ	Maxwell AFB	Apr-98	Jun-98		\$7,250	YES	NO	
Migration	DLT Solution	RFQ	NWCF	May-98	Jun-98		\$1,072	YES	NO	
UNO Facility	Various		Various	Mar-98	Aug-98		\$7,300	YES	NO	
Cable Plant	NCTAMSLANT		NCTAMSLANT	Mar-98	Jun-98		\$4,400	YES	NO	
<u>FY 1999</u>										
NSIPS	TBD	IDIQ	SPAWAR	Feb-99	Mar-99		\$7,675	YES	NO	
<u>FY 2000</u>										
NSIPS	TBD	IDIQ	TBD	Nov-99	Dec-99		\$1,008	YES	NO	
ACC	TBD	IDIQ	TBD	Dec-99	Mar-00		\$4,014	YES	NO	

**OTHER PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION SHEET**

BUDGET ACTIVITY BA-2 JEDMICS						P-1 ITEM NOMENCLATURE JEDMICS SYSTEM EQUIPMENT		
QUANTITY	FY 98	FY99	FY00	FY 01	FY02	FY 03	FY 04	FY 05
COST (in millions)	\$4.9	\$7.0	\$0	\$0	\$0	\$0	\$0	\$0

JEDMICS is an effort to develop a centralized automated system to index, store, retrieve, and distribute technical drawings. The JEDMICS System replaces labor intensive, inefficient manual and semi-automated technical repositories with automated central repositories for all engineering and manufacturing information on ships, aircraft and electronics. This information is used by the fleet shore establishment and industry in support of spares acquisition, equipment maintenance, and modernization and preparation of technical publications.

Funding will be used to expand electronic commerce and electronic data interchange by enhancing security between JEDMICS and wide area networks which transport JEDMICS digital engineering data. This enhanced security will allow DOD to use Internet type technology to share electronic drawings for Military Critical Items throughout DOD and its authorized industry partners. Funds will procure a COTS product called VS-Net Diamond TEK ULTRA for 7000 users. This product is added to existing hardware and networks to build a heterogeneous B2 security solution capable of supporting types of hardware and operating systems. Items will be procured using an existing GSA schedule with CRYPTTEK, Secure Communications.

Exhibit P-40a, Budget Item Justification for Aggregated Items							Date: FEB-99						
OTHER PROCUREMENT, NAVY/BA-2 COMMUNICATION AND ELECTRONIC EQUIPMENT													
Procurement Item/Quantity	ID	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	TOTAL
	CODE	& Prior											
COTS HW UPGRADE/ 5,000	3311	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.9		\$4.9
COTS HW UPGRADE/ 7,143	3311	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7.0	\$7.0

BUDGET ITEM JUSTIFICATION SHEET										DATE February 1999		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE GCCS (#3350)			SUBHEAD 52NW	
	PY		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY												
COST (in millions)			\$1.8	\$2.9								
<p>NOTE: GCCS Equipment (3350) transfers to the GCCS-M Ashore program (2804) in FY00. Detailed budget justification material for FY98 and FY99 is included in the GCCS-M Ashore program for budget comparability.</p> <p>PROGRAM COVERAGE:</p> <p>This line item contains equipment to support the Global Command and Control System (GCCS). GCCS is an operational multi-service/agency C3 program encompassing both strategic and tactical C3 functions. GCCS supports the National Command Authority (NCA) and the CINCs by providing Command, Control and Communication (C3) data processing capabilities, including status of forces and support requirements for use in national security decision making, force preparation and operational planning execution. The Navy's procurement provides equipment to support the GCCS Automated Data Processing Equipment (ADPE) configuration at USACOM , USPACOM, CINCLANTFLT, CINCPACFLT, CNO/NCC, CINCUSNAVEUR, NAVCENTCOM, US FORCES JAPAN, NAVSPECWARCOM, FCTCLANT, and their remote user sites.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>All procurements will directly support Navy GCCS and is in accordance with Joint Staff direction. GCCS consists of standard hardware, standard software, and service/site unique software. GCCS is an open systems client-server environment using COTS and NDI software and hardware and service/site unique software. Procurements will include Intelligent Workstations to replace obsolete terminals, Servers, Local Area Network (LAN) hardware and software and communications equipment.</p> <p>INSTALLATION DATA: All equipment is scheduled for installation at Navy supported GCCS shore sites.</p> <p>FY 98 funds provided Intelligent Workstations, Servers LAN hardware and software, communications equipment, as well as Non-FMP installations for equipment installations . FY 99 funds will provide Intelligent Workstations, Servers LAN hardware and software, communications equipment, as well as Non-FMP installations for equipment installations.</p>												

BUDGET ITEM JUSTIFICATION SHEET										DATE	
APPROPRIATION/BUDGET ACTIVITY										SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT										52D6	
P-1 ITEM NOMENCLATURE										336800 NAVAL SHORE COMMUNICATIONS	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$99.6	110.3*	\$114.3	\$109.2	\$153.2	\$180.5	\$163.6	\$208.8	Continuing	Continuing
<p>*FY 1999 includes \$55M for Y2K Switches.</p> <p>PROGRAM COVERAGE: The Naval Shore Communications program procures and installs communications equipment at shore stations. The equipment upgrades and/or replaces existing systems that are inadequate in mission performance due to obsolescence or cost-prohibitive maintenance. New equipment is predominately non-developmental items (NDI)/ commercial off the shelf (COTS) and provides maximum automated capabilities to accommodate remote control systems from unmanned or minimally manned locations.</p> <p>(1) Information Exchange Systems (D6001): The purpose of the information exchange systems is to provide a transparent, completely automated, interoperable, and integrated shore communications environment which will expedite an orderly transition to Global Grid. Information exchange systems will result in increased throughput via faster system processing speeds and more capable end terminal devices. Additionally, Information Exchange Systems will accomplish more efficient upgrades through the use of modularity and backward-compatible technology applications. Information Exchange Systems consists of the Defense Messaging System (DMS) and Technical Control Upgrade (TCU).</p> <p>Defense Messaging System: DMS will replace the present AUTODIN/TCC message delivery architecture with a single messaging system with seamless strategic and tactical interoperability. The DMS program provides for the planning, analysis, procurement, integration, implementation, and installation of the DMS components at approximately 8,500 activities worldwide.</p> <p>Technical Control Upgrade: TCU provides for the shore segment interconnect of an end-to-end dynamic bandwidth management, Internet Protocol, and Channel Access Protocol capability to deploying Battle Groups/Amphibious Ready Groups, and other support units. TCU Automates the major shore nodes which allow network centric and lights-out operations. TCU (which includes Automated Network Control Center (ANCC), and Automated Technical Control (ATC)) is the key enabling mechanism for the execution of the Joint Maritime Communications System (JMCOMS)/Automated Digital Network System (ADNS) strategy which is essential to meeting the IT-21 vision. ¹</p> <p>(2) Transmission Systems (D6002): Transmission Systems projects provide a broad range of Navy shore communications enhancements. As the Defense Communications System (DCS) backbone evolves toward a totally digital environment, Navy transmission systems must be upgraded, modified, and replaced with digital systems. Transmission Systems consists of the Shore Remote Control System (SRCS), the Automated Digital Multiplexer System(ADMS) and Terrestrial Connectivity (TC).</p> <p>Shore Remote Control Systems/Element Management System (SRCS/EMS): SRCS automates and remotely controls communications, switching and quality monitoring equipment which eliminates manual operations. EMS provides operator controlled automatic configuration of the Radio Communications System (RCS) circuits, computerized communications plan development, and quality monitoring and reporting. ¹</p> <p>Automated Digital Multiplexer System: ADMS is an automated network management capability which is fully compatible with various switching technologies and in compliance with national and intl. standards. ¹</p> <p>¹ / Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassified and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item.</p>											

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE 336800 NAVAL SHORE COMMUNICATIONS
		SUBHEAD 52D6
<p>Automated Digital Network System (ADNS) Build 2 implements Asynchronous Transfer Mode multiplexing technology, and JDIICS-D compliant Integrated Network Management tools. It adds SCI ADNS Architecture, Integrated Network Management Architecture, and supports legacy system protocols during transition.</p> <p>Terrestrial Connectivity: Enhances current and future C4I operational requirements by providing interoperability/redundant links to enhance survivability and reduces effects of jamming and destruction. This Project is included as part of BLII (D6005) starting in FY00.</p> <p>(3) Shore Life Cycle Support (D6004): Procures equipment necessary to enhance existing Naval Shore Communications equipment . This Project is included as part of BLII (D6005) starting in FY00.</p> <p>(4) Base Level Information Infrastructure (D6005): Procures shore Local Area Network, Base Area Network and Metropolitan Area Network cable plant, switches, telephone switch and peripheral upgrades, hubs, routers, basic network and information distribution servers and workstations, network management and system operations equipment and software to provide voice, video and data connectivity and integrated networking capabilities from Defense Information Infrastructure and Public Service Delivery Points up to the user desktop.</p> <p>(5) Joint Warfighting Center (D6006): The JWFC is tasked to assist the Chairman, Joint Chiefs of Staff (CJCS), Commanders in Charge (CINCs) and Service Chiefs in their preparation for joint and multinational operations in the conceptualization, development and assessment of current and future joint doctrine and in the accomplishment of joint and multinational training and exercises. JWFC is a focal point for the use of computer based simulation in joint training and exercises and joint doctrine application. Procures necessary equipment for the infrastructure to support the stated mission.</p> <p>(6) Joint Battle Center (D6007): The Joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) Battle Center (JBC) is the Chairman, Joint Chiefs of Staff (CJCS) facility for warfighter exploration and assessment of C4ISR capabilities. The Center provides the combatant commands, at the Joint Task Force (JTF) level, with a joint assessment and experimental environment for the warfighter and technologist in support of Joint Vision 2010 (JV2010). It serves as the technical analysis and assessment agency for the Joint Requirement Operating Council (JROC) in determining C4ISR system "value-added" prior to introduction to the CINCs and in advance of system fielding in operational environments. The intent is for the JBC to be a forcing function for joint synchronization and a means to foster rapid, near-term insertion of C4ISR technology. The mission of the JBC is to provide rapid assessment of required C4ISR interoperability and warfighter utility, join emerging C4ISR technology with new operational doctrine, and result in fielding C4ISR capabilities that meet the joint warfighter's needs. Initial attention is focused on developing the experimentation and assessment methodology for implementing JV 2010. Procures necessary equipment for the infrastructure to support the stated mission.</p> <p>(7) Equipment Installation (D6776): Installs the above procured equipment at shore stations worldwide. Installations include quality assurance, test evaluation, and as-built drawings.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: Defense Communication System Six Year Plan</p> <p>1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassified and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item. 2/ BLII (D6005) Unit quantities have been changed to meet PR01 requirements.</p>		

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EXHIBIT P-5, COST ANALYSIS											DATE				
											February 1999				
APPROPRIATION ACTIVITY						P-1 ITEM NOMENCLATURE				SUBHEAD					
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						336800 NAVAL SHORE COMMUNICATIONS				52D6					
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS												
			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	
D6001	Information Exchange Systems	A	8	2,772	22,173	10	3,252	32,518	4	6,741	26,963				
D6002	Transmission Systems	A	8	630	5,042	19	333	6,329			0				
D6004	Shore Life Cycle Support	A	1	1,060	1,060	1	0	0			0				
D6005	Base Level Information Infrastructure (BLII)	A	4	9,468	37,871	6	6,577	39,460	9	5,305	47,741				
D6006	Joint Warfighting Center	A			0	Var		2,497	Var		348				
D6007	Joint Battle Center	A			0	Var		2,677			0				
D6008	Production Support										2,609				
	D6001 Information Exchange Systems										1,080				
	D6005 Base Level Information Infrastructure (BLII)										1,529				
D6776	Non-FMP Installation	A			33,458			26,836			36,678				
	TOTAL CONTROL				99,604			110,317			114,339				
Remarks: D6004 - FY 98 data reflects Defense Red Switch.															

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						336800 NAVAL SHORE COMMUNICATIONS					52D6	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
D6001	Defense Messaging System	9900	SSC Charleston/SSC San Diego SSC Charleston/SSC San Diego	Various Various	SPAWAR SPAWAR	N/A N/A	Dec-98 Dec-99	Feb-99 Feb-00	4 4	6,503,250 6,623,250	Yes Yes	N/A N/A
D6001	Technical Control Upgrade/ANCC 1	99	SSC San Diego	C/FP-O	SPAWAR	Sep-98	Dec-98	May-99	5	223,000	Yes	N/A
D6001	Technical Control Upgrade/ATC 1/	99	SSC San Diego	C/FP-O	SPAWAR	Sep-98	Dec-98	May-99	1	1,359,000	Yes	N/A
D6002	Shore Remote Control System/ Element Management System 1/	99	SSC San Diego	C/FP-O	SPAWAR	Sep-98	Dec-98	May-99	13	211,000	Yes	N/A
D6002	Automated Digital Multiplexer 1/	99	SSC San Diego	C/FP-O	SPAWAR	Sep-98	Dec-98	May-99	2	265,000	Yes	N/A
D6002	ADNS Build 2 1/	99	SAIC	C/FP-O	GSA	Sep-98	Dec-98	May-99	4	692,000	Yes	N/A
D6002	Terrestrial Connectivity	99	Various	FP	SSC Charleston	N/A	May-99	Jul-99	1	293,000	Yes	N/A

D. REMARKS
 1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassified and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item.
 D6002 Terrestrial Connectivity/D6004 Shore Life Cycle Support - equipment purchased using various existing COTS contracts. (except FY 98, see D6004 note)
 D6004 - In FY 98, Shore Life Cycle Support funding was reprogrammed to Defense Red Switch. The FY 98 data reflects Defense Red Switch.

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PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						336800 NAVAL SHORE COMMUNICATIONS					52D6	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
D6005	Base Level Information Infrastructure (BLII)	99 00	Various Various	Var Var	Various Various	N/A N/A	Var Var	Var Var	6 9	6,576,667 5,304,556	Yes	N/A
											Yes	N/A
D6006	Joint Warfighting Center	99 00	Various Various	GSA Sched GSA Sched	TCA, Ft. Eustis, VA TCA, Ft. Eustis, VA	N/A N/A	Var Var	Var Var			Yes	N/A
											Yes	N/A
D6007	Joint Battle Center	99	Various	GSA Sched	Kansas City, MO	N/A	Var	Var			Yes	N/A

D. REMARKS
 D6005/D6006/D6007 - equipment procured using various existing COTS contracts
 D6006/D6007 - equipment procured does not require installation

MODIFICATION TITLE: Defense Messaging Systems (ASHORE)
 COST CODE: D6001
 MODELS OF SYSTEMS AFFECTED: Various
 DESCRIPTION/JUSTIFICATION: State of the art technologies for messaging functions which will replace AUTODIN. Quantities reflect areas of coverage (East CONUS, West CONUS, PAC and MED [4 total areas]). DMS will procure and install at 299 worldwide shore sites (8,500 individual activities). Costs vary by site size, requirements and configuration. Funding provides for procurement and installation of TS Genser & SCI capabilities at ACC/LCC's, EC's for Mobile environments, software upgrades for all shore environments and upgrade of EC hardware to provide capability improvement for stand alone PC dial up users as they gain LAN connections.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	4	23.6	4	10.2	4	17.4	4	30.0	4	27.0	4	8.8	4	8.7	4	8.3	4	10.3	4	9.3			4	119.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware ¹	4	6.4	4	3.7	4	11.1	4	3.7	4	15.6	4	8.6	4	6.6	4	5.0	4	4.6	4	5.6			4	60.8	
PRIOR YR EQUIP	4	6.4																						0	0.0
FY 97 EQUIP			4	3.7																				0	0.0
FY 98 EQUIP					4	11.1																		4	11.1
FY 99 EQUIP							4	3.7																4	3.7
FY 00 EQUIP									4	15.6														4	15.6
FY 01 EQUIP											4	8.6												4	8.6
FY 02 EQUIP												4	6.6											4	6.6
FY 03 EQUIP														4	5.0									4	5.0
FY 04 EQUIP															4	4.6								4	4.6
FY 05 EQUIP																	4	5.6						4	5.6
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST		6.4		3.7		11.1		3.7		15.6		8.6		6.6		5.0		4.6		5.6		0.0		60.8	
TOTAL PROCUREMENT COST		30.0		13.9		28.4		33.8		42.6		17.4		15.2		13.3		15.0		14.9		0.0		180.6	

METHOD OF IMPLEMENTATION: EFA Install ADMINISTRATIVE LEADTIM 2 Mos. PROCUREMENT LEADTIME: 4 Mos.

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Dec-98 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Feb-98 FY 1999: Feb-99 FY 2000: Feb-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT	4					4				4			
OUTPUT	4							4					4

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT					4					4																
OUTPUT								4					4													

Notes/Comments
 1/ Total quantity meets inventory objective. Program continues indefinitely.
 Quantities reflect areas of coverage. Costs vary by site requirements and configuration.

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MODIFICATION TITLE: Technical Control Upgrade (TCU)¹
 COST CODE: D6001
 MODELS OF SYSTEMS AFFECTED: Automated Network Control Center (ANCC)/ Automated Technical Control (ATC)
 DESCRIPTION/ JUSTIFICATION: Modifications to operational ADNS/ANCC/ATCs to maintain current technology, modernization of manual patch and test facilities.
 Quantities reflect the following areas of coverage: Med, Lant, Eastpac and Westpac. Costs vary by site requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	10	17.4	4	1.8	4	4.8	6	2.5	0	0													10	###	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware ²	10	3.2	4	0.3	4	2.3	6	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	3.3	
PRIOR YR EQUIP	10	3.2																							
FY 97 EQUIP			4	0.3																					
FY 98 EQUIP					4	2.3																		4	2.3
FY 99 EQUIP							6	1.0																6	1.0
FY 00 EQUIP																									
FY 01 EQUIP																									
FY 02 EQUIP																									
FY 03 EQUIP																									
FY 04 EQUIP																									
FY 05 EQUIP																									
FY TC EQUIP																									
TOTAL INSTALLATION COST		6.4		0.3		2.3		1.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		3.3	
TOTAL PROCUREMENT COST		30.0		2.1		7.1		3.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0		10.5	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIM/2 Mos.

PROCUREMENT LEADTIM/7 Mos.

CONTRACT DATES:

FY 1998: Dec-97

FY 1999: Dec-98

FY 2000:

DELIVERY DATES:

FY 1998: #####

FY 1999: #####

FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01																
	1	2	3	4	1	2	3	4	1	2	3	4													
INPUT	18			6																					
OUTPUT	18			6																					

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL ²							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT																									24
OUTPUT																									24

Notes/Comments

1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassified and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item.

2/ Total quantity meets inventory objective.

P-1 Shopping List-Item No 118-7 of 118-14

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

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MODIFICATION TITLE: Shore Remote Control Systems (SRCS)/Element Management System (EMS) ¹
 COST CODE: D6002
 MODELS OF SYSTEMS AFFECTED: Various transmission media.
 DESCRIPTION/JUSTIFICATION: Automates and remotely controls communications switching and quality monitoring equipment which eliminates manual operations. Quantities reflect the following areas of coverage: Med, Lant, Eastpac, and Westpac. Cost vary by site size, requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	8	2.8	4	1.5	4	2.4	13	2.7	0	0													17	5.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware ²	8	0.9	4	0.6	4	1.5	13	4.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	17	5.6	
PRIOR YR EQUIP	8	0.9																						0	0.0
FY 97 EQUIP			4	0.6																				0	0.0
FY 98 EQUIP					4	1.5																		4	1.5
FY 99 EQUIP							13	4.1																13	4.1
FY 00 EQUIP																								0	0.0
FY 01 EQUIP																								0	0.0
FY 02 EQUIP																								0	0.0
FY 03 EQUIP																								0	0.0
FY 04 EQUIP																								0	0.0
FY 05 EQUIP																								0	0.0
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST	0.9	0.6	1.5	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6		
TOTAL PROCUREMENT COST	3.7	2.1	3.9	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM/2 Mos. PROCUREMENT LEADTIM/7 Mos.

CONTRACT DATES: FY 1998: Dec-97 FY 1999: Dec-98 FY 2000:
 DELIVERY DATES: FY 1998: ##### FY 1999: ##### FY 2000:

	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INSTALLATION SCHEDULE:	16					1	2	3	4	1	2	3	4
INPUT					13								
OUTPUT	16				13								

	FY 02	FY 03	FY 04	FY 05	TC	TOTAL ²	
							1
INSTALLATION SCHEDULE:	1	2	3	4	1	29	
INPUT						29	
OUTPUT						29	

Notes/Comments
 1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassified and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item.

2/ Total quantity meets inventory objective.

MODIFICATION TITLE: Automated Digital Multiplexer System (ADMS)/Automated Digital Network System (ADNS) Build²
 COST CODE: D6002
 MODELS OF SYSTEMS AFFECTED: Various transmission and network management system
 DESCRIPTION/JUSTIFICATION: Automated Network management capability which is fully compatible with switching technologies and in compliance with national and international stand:
 Quantities reflect the following areas of coverage: Med, Lant, Eastpac, and Westpac. Costs vary by site size, requirements and configura

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

	PY		FY97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kit:																										
Installation Kits Nonrecurring																										
Equipment	4	3.0	4	2.3	4	2.7	6	3.3	0		0													10	6.0	
Equipment Nonrecurring																										
Engineering Change Order:																										
Data																										
Training Equipmen																										
Support Equipmen:																										
Other																										
Interm Contractor Support																										
Installation of Hardware ²	4	0.5	4	2.0	4	2.6	6	3.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	5.6
PRIOR YR EQUIP	4	0.5																							0	0.0
FY 97 EQUIP			4	2.0																					0	0.0
FY 98 EQUIP					4	2.6																			4	2.6
FY 99 EQUIP							6	3.0																	6	3.0
FY 00 EQUIP																									0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY 05 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST		0.5		2.0		2.6		3.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0			5.6	5.6
TOTAL PROCUREMENT COST		3.5		4.3		5.3		6.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0			11.6	11.6

METHOD OF IMPLEMENTATION ADMINISTRATIVE LEADTIME 2 Mos. PROCUREMENT LEADTIM 7 Mos.

CONTRACT DATES FY 1998: Dec-97 FY 1999: Dec-98 FY 2000:

DELIVERY DATES: FY 1998: May-98 FY 1999: May-99 FY 2000:

INSTALLATION SCHEDULE	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	12			6									
OUTPUT	12				6								

INSTALLATION SCHEDULE	FY 02				FY 03				FY 04				FY 05				TC	TOTAL								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4										
INPUT																										18
OUTPUT																										18

Notes/Comments:
 1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassified and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consol
 realigns all ADNS systems into one budget line item.
 2/ Total quantity meets inventory objective.

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MODIFICATION TITLE: Terrestrial Connectivity
 COST CODE: D6002
 MODELS OF SYSTEMS AFFECTED: Various transmission media.
 DESCRIPTION/JUSTIFICATION: Enhances current and future C4I operational requirements by providing interoperability/redundant links to enhance survivability and reduce effects of jamming and destruction. Quantity reflects regions of coverage. FYs 97 - 99: Mediterranean (1 total region)

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring																										
Equipment	0	0.0	1	0.3	1	0.3	1	0.3	0	0														1	0.6	
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Intern Contractor Support																										
Installation of Hardware	0	0.0	1	0.1	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
PRIOR YR EQUIP																									0	0.0
FY 97 EQUIP																									0	0.0
FY 98 EQUIP	0	0.0	1	0.1	1	0.1																			1	0.1
FY 99 EQUIP							1	0.1																	1	0.1
FY 00 EQUIP																									0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	
TOTAL PROCUREMENT COST	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	

ADMINISTRATIVE LEADTIME 4 Mos. PROCUREMENT LEADTIME 6 Mos.

CONTRACT DATES: FY 1998: Jul-98 FY 1999: May-99 FY 2000:

DELIVERY DATES: FY 1998: Sep-98 FY 1999: Jul-99 FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT	1					1							
OUTPUT		1	1			1							

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT																		1
OUTPUT																		1

Notes/Comments
 1/ Quantities reflect areas of coverage.

P-1 Shopping List-Item No 118-10 of 118-14

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

February 1999

MODIFICATION TITLE: Shore Life Cycle Support¹
 COST CODE: D6004
 MODELS OF SYSTEMS AFFECTED: Various
 DESCRIPTION/JUSTIFICATION: Procures equipment necessary to enhance existing equipment or to sufficiently meet operational requirements at shore sites worldwide. Quantities reflect regions of coverage. FY 97 - Mediterranean, FY 98 - Bahrain and FY 99 - Mediterranean (2 total regions).

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

	PY		FY97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	1	0.6	1	0.4	1	1.1	1	0.0	0	0													2	1.1	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware	1	0.3	1	0.3	1	0.8	1	0.0															2	0.8	
PRIOR YR EQUIP	1	0.3																					0	0.0	
FY 97 EQUIP			1	0.3																			0	0.0	
FY 98 EQUIP					1	0.8																	1	0.8	
FY 99 EQUIP							1	0.0															1	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.3		0.3		0.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.8	
TOTAL PROCUREMENT COST		0.9		0.7		1.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.8	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 4 mos PROCUREMENT LEADTIME: 6 mos

CONTRACT DATES: FY 1998 Var FY 1999: May-99 FY 2000:
 DELIVERY DATES: FY 1998 Var FY 1999: Jul-99 FY 2000:

	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INSTALLATION SCHEDULE:	2												
INPUT					1								
OUTPUT	2	1				1							

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INSTALLATION SCHEDULE:																		
INPUT																		2
OUTPUT																		2

Notes/Comments
 1/ FY 98 data reflects the procurement and installation of Defense Red Switch at ASU Bahrain.
 2/ Quantities reflect areas of coverage.

UNCLASSIFIED

February 1999

MODIFICATION TITLE: Base Level Information Infrastructure (BLII) ¹
 COST CODE: D6005
 MODELS OF SYSTEMS AFFECTED: All ship and shore voice, video and data requirements.
 DESCRIPTION/ JUSTIFICATION: Procures shore Local Area Network, Base Are Network and Metropolitan Area Network cable plant, switches, telephone switch and peripheral upgrades, hubs, routers, basic network and information distribution servers and workstations network management and system operations equipment and software to provide voice video and data connectivity and integrated networking capabilities from Defense Information infrastructure and Public Service Delivery Points up to the user desktop. Quantities reflect regions of coverage (12 total), all of which will have been serviced at the completion of the program. Costs vary by site size, requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment			4	12.1	4	37.9	6	39.5	9	47.7	10	60.8	10	86.9	10	104.6	10	92.8	12	104.6			12	574.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware ²			4	7.3	4	14.7	6	15.0	9	21.1	10	28.5	10	45.4	10	56.8	10	49.4	12	56.8			12	287.7	
PRIOR YR EQUIP			4	7.3																					
FY 97 EQUIP																								4	14.7
FY 98 EQUIP					4	14.7																		6	15.0
FY 99 EQUIP							6	15.0																9	21.1
FY 00 EQUIP									9	21.1														10	28.5
FY 01 EQUIP											10	28.5												10	28.5
FY 02 EQUIP													10	45.4										10	45.4
FY 03 EQUIP															10	56.8								10	56.8
FY 04 EQUIP																	10	49.4						10	49.4
FY 05 EQUIP																			12	56.8				12	56.8
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST		0.0		7.3		14.7		15.0		21.1		28.5		45.4		56.8		49.4		56.8		0.0		12	287.7
TOTAL PROCUREMENT COST		0.0		19.4		52.6		54.4		68.8		89.3		132.2		161.5		142.3		161.5		0.0		12	862.5

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIM 3 mos

PROCUREMENT LEADTIM 6 mos

CONTRACT DATES: FY 1998: Var FY 1999: Var FY 2000: Var
 DELIVERY DATES: FY 1998: Var FY 1999: Var FY 2000: Var

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	4			3	3			4	5			6	4
OUTPUT	4		1	3	1	3	2		2	5	2		

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT			6	4			6	4			6	4			6	6			
OUTPUT		2	6	2	2	6	2			2	6	2			2	6	2	12	12

Notes/Comments

1/ In FY 98, D6005 includes \$5.4M that inadvertently is being executed in D6004

2/ Total quantity meets inventory objective. Program continues indefinitely.

3/ Quantities reflect areas of coverage.

P-1 SHOPPING LIST

P-1 Shopping List-Item No 118-12 of 118-14

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

BUDGET ITEM JUSTIFICATION SHEET										DATE	
APPROPRIATION/BUDGET ACTIVITY										February 1999	
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE			SUBHEAD	
							341500-ISSP (INFO SYS SECURITY PRGM)			52DA	
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$25.5	\$45.8	\$64.1	\$52.3	\$66.9	\$56.7	\$74.7	\$78.5	Continuing	Continuing

P.E. #0303140N

PROGRAM COVERAGE: The Information Systems Security Program (ISSP) provides funds for procurement of secure communications equipment for Navy Ships, shore sites, aircraft, Marine Corps, and U.S. Coast Guard to **protect** information systems from unauthorized access or modification of information, and against the denial of service to authorized users or provision of service to unauthorized users. Information Assurance is a layered protection strategy, using COTS and GOTS hardware and software products, that collectively provides an effective Network Security Infrastructure (multiple level security mechanisms and ability to detect and react to intrusions). Information Assurance is critical in protecting our ability to wage Network Centric Warfare. The following ISSP specific efforts will be funded under this program:

SECURE VOICE: The Secure Voice program procures equipment to secure voice communications. Equipment's to be procured in FY00 include Secure Terminal Equipment (STE), Advanced Narrowband Digital Voice Terminal (ANDVT) - AIRTERM's /RCU's (KY-100/Z-AVH), ancillaries, associated production and installation support efforts. The STE is a ship, shore and desktop terminal for classified voice, data, facsimile, video and voice conferencing and will replace the existing STU-III units via a phased approach and also replaces the TA-970 (SA-2112). Various configurations of STE's will be procured (Office, Tactical, C2, Condor (wireless), Portable UPS, PTT handsets, Data, Cellular, Direct Dial IWF) along with companion Security Token cards. The ANDVT upgrades will provide multiple voice encoding algorithms at increased selectable data rates. The AIRTERM (KY-100) is a lightweight, low power, single channel half duplex narrowband/wideband terminal, providing secure voice/data communications in tactical airborne/ground environments. The Z-AVH (Remote Control Unit) provides the KY-100 with all of the front panel control capabilities available on the AIRTERM equipment. Procurement of ancillary devices includes Timplex and DSD-421's.

SECURE DATA: The Secure Data program procures equipment to secure record and data communications. Equipment's to be procured in FY 00 includes Network Security Systems (NSS)/COMSEC Equipment, Network Vulnerability Assessment Countermeasures (NVACM), and associated production/ installation support. Procurements within the NSS/COMSEC equipment line are: AMODSM is a Navy aircraft and shipboard encryption communication security module that secures telemetry data to ground systems and supports the JTCS (Joint Tactical Combat Training System). Procurement of COMSEC equipment devices includes KG family of cryptos, Fastlanes (KG-75), Taclanes (KG-175), Sonets (KG-189), KIV-6, KIV-7's, KGV-XX, and EIP (Embeddable Infosec Product). The Network Security System (NSS) program procures equipment to secure Navy network information systems. Specific products include the Standard Mail Guard (SMG), which allows two way flow between SECRET high Local Area Networks (LANs) and Unclassified LANs, the Security Token card which provides writer to reader security for LANs, the Network Encryption Systems (NES) which provides transmission encryption for packetized data among Wide Area Networks (WANs), and FIREWALL components which provide protection for networks from unauthorized users. Network security systems also covers Certification Authority Workstations (CAWs) which creates, initializes, programs, and distributes the Security Token card and provides certificate management infrastructure. NVACM budget line procures IDS (Intrusion Detection Systems), Administrator Tool Kits, Network Security tools, and Network Intrusion filters. Various ancillary devices will also be procured in this line to integrate NSS and COMSEC equipment systems.

KEY MANAGEMENT: The Key Management program is a COMSEC key distribution and hardware management system consisting of interoperable Joint Service and Civil Agency key management systems. NSA established the Electronic Key Management System (EKMS) program to meet multiple objectives, which includes supplying electronic key in a secure and operationally responsive manner and providing COMSEC managers with an automated system capable of ordering, generation, distribution, storage, security, accounting, and access control. The FY00 procurements include Local Management Device (LMD)/Local COMSEC Management System (LCMS) Tier 1 replacement upgrades, KPE (Key Processor Equipment) upgrades, EKMS Extension Node for DCMS along with EKMS Upgrades (hardware and software), Data Transfer Devices (DTDs), ancillaries, associated production and installation support efforts. The LMD is a commercial off the shelf computer that runs LCMS software which controls the Key Processor Equipment (KPE), and provides the COMSEC manager with improved security and enhanced management capabilities. The Key Processor equipment (KPE) will perform cryptographic key management functions including encryption, decryption, public key encryption and cryptographic signature operations. The DTD (Tier 3) stores, manages, transfers and loads key and COMSEC data through automatic loading of ECU's (End Crypto Units) in a COTS palmtop computer configuration. Various ancillary devices will be procured in this line to integrate EKMS Tier 1 and Tier 2 Upgrades.

BUDGET ITEM JUSTIFICATION SHEET		DATE	February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	341500-ISSP (INFO SYS SECURITY PRGM)	52DA	
<p>JUSITIFICATION OF BUDGET YEAR REQUIREMENTS: The procurement profile has been phased in accordance with internally generated and validated requirements by N643 for Navy, Marine Corps, and Coast Guard implementation plans and availability of NSA procured key management items.</p> <p>INSTALLING AGENT: The ISSP equipment will be installed by the In-Service Engineering Activity (ISEA).</p> <p>NOTE: This program represents a consolidation of Secure Voice Systems (341000), Secure Data Systems (3412000), and Key Management Systems (3486000) programs for FY98 and out.</p>			

UNCLASSIFIED
CLASSIFICATION

COST ANALYSIS													DATE February 1999					
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE 341500-ISSP (INFO SYS SECURITY PRGM)						SUBHEAD 52DA						
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS															
			QTY	PY				FY 1998			FY 1999			FY 2000				
				TOTAL COST				QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
	SECURE VOICE										2,571				12,000			11,718
	SECURE DATA										14,737				24,414			42,499
	KEY MGMT										2,526				2,250			3,142
DA030	ISSP PRODUCTION SUPPORT	N/A									1,577				2,039			3,493
DA666	TRAINING SUPPORT	N/A									90				90			0
DA776	INSTALLATION (SHORE)	N/A									2,937				3,768			2,224
DA777	INSTALLATION EQUIP (SHIP)										1,054				1,239			1,063
	SUBTOTAL PROD/TRNG/INSTALLS:										5,658				7,136			6,780
	TOTAL CONTROL										25,492				45,800			64,139

DD FORM 2446, JUN 86

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: STE (SECURE TERMINAL EQUIPMENT) (SHIPBOARD)
 COST CODE: DA013/DA777
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: STE (SECURE TELEPHONE EQUIPMENT) IS A SHIP/SHORE, AND DESKTOP TERMINAL FOR CLASSIFIED VOICE, DATA, FACSIMILE, VIDEO AND VOICE CONFERENCING.
 (SECURE VOICE AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring Equipment		0.0	4716	9.5	290	1.1	2654	7.0	3728	6.9	2560	6.5	3246	11.3	4460	15.4	8220	29.7	8405	30.8	CONT	CONT	CONT	CONT	
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	30	0.3	60	0.6	60	0.6	60	0.6	0	0.0	0	0.0	0	0.0	210	2.1	
PRIOR YR EQUIP																								0	0.0
FY 97 EQUIP																								0	0.0
FY 98 EQUIP							0	0.0																0	0.0
FY 99 EQUIP									30	0.3														30	0.3
FY 00 EQUIP											60	0.6												60	0.6
FY 01 EQUIP													60	0.6										60	0.6
FY 02 EQUIP															60	0.6								60	0.6
FY 03 EQUIP																	60	0.6						0	0.0
FY 04 EQUIP																			0	0.0				0	0.0
FY 05 EQUIP																					0	0.0		0	0.0
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.3		0.6		0.6		0.6		0.0		0.0		0.0	CONT	CONT	2.1
TOTAL PROCUREMENT COST		0.0		9.5		1.1		7.0		7.2		7.1		11.9		16.0		29.7		30.8		CONT	CONT	CONT	CONT

ADMINISTRATIVE LEADTIME: 5 MOS PROCUREMENT LEADTIME: 17 MOS

CONTRACT DATES: FY 1998: Mar-98 FY 1999: Mar-99 FY 2000: Mar-00

DELIVERY DATES: FY 1998: Mar-99 FY 1999: Mar-00 FY 2000: Mar-01

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT								30				60
OUTPUT								30				60

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT			60				60											210
OUTPUT			60				60											210

Notes/Comments
 Difference between procured quantity and installed quantity are shore installations which will be done by the end users.
 INVENTORY OBJECTIVE FOR STE IS 70,000 UNITS FOR NAVY, MARINES, AND COAST GUARD

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SECURE VOICE ANCILLARIES (SHIPBOARD)
 COST CODE: DA029/DA777
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: SECURE VOICE ANCILLARY INSTALLATIONS OF TIMEPLEX.
 (SECURE VOICE AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment		0.0		0.0	VAR	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.5
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	0	0.0	VAR	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3
PRIOR YR EQUIP																								0
FY 97 EQUIP																								0
FY 98 EQUIP							VAR	0.3																0
FY 99 EQUIP									0	0.0														0
FY 00 EQUIP											0	0.0												0
FY 01 EQUIP												0	0.0											0
FY 02 EQUIP													0	0.0										0
FY 03 EQUIP														0	0.0									0
FY 04 EQUIP															0	0.0								0
FY 05 EQUIP																0	0.0							0
FY TC EQUIP																								0
TOTAL INSTALLATION COST	0.0		0.0		0.0		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	0.3
TOTAL PROCUREMENT COST	0.0		0.0		0.6		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	0.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VARIOUS PROCUREMENT LEADTIME: VARIOUS

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT

OUTPUT

Notes/Comments

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: SECURE VOICE ANCILLARIES (SHORE)
 COST CODE: DA029/DA776
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: SECURE VOICE INSTALLATIONS OF TIMEPLEX, CIPHER TAC, DSD -421'S
 (SECURE VOICE AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment		0.0		0.0	VAR	0.5	VAR	1.5	VAR	0.6	VAR	0.6	VAR	0.5	VAR	0.4	VAR	0.6	VAR	0.5	CONT	CONT	CONT	CONT
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	0	0.0	VAR	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.6
PRIOR YR EQUIP																								0
FY 97 EQUIP																								0
FY 98 EQUIP																								0
FY 99 EQUIP							VAR	0.6	0	0.0													0	
FY 00 EQUIP										0	0.0												0	
FY 01 EQUIP											0	0.0											0	
FY 02 EQUIP												0	0.0										0	
FY 03 EQUIP													0	0.0									0	
FY 04 EQUIP														0	0.0								0	
FY 05 EQUIP															0	0.0							0	
FY TC EQUIP																							0	
TOTAL INSTALLATION COST	0.0		0.0		0.0		0.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.6	
TOTAL PROCUREMENT COST	0.0		0.0		0.5		2.1		0.6		0.6		0.5		0.4		0.6		0.5		CONT		CONT	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VARIOUS PROCUREMENT LEADTIME: VARIOUS

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT

OUTPUT

Notes/Comments

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: KPE (KEY PROCESSOR EQUIPMENT) KOK-22 - SHIPBOARD
 COST CODE: 1X013/DA777
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: KEY PROCESSOR EQUIPMENT GENERATES ELECTRONIC CRYPTOGRAPHIC VARIABLES.
 (KEY MGMT AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring	415	2.3	0	0.0																			415	2.3	
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	274	0.8	0	0.0	141	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	415	0.9	
PRIOR YR EQUIP		0.0	274	0.8			141	0.1															415	0.9	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP																							0	0.0	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.8		0.0		0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.9	
TOTAL PROCUREMENT COST		2.3		0.8		0.0		0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		3.2	

ADMINISTRATIVE LEADTIME: 6 MOS PROCUREMENT LEADTIME: 29 MOS

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 274 141

OUTPUT 274 141

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 415

OUTPUT 415

Notes/Comments

INVENTORY OBJECTIVE FOR KPE IS 415 UNITS

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: KPE (KEY PROCESSING EQUIPMENT) (SHORE)
 COST CODE: 1X013/DA776
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: KEY PROCESSOR (KOK-22) GENERATES ELECTRONIC CRYPTOGRAPHIC VARIABLES.
 (KEY MGMT AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																										
PROCUREMENT:																										
Kit Quantity																										
Installation Kits																										
Installation Kits Nonrecurring	846	15.9																						846	15.9	
Equipment																										
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*	0	0.0	371	0.3	359	0.3	116	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	846	1.4
PRIOR YR EQUIP			371	0.3	359	0.3	116	0.8																	846	1.4
FY 97 EQUIP																									116	0.8
FY 98 EQUIP																									0	0.0
FY 99 EQUIP																									0	0.0
FY 00 EQUIP																									0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY 05 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST		0.0		0.3		0.3		0.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.4
TOTAL PROCUREMENT COST		15.9		0.3		0.3		0.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		17.3

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 6 MOS PROCUREMENT LEADTIME: 29 MOS

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 730 14 102

OUTPUT 730 14 102

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 846

OUTPUT 846

Notes/Comments
 INVENTORY OBJECTIVE FOR KPE IS 846 UNITS

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: BENIGN KEY (SHIPBOARD)
 COST CODE: 1X018/DA777
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: BENIGN KEY LOADS CRYPTOGRAPHIC KEY INTO AN END EQUIPMENT IN SUCH A WAY THAT THE UNENCRYPTED KEY IS NEVER AVAILABLE TO PERSONNEL.
 (KEY MGMT AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total				
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			
RDT&E																											
PROCUREMENT:																											
Kit Quantity																											
Installation Kits																											
Installation Kits Nonrecurring																											
Equipment	90	0.3	57	0.4																			147	0.7			
Equipment Nonrecurring																											
Engineering Change Orders																											
Data																											
Training Equipment																											
Support Equipment																											
Other																											
Interm Contractor Support																											
Installation of Hardware*	10	0.4	80	0.8	57	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	147	1.4	
PRIOR YR EQUIP	10	0.4	80	0.8																					90	1.2	
FY 97 EQUIP					57	0.2																			57	0.2	
FY 98 EQUIP																										0	0.0
FY 99 EQUIP																										0	0.0
FY 00 EQUIP																										0	0.0
FY 01 EQUIP																										0	0.0
FY 02 EQUIP																										0	0.0
FY 03 EQUIP																										0	0.0
FY 04 EQUIP																										0	0.0
FY 05 EQUIP																										0	0.0
FY TC EQUIP																										0	0.0
TOTAL INSTALLATION COST		0.4		0.8		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.4	
TOTAL PROCUREMENT COST		0.7		1.2		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		2.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MOS PROCUREMENT LEADTIME: 6 MOS

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	147												
OUTPUT	147												

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		147
OUTPUT																		147

Notes/Comments
 INVENTORY OBJECTIVE FOR BENIGN KEY IS 147 UNITS

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: BENIGN KEY (SHORE)
 COST CODE: 1X018/DA776
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: BENIGN KEY LOADS CRYPTOGRAPHIC KEY INTO AN END EQUIPMENT IN SUCH A WAY THAT THE UNENCRYPTED KEY IS NEVER AVAILABLE TO PERSONNEL.
 (KEY MGMT AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																								0	0.0	
PROCUREMENT:																										
Kit Quantity																										
Installation Kits Nonrecurring																										
Equipment	200	0.7	1068	7.1																				1268	7.8	
Equipment Nonrecurring																										
Engineering Change Orders																										
Data																										
Training Equipment																										
Support Equipment																										
Other																										
Interm Contractor Support																										
Installation of Hardware*	0	0.0	200	0.3	1068	0.5	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	1268	0.8
PRIOR YR EQUIP			200	0.3																					200	0.3
FY 97 EQUIP					1068	0.5																			1068	0.5
FY 98 EQUIP																									0	0.0
FY 99 EQUIP																									0	0.0
FY 00 EQUIP																									0	0.0
FY 01 EQUIP																									0	0.0
FY 02 EQUIP																									0	0.0
FY 03 EQUIP																									0	0.0
FY 04 EQUIP																									0	0.0
FY 05 EQUIP																									0	0.0
FY TC EQUIP																									0	0.0
TOTAL INSTALLATION COST		0.0		0.3		0.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.8
TOTAL PROCUREMENT COST		0.7		7.4		0.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		8.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PROCUREMENT LEADTIME: 6 MOS

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	1268												
OUTPUT	1268												

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		1268
OUTPUT																		1268

Notes/Comments
 INVENTORY OBJECTIVE FOR BENIGN KEY IS 1268 UNITS

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: NSS (NETWORK SECURITY SYSTEMS)/COMSEC EQUIPMENT - SHIPBOARD
 COST CODE: DA070/DA777
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: COMSEC EQUIPMENT INCLUDES: KG FAMILY OF CRYPTOS, FASTLANES (KG-75), TACLANES (KG-175), SONETS (KG-189), KIV-6, KIV-7, KGV-XX AND EIP (EMBEDDABLE INFOSEC PRODUCT. NSS ITEMS INCLUDE: SMG (STANDARD MAIL GUARDS), SECURITY TOKENS, CAW'S (CERTIFICATION AUTHORITY WORKSTATIONS), FIREWALL COMPONENTS AND SECURITY TOOLS. (SECURE DATA AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment																									
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*																									
PRIOR YR EQUIP	0	0.0	VAR	0.0	VAR	0.8	VAR	0.7	VAR	0.8	VAR	0.6	VAR	1.0	VAR	1.0	VAR	1.0	VAR	1.3	CONT	0.0	CONT	0.0	CONT
FY 97 EQUIP			VAR	0.0																					
FY 98 EQUIP					0	0.8																			
FY 99 EQUIP							VAR	0.7																	
FY 00 EQUIP								VAR	0.8																
FY 01 EQUIP										VAR	0.6														
FY 02 EQUIP												VAR	1.0												
FY 03 EQUIP														VAR	1.0										
FY 04 EQUIP																VAR	1.0								
FY 05 EQUIP																		VAR	1.3						
FY TC EQUIP																						CONT			
TOTAL INSTALLATION COST		0.0		0.0		0.8		0.7		0.8		0.6		1.0		1.0		1.0		1.3		0.0		0.0	0.0
TOTAL PROCUREMENT COST		0.0		0.0		1.6		1.7		1.8		2.7		3.2		2.1		2.2		2.9		0.0		0.0	0.0

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: VARIOUS PROCUREMENT LEADTIME: VARIOUS

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT

OUTPUT

Notes/Comments

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification.

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: NSS (NETWORK SECURITY SYSTEMS)/COMSEC EQUIPMENT - SHORE
 COST CODE DA070/DA776

MODELS OF SYSTEMS AFFECTED: NONE

DESCRIPTION/JUSTIFICATION: COMSEC EQUIPMENT INCLUDES: KG FAMILY OF CRYPTOS, FASTLANES (KG75), TACLANES (KG175), SONETS (KG189), KIV6, KIV7, KGV-XX AND EIP (EMBEDDABLE INFOSEC PRODUCT. NSS ITEMS INCLUDE: SMG (STANDARD MAIL GUARDS), SECURITY TOKENS, CAW'S (CERTIFICATION AUTHORITY WORKSTATIONS), FIREWALL COMPONENTS AND SECURITY TOOLS. (SECURE DATA AREA)

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits Nonrecurring																									
Equipment	VAR	6.1	VAR	5.4	VAR	12.1	VAR	20.0	VAR	36.8	VAR	23.3	VAR	29.7	VAR	18.8	VAR	20.2	VAR	22.3	CONT	0.0	CONT	0.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	VAR	3.0	VAR	3.1	VAR	2.1	VAR	2.3	VAR	2.0	VAR	2.6	VAR	4.3	VAR	3.1	VAR	4.0	VAR	3.8	CONT	0.0	CONT	0.0	
PRIOR YR EQUIP	VAR	3.0																						0	
FY 97 EQUIP			VAR	3.1																				0	
FY 98 EQUIP					VAR	2.1																		0	
FY 99 EQUIP							VAR	2.3																0	
FY 00 EQUIP									VAR	2.0														0	
FY 01 EQUIP											VAR	2.6												0	
FY 02 EQUIP													VAR	4.3										0	
FY 03 EQUIP															VAR	3.1								0	
FY 04 EQUIP																	VAR	4.0						0	
FY 05 EQUIP																			VAR	3.8				0	
FY TC EQUIP																					CONT	0.0		0	
TOTAL INSTALLATION COST		3.0		3.1		2.1		2.3		2.0		2.6		4.3		3.1		4.0		3.8	CONT	0.0	CONT	0.0	
TOTAL PROCUREMENT COST		9.1		8.5		14.2		22.3		38.8		25.9		34.0		21.9		24.2		26.1	CONT	0.0	CONT	0.0	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VARIOUS PROCUREMENT LEADTIME: VARIOUS

CONTRACT DATES: FY 1998: FY 1999: FY 2000:

DELIVERY DATES: FY 1998: FY 1999: FY 2000:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01															
		1	2	3	4	1	2	3	4	1	2	3	4												
INPUT																									
OUTPUT																									

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
INPUT																									
OUTPUT																									

Notes/Comments

MODIFICATION TITLE: NVACM (NETWORK VULNERABILITY ASSESSMENT COUNTERMEASURES) -SHIPBOARD
 COST CODE: DA002/DA777
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: INTRUSION DETECTION SYSTEMS.

(SECURE DATA AREA)

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	FY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment			VAR	0.0	VAR	0.8	VAR	2.0	VAR	3.8	VAR	3.8	VAR	3.8	VAR	3.8	VAR	3.8	VAR	3.8	CONT	0.0	CONT	CONT	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interim Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	VAR	0.1	VAR	0.1	VAR	0.1	VAR	0.1	VAR	0.1	VAR	0.1	VAR	0.1	CONT	0.0	CONT	CONT	
PRIOR YR EQUIP																									
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP					0	0.0																	0	0.0	
FY 99 EQUIP							VAR	0.1															0	0.1	
FY 00 EQUIP									VAR	0.1													0	0.1	
FY 01 EQUIP										VAR	0.1												0	0.1	
FY 02 EQUIP												VAR	0.1										0	0.1	
FY 03 EQUIP														VAR	0.1								0	0.1	
FY 04 EQUIP																VAR	0.1						0	0.0	
FY 05 EQUIP																		VAR	0.1				0	0.1	
FY TC EQUIP																					CONT		0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.0	CONT	CONT	
TOTAL PROCUREMENT COST		0.0		0.0		0.8		2.1		3.9		3.9		3.9		3.9		3.9		3.9		0.0	CONT	CONT	

METHOD OF IMPLEMENTATION:

CONTRACT DATES:

FY 1998:

FY 1999:

FY 2000:

DELIVERY DATES:

FY 1998:

FY 1999:

FY 2000:

INSTALLATION SCHEDULE:

	FY 99				FY 00				FY 01			
PY	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
PY	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		0

INPUT

0

OUTPUT

0

Notes/Comments

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: EKMS EXTENSION NODE (SHORE)
 COST CODE: DA020/DA776
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: ELECTRONIC KEY MANAGEMENT SYSTEM EXTENSION NODE FOR PLACEMENT AT DCMS TO SUPPORT REMOTE ACCESS TO TIER 1 SYSTEM.. (KEY MGMT AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment									1	0.9		0.0											1	0.9	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	
PRIOR YR EQUIP																							0	0.0	
FY 97 EQUIP																							0	0.0	
FY 98 EQUIP																							0	0.0	
FY 99 EQUIP																							0	0.0	
FY 00 EQUIP									1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	
FY 01 EQUIP																							0	0.0	
FY 02 EQUIP																							0	0.0	
FY 03 EQUIP																							0	0.0	
FY 04 EQUIP																							0	0.0	
FY 05 EQUIP																							0	0.0	
FY TC EQUIP																							0	0.0	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.2	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		1.1		0.0		0.0		0.0		0.0		0.0		0.0		1.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1 MO PROCUREMENT LEADTIME: 2 MOS

CONTRACT DATES: FY 1998: FY 1999: FY 2000: Mar-00

DELIVERY DATES: FY 1998: FY 1999: FY 2000: Jun-00

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4
INPUT								1				
OUTPUT								1				

INSTALLATION SCHEDULE:

PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		1
OUTPUT																		1

Notes/Comments
 INVENTORY OBJECTIVE FOR EKMS EXTENSION NODE IS 1 UNIT

Exhibit P-3a, Individual Modification Program
 Unclassified
 Classification

UNCLASSIFIED

Feb-99

MODIFICATION TITLE: LMD REPLACEMENTS (SHORE)
 COST CODE: DA003/DA776
 MODELS OF SYSTEMS AFFECTED: NONE
 DESCRIPTION/JUSTIFICATION: TIER 2 LMD REPLACEMENTS. PROVIDES HARDWARE PLATFORMS FOR TIER 2. (KEY MGMT AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment					2000	2.0			0.0	365	1.0	183	0.4								CONT	CONT	2548	3.4	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	217	0.2	212	0.2	119	0.1	0	0.0	0	0.0	548	0.5	
PRIOR YR EQUIP																									
FY 97 EQUIP																									
FY 98 EQUIP																									
FY 99 EQUIP																									
FY 00 EQUIP																									
FY 01 EQUIP												217	0.2	148	0.1	119	0.1								
FY 02 EQUIP														64	0.1										
FY 03 EQUIP																									
FY 04 EQUIP																									
FY 05 EQUIP																									
FY TC EQUIP																									
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.0		0.2		0.2		0.1		0.0		0.0		0.5	
TOTAL PROCUREMENT COST		0.0		0.0		2.0		0.0		0.0		1.0		0.6		0.2		0.1		0.0		CONT		3.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 9 MOS PROCUREMENT LEADTIME: 21 MOS

CONTRACT DATES: FY 1998: Mar-99 FY 1999: FY 2000:

DELIVERY DATES: FY 1998: Mar-00 FY 1999: FY 2000:

INSTALLATION SCHEDULE:

PY	FY 99				FY 00				FY 01			
	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:

	FY 02				FY 03				FY 04				FY 05				TC	TOTAL				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT		31	93	93	93	55	16	48	48	48	23									CONT		CONT
OUTPUT		31	93	93	93	55	16	48	48	48	23									CONT		CONT

Notes/Comments
 FY-98 PROCUREMENT UPGRADES WERE PERFORMED TURN-KEY WITH NSA/VENDOR.
 INVENTORY OBJECTIVE FOR LMD REPLACEMENTS IS 1200 UNITS WITH CONTINUAL UPGRADES

Exhibit, P-3a, Individual Modification Program
 Unclassified
 Classification

BUDGET ITEM JUSTIFICATION SHEET										DATE	
APPROPRIATION/BUDGET ACTIVITY										SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT										521V	
P-1 ITEM NOMENCLATURE											
CRYPTOLOGIC EQUIPMENT 3501											
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)		\$6.8	\$21.1	\$21.1	\$17.9	\$22.5	\$24.6	\$25.3	\$25.9	Continuing	Continuing
<p>NARRATIVE DESCRIPTION JUSTIFICATION: This line supports the Cryptologic Carry-on Program (CCOP) , the Cryptologic Training Equipment Program, the Training Technology Program, and the Signals Analysis Laboratory Program.</p> <p>CRYPTOLOGIC CARRY-ON EQUIPMENT: This program procures state-of-the-art, Commercial Off-The-Shelf (COTS) signal acquisition equipment (hardware and software) in response to the Fleet Commander's In Chief (CINC) requirements for a quick-reaction surface, subsurface and airborne cryptologic carry-on capability. Due to a continually changing threat environment, requirements are dynamic and equipment procured varies by quantity and type. Hardware procurement includes: receivers, recorders, Transportable-Radio Direction Finding (T-RDF) systems, tactical computers and related peripherals, antennas, Electronic-Warfare Support Measures (ESM) systems, and advanced signal and search equipment including spectrum analyzers, VXI chassis/cards and associated portable Special Intelligence communications equipment. CCOP equipment is installed either in AN/SSQ-99 vans for deployment or augments cryptologic capabilities on ships with permanent facilities. The temporary installation of equipment is done by Fleet Electronic Support (FES) personnel. A primary product of this line, is the Advanced Cryptologic Carry-on Exploitation System (ACCES). The outdated SSQ-80A(V) analog systems were converted to ACCES, by modernizing them with VXI-based digital Signal Processing (DSP) capabilities and an open, modular architecture that provides flexibility and vastly increased capabilities. T-RDF (AN/SSQ-120 (V)) has adeptly satisfied Fleet CINC requirements for organic direction finding capabilities; the system covers an extremely wide frequency spectrum, is low cost and highly accurate. T-RDF is temporarily installed on ACCES equipped ships. FY98-FY00 funds continue to procure ACCES core architecture system upgrades (24 Fleet CINC's surface, subsurface and airborne deployable upgrade systems; 11 shore-based training system upgrades for Cryptologic Shore Support Activities (CSSAs) and Cryptologic Readiness Groups (CRGs) worldwide) such as digital wideband recorders and independently developed items to provide affordable additional functionality to the Fleet CINCs. FY98 - FY00 funds will also procure T-RDF systems/upgrades with associated antennas and pregroom installations (pregroom installations are required on 13 CG-47, 6 LPD and 21 DDG-51 class ships in order to utilize the T-RDF systems as carry-on hardware during critical missions). A total of 12 T-RDF systems with 26 associated mast antennas, 36 deck antenna arrays and 40 pregroom installations will be procured.</p> <p>CRYPTOLOGIC TRAINING EQUIPMENT (CTE): This program provides Technical Training Laboratories and Computer Based Classroom Training systems interconnected by a system of Local Area Networks (LAN) and procures other Technical Training Equipment (TTE) (e.g. maintenance diagnostic equipment, analytic workstations, network file servers, signal analyzers, etc). This hardware is provided to the Naval Technical Training Center in Pensacola, FL, and its detachments as well as NAVSECGRU Field Activities worldwide and Intelligence schoolhouses at NMITC, Damneck, VA and FITC, San Diego, CA, to support both core cryptologic and Intelligence skills training and systems familiarization training. FY98 - FY00 funds will continue to modernize the Cryptologic and Intelligence Training Department infrastructure, "A" School laboratories, classrooms and courseware equipment with state-of-the-art multimedia CBT hardware capable of supporting both national and Navy unique Cryptologic and Intelligence training worldwide. Total number of Cryptologic and Intelligence classrooms/laboratories is 147.</p>											

BUDGET ITEM JUSTIFICATION SHEET		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	CRYPTOLOGIC EQUIPMENT 3501	521V
<p>TRAINING MODERNIZATION PROGRAM (TMP): This program supports the Reinvestment Strategy For Cryptologic and Intelligence Training (RSCIT). This program improves the effectiveness and efficiency of cryptologic and general intelligence training at NAVTECHTRACEN (NTTC) Corry Station, Fleet Intelligence Training Center Pacific (FITCPAC) San Diego and Navy Marine Corps Intelligence Training Center (NMITC) Dam Neck. With investment in technology-enhanced training systems and methods, courseware will be produced and exported to fleet users through the purchase of state-of-the-art interactive multimedia courseware production suites, predeployment suites, and the use of advanced modeling and simulation techniques. Distribution via the Automated Electronic Classroom, and mobile training teams will necessitate infrastructure improvements at the schoolhouses. Program funding in FY98 - FY00 will initiate the procurement of equipment composed of Commercial Off-The-Shelf (COTS) hardware with particulars determined, initially by training plans and training equipment plans, that validate nearerterm training requirements and recommend the equipment/system configuration.</p>		
<p>SIGNAL ANALYSIS LABORATORY (SAL): This program directly supports tactical commanders with tailored and responsive feedback from theater Information Warfare (IW) exploitation operations. Navy Signals Analysis Laboratories (SALs) are forward based signals analysis and processing centers for complex communications and electronic emissions. SALs require advanced signals processing equipment to keep pace with information technology and continually changing target sets. Funds are required to procure signals analysis equipment to perform shore-based IW exploitation of data resulting from mobile collection missions, and to deploy advanced signal analysis systems afloat to aid near real-time exploitation efforts. The Reconnaissance Intercept Processor Signal Analysis Workstation (RIPSAW), a high powered workstation combined with a digitizer and a multitude of digital signal analysis software packages, is the heart of the SAL effort. RIPSAW workstations will provide theater focal points for analysis and exploitation of specialized emissions. New recorders and advanced digitizers are needed to effectively analyze and exploit modern emitters (signals utilizing increasingly wide bandwidths). Using GOTS/COTS technology to adapt to the ever-changing global signals environment, SALs also augment organic mobile IW exploitation capabilities with sophisticated carry-on exploitation and analysis equipment. The acquisition of this equipment will allow Theater Commanders to use the information derived from the exploitation of these emitters in near real-time. This capacity will ensure the warfighter has the tools required to meet the challenges of emergent information technology trends. FY99-FY00 funding will be used for the purchase of components to upgrade six existing RIPSAW II analysis workstations: one located at each of the four SALs (NAVSECGRUACTs at Yokosuka, JA; Rota, SP; Whidbey Island, WA; and NIWA, Suitland, MD); one deployable system and one Configuration Control Model (CCM) located at SSC, Charleston, SC.</p>		
<p>INSTALLATION NON-FMP: Installation of Cryptologic Training Equipment is done by SPAWARSSYSCOM engineering field Activities or by system integration contractors. Installation of SAL cryptologic equipment will be performed by SSC, San Diego, CA; SSC, Charleston, SC or by system integration contractors on behalf of SSC, Charleston. Installation of ACCES Training systems and upgrades is done by SSC, Charleston, SC, the SPAWARSSYSCOM Field Activity responsible for the Cryptologic Carry-On Program (CCOP).</p>		
<p>INSTALLATION FMP: Installation of Transportable-Radio Direction Finding (T-RDF) pregrisms are done by SPAWARSSYSCOM Engineering Field Activities or by system integration contractors. Fleet Electronic Support (FES) Personnel install the T-RDF systems.</p>		

**UNCLASSIFIED
CLASSIFICATION**

COST ANALYSIS													DATE February 1999		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE CRYPTOLOGIC EQUIPMENT 3501					SUBHEAD 521V			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS												
			QTY	PY			FY 1998			FY 1999			FY 2000		
				TOTAL COST			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
1V005	PRODUCTION SUPPORT	A							679			716			840
1V040	CRYPTOLOGIC TRAINING EQUIPMENT (CTE)	A	1	460	460	147	29	4,229	147	19	2,777				
1V041	TMP EQUIPMENT	A	VAR		2,096	VAR		2,841	VAR		5,655				
1V042	SIGNALS ANALYSIS LAB	A				8	86	684	6	129	774				
1V043	T-RDF EQUIPMENT	A	2	382	763	3	460	1,380	2	469	938				
1V044	T-RDF ANTENNAS	A	4	222	887	11	71	784	13	65	845				
1V045	ACCES SYSTEMS	A	12	106	1,269	17	559	9,508	9	914	8,222				
1V776	INSTALLATION NON-FMP	A			276			310			114				
1V777	INSTALLATION FMP	A			405			675			968				
	INSTALL				385			655			968				
	DSA				20			20							
	TOTAL CONTROL				6,835			21,127			21,133				
Remarks:															

DD FORM 2446, JUN 86

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					SUBHEAD	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						CRYPTOLOGIC EQUIPMENT 3501					521V	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1V040	CRYPTOLOGIC TRAINING EQUIPMENT (CTE)	98	VARIOUS	VARIOUS	SSC, SC	N/A	Feb-98	Apr-98	1	460	YES	N/A
		99	VARIOUS	VARIOUS	SSC, SC	N/A	Mar-99	May-99	147	29	YES	N/A
		00	VARIOUS	VARIOUS	SSC, SC	N/A	Dec-99	Feb-00	147	19	YES	N/A
1V042	SIGNALS ANALYSIS LAB (SAL)	99	VARIOUS	VARIOUS	SSC, SC	N/A	Mar-99	Aug-99	8	86	YES	N/A
		00	VARIOUS	VARIOUS	SSC, SC	N/A	Dec-99	May-00	6	129	YES	N/A
1V043	T-RDF EQUIPMENT	98	SWRI, TX	OPT	OSP	N/A	Jan-98	Jun-98	2	382	YES	N/A
		99	SWRI, TX	OPT	OSP	N/A	Jan-99	Jun-99	3	460	YES	N/A
		00	SWRI, TX	OPT	OSP	N/A	Jan-00	Jun-00	2	469	YES	N/A
D. REMARKS												
CTE and TMP quantities reflect the number of classrooms and labs that require hardware updates. Mix of hardware to be procured for each classroom and lab varies.												
CTE and SAL: Various commercial-off-the-shelf procurements.												

DD FORM 2446, JUN 87

UNCLASSIFIED
CLASSIFICATION

PROCUREMENT HISTORY AND PLANNING											A. DATE	
											February 1999	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				SUBHEAD		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						CRYPTOLOGIC EQUIPMENT 3501				521V		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1V044	T-RDF ANTENNAS	98	SWRI, TX	OPT	OSP	N/A	Jan-98	Jun-98	4	222	YES	N/A
		99	SWRI, TX	OPT	OSP	N/A	Jan-99	Jun-99	11	71	YES	N/A
		00	SWRI, TX	OPT	OSP	N/A	Jan-00	Jun-00	13	65	YES	N/A
1V045	ACCES SYSTEMS	98	VARIOUS	VARIOUS	SSC, SC	N/A	Nov-97	Mar-98	12	106	YES	N/A
		99	VARIOUS	VARIOUS	SSC, SC	N/A	Feb-99	Jun-99	17	559	YES	N/A
		00	VARIOUS	VARIOUS	SSC, SC	N/A	Nov-99	Mar-00	9	914	YES	N/A

D. REMARKS

ACCES: Various Commercial Off-The Shelf (COTS) procurements.

T-RDF Antennas / ACCES Systems: Unit cost variance results from the mix of hardware procured for various ship classes.

DD FORM 2446, JUN 87

MODIFICATION TITLE: CRYPTOLOGIC TRAINING EQUIPMENT (SHORE)
 COST CODE: 1V040 / 1V776
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

This program provides Computer Based Training (CBT) systems and other technical equipment (TTE) (e.g. maintenance diagnostic equipment, analytic workstations, network file servers, signal analyzers) at Naval Technical Training Center in Pensacola, FL, its detachments as well as NAVSECGRU Cryptologic Readiness Groups worldwide.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring Equipment	22	3.9	1	0.1	1	0.5	147	4.2	147	2.8	147	2.0	147	3.9	147	4.5	147	4.8	147	5.0	CONT.		CONT.		
Equipment Nonrecurring Engineering Change Orders																									
Data Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	22	0.9	1	0.02	1	0.07	147	0.115	147	0.024	147	0.005	147	0.005	147	0.025	147	0.024	147	0.028	CONT.		CONT.	0.000	
PRIOR YR EQUIP																								0	0.000
FY 97 EQUIP			1	0.02																				1	0.020
FY 98 EQUIP					1	0.07																		1	0.070
FY 99 EQUIP							147	0.115																147	0.115
FY 00 EQUIP									147	0.024														147	0.024
FY 01 EQUIP											147	0.005												147	0.005
FY 02 EQUIP													147	0.005										147	0.005
FY 03 EQUIP															147	0.025								147	0.025
FY 04 EQUIP																	147	0.024						147	0.024
FY 05 EQUIP																				147	0.028			147	0.028
FY TC EQUIP																						CONT.		0	0.000
TOTAL INSTALLATION COST		0.9		0.0		0.1		0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0	CONT.	0.0	
TOTAL PROCUREMENT COST		4.8		0.1		0.6		4.3		2.8		2.0		3.9		4.5		4.8		5.0		0.0	CONT.	0.0	

ADMINISTRATIVE LEADTIME: 2 MONTHS PROCUREMENT LEADTIME: 4 MONTHS

CONTRACT DATES: FY 1998: Feb-98 FY 1999: Mar-99 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Apr-98 FY 1999: May-99 FY 2000: Feb-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	24		49	98	49	49	49			49	49	49	
OUTPUT	24		49	98	49	49	49			49	49	49	

INSTALLATION SCHEDULE:	PY	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		49	49	49	49	49	49			49	49	49			49	49	49	CONT.	CONT.
OUTPUT		49	49	49	49	49	49			49	49	49			49	49	49	CONT.	CONT.

Notes/Comments:
 Quantities reflect number of classrooms / labs, not quantity of hardware to be procured.

Total number of Cryptologic and Intelligence classrooms / laboratories is 147.

UNCLASSIFIED

Feb-99

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

TMP EQUIPMENT (SHORE)
 1V041 / 1V776

This program improves the effectiveness and efficiency of cryptologic and general intelligence training at NAVTECTRACEN (NTTC) Corry Station, Fleet Intelligence Training Center (FITC) San Diego and Navy and marine Corps Intelligence Center (NMIC) Dam Neck. State-of-the-art interactive multimedia classrooms and courseware will be developed for schoolhouse use.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment					VAR	2.1	VAR	2.8	VAR	5.7	VAR	2.2	VAR	1.4	VAR	1.5	VAR	1.5	VAR	1.5	CONT.		CONT.		
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.2	0	0.02	0	0.006	0	0.00	0	0.00	0	0.005	0	0.006	0	0.007	CONT.		CONT.	0.244	
PRIOR YR EQUIP																								0	
FY 97 EQUIP																								0	
FY 98 EQUIP					0	0.2																		0	
FY 99 EQUIP							0	0.02																0	
FY 00 EQUIP									0	0.006														0	
FY 01 EQUIP										0	0.00													0	
FY 02 EQUIP											0	0.00												0	
FY 03 EQUIP												0	0.00											0	
FY 04 EQUIP													0	0.005										0	
FY 05 EQUIP															0	0.006								0	
FY TC EQUIP																	0	0.007						0	
TOTAL INSTALLATION COST		0.0		0.0		0.2		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		2.3		2.8		5.7		2.2		1.4		1.5		1.5		1.5		0.0		0.0	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 MONTHS PROCUREMENT LEADTIME: 4 MONTHS

CONTRACT DATES: FY 1998: May-98 FY 1999: Mar-99 FY 2000: Dec-99

DELIVERY DATES: FY 1998: Jul-98 FY 1999: May-99 FY 2000: Feb-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT CONT. CONT.

OUTPUT CONT. CONT.

Notes/Comments

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

SIGNALS ANALYSIS LABORATORY (SHORE)
 1V042 / 1V776

This program directly supports tactical commanders with tailored and responsive feedback from theater Information Warfare (IW) exploitation operations. Navy signals analysis Laboratories (SALs) are forward based signals analysis and processing centers for complex communications and electronic emissions. SALs require advanced signals processing equipment to keep pace with information technology and continually changing target sets. Funds are required to procure signals analysis equipment to perform shore-based IW exploitation of data resulting from mobile collection missions, and to deploy advanced signals analysis systems afloat to aid near real-time exploitation efforts.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							8	0.7	6	0.8	7	0.5	2	0.4	2	0.4	2	0.5	2	0.5	0	0.0	29	3.8	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	0	0.0	0	0.0	0	0.0	8	0.1	6	0.03	7	0.06	2	0.02	2	0.04	0	0.00	0	0.00	0	0.0	25	0.25	
PRIOR YR EQUIP																							0	0.00	
FY 97 EQUIP																							0	0.00	
FY 98 EQUIP							8	0.1															8	0.10	
FY 99 EQUIP									6	0.03													6	0.03	
FY 00 EQUIP											7	0.06											7	0.06	
FY 01 EQUIP													2	0.02									2	0.02	
FY 02 EQUIP															2	0.04							2	0.04	
FY 03 EQUIP																	0	0.00					0	0.00	
FY 04 EQUIP																			0	0.00			0	0.00	
FY 05 EQUIP																							0	0.00	
FY TC EQUIP																							0	0.00	
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.1		0.0		0.1		0.0		0.0		0.0		0.0		0.0		0.3	
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.8		0.8		0.6		0.4		0.4		0.5		0.5		0.0		4.1	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 MONTHS PROCUREMENT LEADTIME: 7 MONTHS

CONTRACT DATES: FY 1998: FY 1999: Mar-99 FY 2000: Dec-99

DELIVERY DATES: FY 1998: FY 1999: Aug-99 FY 2000: May-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4

INPUT 8 5 1 6 1

OUTPUT 8 5 1 6 1

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT 2 2 25

OUTPUT 2 2 25

Notes/Comments

MODIFICATION TITLE: T-RDF EQUIPMENT (SHIP)
 COST CODE: IV043 / 1V777

MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: This program provides Transportable-Radio Direction Finding (T-RDF) Systems to Fleet Electronic Support (FES) Activities worldwide for temporary installation and use with the Advanced Cryptologic Carry-on Exploitation system (ACCES).

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring	2**	1.5			2	0.8	3	1.4	2	0.9	1	0.5	1	0.5	1	0.5	5	1.3	5	1.3	CONT.		CONT *	0.0	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*	1	0.1	1	0.1	3	0.3	6	0.7	8	1.0	8	1.0	8	1.1	5	0.8	15	0.5	18	0.5	CONT.		CONT **		
PRIOR YR EQUIP	1	0.1																						1	0.1
FY 97 EQUIP			1	0.1																				1	0.1
FY 98 EQUIP					3	0.3																		3	0.3
FY 99 EQUIP							6	0.7																6	0.7
FY 00 EQUIP									8	1.0														8	1.0
FY 01 EQUIP											8	1.0												8	1.0
FY 02 EQUIP													8	1.1										8	1.1
FY 03 EQUIP															5	0.8								5	0.8
FY 04 EQUIP																	15	0.5						15	0.5
FY 05 EQUIP																			18	0.5				18	0.5
FY TC EQUIP																					CONT.			0	0.0
TOTAL INSTALLATION COST		0.1		0.1		0.3		0.7		1.0		1.0		1.1		0.8		0.5		0.5		0.0	CONT.	0.0	
TOTAL PROCUREMENT COST		1.6		0.1		1.1		2.1		1.9		1.5		1.6		1.3		1.8		1.8		0.0	CONT.	0.0	

ADMINISTRATIVE LEADTIME: 3 MONTHS PROCUREMENT LEADTIME: 8 MONTHS

CONTRACT DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000: Jan-00

DELIVERY DATES: FY 1998: Jun-98 FY 1999: Jun-99 FY 2000: Jun-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	4	2	2	2	2	2	2	2	2	2	2	2	
OUTPUT	4	2	2	2	2	2	2	2	2	2	2	2	

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	2	2	2	2	2	2	1	4	4	4	3	5	5	5	3	CONT.	CONT.	
OUTPUT	2	2	2	2	2	2	1	4	4	4	3	5	5	5	3	CONT.	CONT.	

Notes/Comments:

- * Inventory objective is 12 systems with continual upgrades to the 12. T-RDF systems and antennas are carry-on (not permanently installed).
- ** Reflects pregrooms. Pregroom installations are required in order to utilize the T-RDF systems as carry-on hardware during critical missions. 40 ships will be pregroomed, but will need to be upgraded beginning in FY04.
- *** Procured against Cost Code 1V039.

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Feb-99

MODIFICATION TITLE: ACCES SYSTEMS (SHORE)
 COST CODE: 1V045 / 1V776
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

This program upgrades ACCES training systems installed at Cryptologic shore support Activities (CSSAs) and Cryptologic Readiness Groups (CRGs) worldwide. These upgrades provide ACCES with improved hardware/software capabilities/functionalities for operator/maintenance training of Direct Support (DIRSUP) personnel who temporarily deploy aboard surface, subsurface and airborne platforms in support of fleet CINC's cryptologic mission requirements.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment							1	0.6	2	1.8	4	2.3	5	3.2	4	1.9	4	3.3	5	3.6	CONT.		CONT.		
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Interm Contractor Support																									
Installation of Hardware*																									
PRIOR YR EQUIP	0	0.0	0	0.0	0	0.0	1	0.07	2	0.05	4	0.1	5	0.1	4	0.1	4	0.1	5	0.2	CONT.		CONT.		
FY 97 EQUIP																									
FY 98 EQUIP																									
FY 99 EQUIP							1	0.07																	
FY 00 EQUIP								2	0.05																
FY 01 EQUIP										4	0.1														
FY 02 EQUIP												5	0.1												
FY 03 EQUIP														4	0.1										
FY 04 EQUIP																4	0.1								
FY 05 EQUIP																		5	0.2						
FY TC EQUIP																					CONT.				
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.1		0.1		0.1		0.1		0.1		0.1		0.2		0.0		CONT.	0.0
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.7		1.9		2.4		3.3		2.0		3.4		3.8		0.0		CONT.	0.0

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1 MONTH PROCUREMENT LEADTIME: 6 MONTHS

CONTRACT DATES: FY 1998: Nov-97 FY 1999: Feb-99 FY 2000: Nov-99

DELIVERY DATES: FY 1998: Mar-98 FY 1999: Jun-99 FY 2000: Mar-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02				FY 03				FY 04				FY 05				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT				1				2				2	2																		
OUTPUT				1				2				2	2																		
INSTALLATION SCHEDULE:																															
INPUT				2	3			2	2			2	2							2	3					CONT.	CONT.				
OUTPUT				2	3			2	2			2	2							2	3					CONT.	CONT.				

Notes/Comments

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

DATE
February 1999

(DOD EXHIBIT P-21A)

APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE												SUBHEAD NO.								
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					CRYPTOLOGIC EQUIPMENT 3501												521V								
COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98						FISCAL YEAR 99						FISCAL YEAR 00						
							CALENDAR YEAR 98						CALENDAR YEAR 99						CALENDAR YEAR 00						
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
1V043	T-RDF EQUIPMENT	98		2		2																			
		99		3		3																			
		00		2		2																			
1V044	T-RDF ANTENNAS	98		4		4																			
		99		11		11																			
		00		13		13																			
1V045	ACCES SYSTEMS	98		12		12																			
		99		17		17																			
		00		9		9																			

ITEM	Manufacturer's Name and Location	PRODUCTION RATE			PROCUREMENT LEADTIMES				Total	Unit of Measure
		MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT		

**OTHER PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION SHEET**

BUDGET ACTIVITY
BA-2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT

P-1 ITEM NOMENCLATURE
OTHER DRUG INTERDICTION SUPPORT

QUANTITY	FY 98	FY 99	FY00	FY01	FY02	FY03	FY04	FY05
COST (in millions)	\$16.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

Details of this program are of a higher classification. Information provided under separate cover.

UNCLASSIFIED
CLASSIFICATION

APPROPRIATION			PROGRAM COST BREAKDOWN			(DOD Exhibit P-5)		
OTHER PROCUREMENT, NAVY								
BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
BA-2 COMMUNICATIONS AND ELECTRONICS EQPT		OTHER DRUG INTERDICTION SUPPORT						
TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1998		FY 1999		FY 2000	
COST		IDENT		TOTAL		TOTAL		TOTAL
CODE	ELEMENT OF COST	CODE	QTY	COST	QTY	COST	QTY	COST
	OTHER DRUG INTERDICTION SUPPORT			16,047				