

DEPARTMENT OF THE NAVY FY 1998/1999 BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES

OTHER PROCUREMENT, NAVY BUDGET ACTIVITY 2

FEBRUARY 1997

UNCLASSIFIED

EXHIBIT P-1

DEPARTMENT OF THE NAVY
FY 1998/FY 1999 PROCUREMENT PROGRAMS

APPROPRIATION: 1810N Other Procurement, Navy

DATE: 02/04/97

LINE NO	ITEM NOMENCLATURE	IDENT CODE	DOLLARS				MILLIONS OF DOLLARS				
			FY 1998	----- FY 1996 -----	----- FY 1997 -----	----- FY 1998 -----	----- FY 1999 -----	-----	-----	-----	
			UNIT COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
BUDGET ACTIVITY 02: Communications and Electronics Equipment											
Ship Radars											
35	2005 AN/SPS-40	A			-		7.5		0.7		- U
36	2010 AN/SPS-48	A			9.1		12.6		0.2		- U
37	2015 AN/SPS-49	A			8.4		11.9		13.4		11.5 U
38	2027 AN/SYS-()	A			0.3		0.8		-		- U
39	2031 MK-23 Target Acquisition Syst	A			5.4		1.3		1.9		2.0 U
40	2040 Radar Support	A			13.9		15.7		1.7		1.3 U
41	2042 Surface Electro-Optical Syste	B			8.3		-		-		- U
42	2043 TISS	A			-		-		13.7		18.6 U
Ship Sonars											
43	2130 Surface Sonar Support Equipme	A			20.8		6.7		3.8		5.5 U
44	2136 AN/SQQ-89 Surf ASW Combat Sys	A			22.2		23.7		16.6		35.9 U
45	2147 SSN Acoustics	A			42.7		44.2		78.0		116.3 U
46	2178 Surface Sonar Windows and Dom	A			3.3		-		-		3.1 U
47	2180 Sonar Support Equipment	A			26.6		16.9		5.4		5.8 U
48	2181 Sonar Switches and Transducer	A			8.7		10.4		11.6		13.7 U
ASW Electronic Equipment											
49	2210 Submarine Acoustic Warfare Sy	A			8.1		6.5		4.3		8.5 U
50	2213 SSTD	A			13.3		10.8		0.3		0.9 U
51	2215 Acoustic Communications	A			0.2		0.2		0.4		0.4 U
52	2225 Fixed Surveillance System	A			19.2		33.9		15.2		11.4 U
53	2237 SURTASS	A			18.0		10.4		7.1		16.4 U
54	2246 ASW Operations Center	A			8.1		9.9		5.3		7.7 U
55	2247 Carrier ASW Module	A			0.2		0.1		*		- U
Electronic Warfare Equipment											
56	2312 AN/SLQ-32	A			17.7		6.2		2.1		1.5 U
57	2320 AN/WLR-1	A			2.9		0.2		-		- U
58	2340 Information Warfare Systems	A			1.9		4.6		3.8		4.4 U
59	2343 EW Support Equipment	A			7.9		7.8		4.2		10.7 U
60	2346 C-3 Countermeasures	A			22.9		0.5		6.9		- U

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			FY 1998 UNIT COST	----- FY 1996 ----- QUANTITY COST	----- FY 1997 ----- QUANTITY COST	----- FY 1998 ----- QUANTITY COST	----- FY 1999 ----- QUANTITY COST			
Reconnaissance Equipment										
61	2419 Combat DF	A		3.1		10.3		10.5		16.1 U
62	2430 OUTBOARD	A		1.5		0.3		11.7		22.7 U
63	2434 Battle Group Passive Horizon	B		-		38.1		50.2		76.1 U
Submarine Surveillance Equipment										
64	2516 AN/WLQ-4	A		3.0		4.1		4.5		2.9 U
65	2560 Submarine Support Equipment P	A		4.4		5.3		6.9		4.0 U
Other Ship Electronic Equipment										
66	2605 Navy Tactical Data System	A		12.1		29.5		14.3		6.2 U
67	2606 Cooperative Engagement Capabi	B		-		-		-		57.5 U
68	2608 JMCIS Afloat	A		13.3		25.6		22.4		23.5 U
69	2611 Naval Tactical Command Suppor	A		30.7		31.8		49.7		58.4 U
70	2614 ATDLS	A		15.1		17.4		17.0		36.3 U
71	2622 Minesweeping System Replaceme	A		5.1		39.8		15.8		44.4 U
72	2624 SHALLOW WATER MCM	B		0.8		0.9		-		15.0 U
73	2640 EMSP (MYP)	A		26.4		-		-		- U
74	2657 NAVSTAR GPS Receivers (Space)	A		1.4		4.8		5.0		9.9 U
75	2660 HF Link-11 Data Terminals	A		3.5		3.2		-		- U
76	2666 Armed Forces Radio and TV	A		3.5		3.3		15.7		16.5 U
77	2676 Strategic Platform Support Eq	A		9.8		27.4		7.5		27.2 U
Training Equipment										
78	2760 Other SPAWAR Training Equipme	A		1.0		1.6		3.6		3.3 U
79	2762 Other Training Equipment	A		11.4		27.8		24.5		33.8 U
Aviation Electronic Equipment										
80	2815 MATCALs	A		1.5		4.1		9.7		15.0 U
81	2831 Shipboard Air Traffic Control	B		6.5		13.2		3.0		12.3 U
82	2832 Automatic Carrier Landing Sys	A		5.1		15.7		13.2		12.9 U
83	2840 National Air Space System	B		-		-		2.2		28.9 U
84	2843 TACAN	A		0.1		2.2		-		- U
85	2845 Air Station Support Equipment	A		5.9		9.5		9.5		11.6 U
86	2846 Microwave Landing System	A		0.5		7.1		5.3		8.4 U
87	2847 FACS FAC	A		6.6		3.8		7.0		7.1 U
88	2851 ID Systems	A		9.4		18.3		11.3		16.0 U
89	2856 Surface Identification System	A		8.3		-		-		5.5 U
90	2876 TAC A/C MISSION PLANNING SYS(A		-		7.0		15.7		24.2 U

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DATE: 02/04/97

LINE NO	ITEM NOMENCLATURE	IDENT CODE	DOLLARS				MILLIONS OF DOLLARS				
			FY 1998	----- FY 1996 -----	----- FY 1997 -----	----- FY 1998 -----	----- FY 1999 -----				
			UNIT COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
Other Shore Electronic Equipment											
91	2804 JMCIS Ashore	A			-				3.4		4.9 U
92	2805 JMCIS OED	A			-				0.3		0.4 U
93	2900 TADIX-B	A			2.0		14.9		5.2		26.4 U
94	2903 National Imagery Support	A			1.3		-		-		- U
95	2906 JMCIS Tactical/Mobile	A			8.9		50.2		2.9		5.7 U
96	2920 RADIAC	A			4.8		3.4		6.1		6.9 U
97	2940 GPETE	A			13.4		9.1		7.5		10.3 U
98	2960 Integ Combat System Test Faci	A			6.1		4.8		3.9		4.5 U
99	2962 Calibration Standards	A			2.4		2.1		2.1		2.1 U
100	2970 EMI Control Instrumentation	A			5.7		5.3		5.0		7.7 U
101	2975 SHORE ELEC ITEMS UNDER \$2 MIL	A			8.0		4.0		3.4		5.0 U
Shipboard Communications											
102	3010 Shipboard Tactical Communicat	A			12.3		10.8		24.5		46.1 U
103	3033 Portable Radios	A			1.4		1.4		2.4		11.2 U
104	3040 SINCGARS	A			3.0		4.6		7.4		12.6 U
105	3050 Ship Communications Automatio	A			5.9		14.7		25.8		60.6 U
106	3055 Ship Comm Items Under \$2 Mill	A			10.1		9.3		12.4		18.0 U
Submarine Communications											
107	3107 Shore LF/VLF Communications	A			4.2		4.0		7.8		16.2 U
108	3130 Submarine Communication Equip	A			12.8		25.4		37.2		50.9 U
109	3147 Advanced VLF Receiver	B			-		-		7.6		18.5 U
Satellite Communications											
110	3210 SATCOM Ship Terminals (Space)	A			109.7		141.6		107.6		144.7 U
111	3220 SATCOM Shore Terminals (Space)	A			11.9		27.0		5.0		77.8 U
Shore Communications											
112	3302 JCS Communications Equipment	A			1.5		1.9		2.6		3.4 U
113	3306 NSIPS	A			-		24.5		-		- U
114	3311 JEDMICS	A			-		4.1		-		- U
115	3350 GCCS Equipment	A			2.3		1.7		1.6		4.5 U
116	3368 Naval Shore Communications	A			31.8		42.3		72.5		95.1 U

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			FY 1998	FY 1996	FY 1997	FY 1998	FY 1999	UNIT COST	QUANTITY	COST	QUANTITY	COST	
Cryptographic Equipment													
117	3410 Secure Voice System	A			6.7			15.1		-		-	U
118	3412 Secure Data System	A			5.9			14.2		-		-	U
119	3415 Info Systems Security Program				-			-		31.7		56.4	U
120	3486 Key Management Systems	A			11.7			12.3		-		-	U
Cryptologic Equipment													
121	3501 Cryptologic Communications Eq	A			5.8			1.3		7.1		22.8	U
Other Electronic Support													
122	3617 Elec Engineered Maint (NAVSEA	A			0.1			-		-		-	U
Drug Interdiction Support													
123	3820 Other Drug Interdiction Suppo	A			12.0			-		-		-	U
TOTAL Communications and Electronics Equipment					781.6			1044.7		925.8		1584.0	

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

Identification code	17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			
		1996 actual	1997 est.	1998 est.	1999 est.
Program by activities:					
Direct program:					
00.0101	Ships support equipment	617,796	815,611	771,120	1,070,756
00.0201	Communications and electronics equipment	781,611	1,044,672	925,763	1,583,978
00.0301	Aviation support equipment	192,128	249,793	169,250	255,932
00.0401	Ordnance support equipment	396,264	468,410	539,662	692,543
00.0501	Civil engineering support equipment	46,716	43,943	53,610	81,860
00.0601	Supply support equipment	93,966	67,709	56,528	127,373
00.0701	Personnel and command support equipment	115,439		60,850	70,615
00.0801	Spares and repair parts	183,379	202,217	248,717	302,318
00.9101	Total direct program	2,427,299	2,892,355	2,825,500	4,185,375
01.0101	Reimbursable program	70,033	42,000	42,000	42,000
10.0001	Total	2,497,332	2,934,355	2,867,500	4,227,375
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-1,918	-42,000	-42,000	-42,000
14.0001	Non-Federal sources(-)	-68,115			
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	-27,495	-14,200		
21.4009	Reprogramming from/to prior year budget plans	-14,000			
22.1001	Unobligated balance transferred to other accounts		4,200		
Unobligated balance available, end of year:					
24.4002	For completion of prior year budget plans				
24.4003	Available to finance subsequent year budget plans	14,200			
39.0001	Budget authority	2,400,004	2,882,355	2,825,500	4,185,375
Budget authority:					
40.0001	Appropriation	2,455,442	3,067,944	2,825,500	4,185,375
40.3601	Appropriation rescinded (unob bal)	-8,828	-10,000		
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(e)		-6,439		
41.0001	Transferred to other accounts (-)	-76,948	-169,150		
42.0001	Transferred from other accounts	30,338			
43.0001	Appropriation (adjusted)	2,400,004	2,882,355	2,825,500	4,185,375

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

Identification code	17-1810-0-1-051	Obligations			
		1996 actual	1997 est.	1998 est.	1999 est.

Program by activities:					
Direct program:					
00.0101	Ships support equipment	596,593	684,724	792,152	953,019
00.0201	Communications and electronics equipment	871,323	1,097,955	899,167	1,533,267
00.0301	Aviation support equipment	176,903	238,046	177,033	240,993
00.0401	Ordnance support equipment	398,426	404,965	474,729	654,593
00.0501	Civil engineering support equipment	65,939	42,457	51,387	73,857
00.0601	Supply support equipment	100,513	77,535	61,691	110,693
00.0701	Personnel and command support equipment	193,184	29,539	60,175	65,619
00.0801	Spares and repair parts	215,400	179,567	216,931	284,702
		-----	-----	-----	-----
00.9101	Total direct program	2,618,281	2,754,788	2,733,265	3,916,743
01.0101	Reimbursable program	62,124	50,930	42,000	42,000
		-----	-----	-----	-----
10.0001	Total	2,680,405	2,805,718	2,775,265	3,958,743

Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-4,591	-42,000	-42,000	-42,000
14.0001	Non-Federal sources(-)	-66,891			
17.0001	Recovery of prior year obligations	-21,397			
Unobligated balance available, start of year:					
21.4002	For completion of prior year budget plans	-673,573	-499,346	-627,983	-720,218
21.4003	Available to finance new budget plans	-27,495	-14,200		
21.4009	Reprogramming from/to prior year budget plans				
22.1001	Unobligated balance transferred to other accounts		4,200		
Unobligated balance available, end of year:					
24.4002	For completion of prior year budget plans	499,346	627,983	720,218	988,850
24.4003	Available to finance subsequent year budget plans	14,200			
		-----	-----	-----	-----
39.0001	Budget authority	2,400,004	2,882,355	2,825,500	4,185,375

Budget authority:					
40.0001	Appropriation	2,455,442	3,067,944	2,825,500	4,185,375
40.3601	Appropriation rescinded (unob bal)	-8,828	-10,000		
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(e)		-6,439		
41.0001	Transferred to other accounts (-)	-76,948	-169,150		
42.0001	Transferred from other accounts	30,338			
		-----	-----	-----	-----
43.0001	Appropriation (adjusted)	2,400,004	2,882,355	2,825,500	4,185,375

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

		Obligations			
Identification code	17-1810-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Relation of obligations to outlays:					
71.0001	Obligations incurred	2,608,923	2,763,718	2,733,265	3,916,743
72.1001	Orders on hand, SOY	-30,569	-86,326	-86,326	-86,326
72.4001	Obligated balance, start of year	4,671,807	3,793,123	3,694,860	3,679,591
74.1001	Orders on hand, EOY	86,326	86,326	86,326	86,326
74.4001	Obligated balance, end of year	-3,793,123	-3,694,860	-3,679,591	-4,506,636
77.0001	Adjustments in expired accounts (net)	70,950			
78.0001	Adjustments in unexpired accounts	-21,397			
90.0001	Outlays (net)	3,592,917	2,861,981	2,748,534	3,089,698

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

Identification code	17-1810-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.

Direct obligations:					
125.101	Advisory and assistance services	39,841	40,866	36,534	43,623
	Purchases goods/services (inter/intra) Fed accounts				
125.303	Purchases from revolving funds	699,254	677,669	787,453	868,016
126.001	Supplies and materials	655,400	795,655	634,436	959,263
131.001	Equipment	1,223,786	1,240,598	1,274,842	2,045,841
		-----	-----	-----	-----
199.001	Total Direct obligations	2,618,281	2,754,788	2,733,265	3,916,743
Reimbursable obligations:					
225.201	Other services with the private sector	33,363			
231.001	Equipment	28,761	50,930	42,000	42,000
		-----	-----	-----	-----
299.001	Total Reimbursable obligations	62,124	50,930	42,000	42,000
		-----	-----	-----	-----
999.901	Total obligations	2,680,405	2,805,718	2,775,265	3,958,743

Comparison of FY 1996 Financing as reflected
in FY 1997 Budget with 1996 Financing as
Shown in the FY 1998 Budget

(\$ in Thousands)

	Financing per FY 1997 Budget	Financing Per FY 1998 Budget	Increase (+) or Decrease (-)
Program Requirements (Total)	\$2,457,431	\$2,497,332	+\$39,901
Program Requirements (Service Account)	(\$2,421,431)	(\$2,427,299)	(+)\$5,868
Program Requirements (Reimbursable)	\$36,000	\$70,033	+\$34,033
Appropriation (Adjusted)	\$2,399,131	\$2,400,004	+\$873

Explanation of Changes in Financing

The Fiscal Year 1996 program has changed since the presentation of the FY 1997 budget as noted below:

1. Program Requirements increased by \$39,901K, \$5,868K for direct service and \$34,033 reflecting increased reimbursable requirements.
2. Appropriation (Adjusted). There has been a minor net increase to the appropriation of \$873K reflecting transfers from other accounts for the Drug Interdiction Program.

Comparison of FY 1996 program requirements as reflected
in the FY 1997 Budget with FY 1996 program requirements
as shown in the FY 1998 Budget

Summary of Requirements (\$ In Thousands)

	Total Program Requirements per FY 1997 Budget	Total Program Requirements per FY 1998 Budget	Increase (+) or Decrease (-)
Ship Support Equipment	\$610,985	\$617,796	+\$6,811
Communications & Electronic Equipment	783,792	781,611	-2,181
Aviation Support Equipment	197,039	192,128	-4,911
Ordnance Support Equipment	399,451	396,264	-3,187
Civil Engineering Support Equipment	46,442	46,716	+274
Supply Support Equipment	96,277	93,966	-2,311
Personnel & Command Support Equip	96,196	115,439	+19,243
Spares & Repair Parts	191,249	183,379	-7,870
Total Fiscal Year Program	\$2,421,431	\$2,427,299	+\$5,868

Explanation by Budget Activity
(\$ In Thousands)

1. SHIP SUPPORT EQUIPMENT (+\$6,811) - Net mid-year review increases for the Acquisition Center of Excellence (ACE), Other Navigation Equipment, and Hull, Mechanical, & Electrical Items under \$2 Million.
2. COMMUNICATIONS & ELECTRONIC EQUIPMENT (-\$2,181) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).
3. AVIATION SUPPORT EQUIPMENT (-\$4,911) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).
4. ORDNANCE SUPPORT EQUIPMENT (-\$3,187) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).
5. CIVIL ENGINEERING SUPPORT (+\$274) - Net minor adjustment.
6. SUPPLY SUPPORT EQUIPMENT (-\$2,311) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).
7. PERSONNEL & COMMAND SUPPORT (+\$19,243) - Net increase for unfunded Investment/Expense items.
8. SPARES & REPAIR PARTS (-\$7,870) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).

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

(\$ In Thousands)

	Financing per FY 1997 Budget	Financing Per FY 1998 Budget	Increase (+) or Decrease (-)
Program Requirements (Total)	\$2,750,195	\$2,934,355	+\$184,160
Program Requirements (Service Account)	(2,714,195)	(\$2,892,355)	(+178,160)
Program Requirements (Reimbursable)	\$36,000	\$42,000	+6,000
Appropriation (Adjusted)	\$2,714,195	\$2,882,355	+\$168,160

Explanation of Changes in Financing

The Fiscal Year 1996 program has changed since the presentation of the FY 1997 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of \$168,160. This net change is comprised of an increase in program requirements (+\$178,160), less rescissions of (-\$10,000).

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

Summary of Requirements (\$ in Thousands)

	Total Program Requirements per FY 1997 Budget	Total Program Requirements per FY 1998 Budget	Increase (+) or Decrease (-)
Ships Support Equipment	\$868,175	\$815,611	-\$52,564
Communications and Electronic Equip	865,974	1,044,672	+178,698
Aviation Support Equipment	199,105	249,793	+50,688
Ordnance Support Equipment	464,903	468,410	+3,507
Civil Engineering Support Equip	38,057	43,943	+5,886
Supply Support Equipment	69,153	67,709	-1,444
Personnel and Command Support Equip	0	0	0
Spares and Repair Parts	208,828	202,217	-6,611
Total Fiscal Year Program	\$2,714,195	\$2,892,355	+\$178,160

Explanation by Budget Activity
(\$ in Thousands)

1. Ships Support Equipment (-\$52,564) - Changes reflects FY 1997 Congressional reductions (-\$63,747), Congressional increases (+10,000), and below threshold reprogramming (BTR) actions (-\$1,183).
2. Communications and Electronics Equipment (+\$178,698) - Changes reflects FY 1997 Congressional reductions (-\$28,253), Congressional increases(+\$204,674), and below threshold reprogramming (BTR) actions (+\$2,277).
3. Aviation Support Equipment (+\$50,688) - Changes reflects FY 1997 Congressional reductions (-\$8,079), Congressional increases(+\$166,558), and transfers to the Air Force (-\$107,791).
- 4.) Ordnance Support Equipment (+\$3,507) - Changes reflects FY 1997 Congressional reductions (-\$17,033), Congressional increases(+\$22,000), and below threshold reprogramming (BTR) actions (-\$1,460).
5. Civil Engineering Support Equipment (+\$5,886) - Changes reflects FY 1997 Congressional reductions (-\$931) and Congressional increases(+\$6,817).
6. Supply Support Equipment (-\$1,444) - Changes reflects FY 1997 Congressional reductions (-\$1,444).
8. Spare and Repair Parts (-\$6,611) - Changes reflects FY 1997 Congressional reductions (-\$4,611) and below threshold reprogramming (BTR) actions (-\$2,000).

UNCLASSIFIED	DATE FEBRUARY 1997
BUDGET ITEM JUSTIFICATION SHEET	

APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT	P-1 ITEM NOMENCLATURE AN/SPS-40 (82KA/200500)
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	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY								
COST (In Millions)	0.0	7.5	0.7	0.0	0.0	0.0	0.0	0.0

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.

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.

EQUIPMENT INSTALLATION - FUNDING IS FOR THE INSTALLATION OF EQUIPMENT INCLUDING FLEET MODERNIZATION PROGRAM INSTALLATIONS AND INSTALLATION OF TRAINING EQUIPMENT.

THE BUDGET REFLECTS THE TRANSFER OF DESIGN SERVICES INTO THE APPROPRIATE EQUIPMENT P-1 LINE ITEM IN ACCORDANCE WITH FULL FUNDING POLICY FY 98 AND OUT.

UNCLASSIFIED	WEAPON SYSTEM COST ANALYSIS	DATE FEBRUARY 1997
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APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE AN/SPS-40 (82KA/200500)
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ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY 96		FY 97		FY 98		FY 99	
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
SURFACE SHIPS (N-86)									
KA011 SOLID STATE TRANSMITTER	A			4	6,762				
KA830 PRODUCTION ENGINEERING	A				300				
KA900 CONSULTING SERVICES	A				400				
KADSA DESIGN AGENT	A						98		
KA5IN INSTALLATION OF EQUIPMENT (FMP	A						571		
TOTAL			0		7,462		669		0

P-1 SHOPPING LIST

UNCLASSIFIED BUDGET PROCUREMENT HISTORY AND PLANNING								DATE FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE AN/SPS-40 (82KA/200500)			
LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
<u>KA011 SOLID STATE TRANSMITTER</u>										
FY 1993	NSWC/CRANE, IN	SS/FP	NAVSEA	06/94	05/96	4	1,790,000	YES	NO	
FY 1997	NSWC/CRANE, IN	SS/FP	NAVSEA	01/97	07/98	4	1,690,500	YES	NO	
REMARKS										

P-1 SHOPPING LIST

INDIVIDUAL MODIFICATION

UNCLASSIFIED

P-1 ITEM NOMENCLATURE

AN/SPS-40 (82KA/200500)

FEBRUARY 1997

MODIFICATION TITLE:

AN/SPS-40

MODELS OF SYSTEMS AFFECTED:

AN/SPS-40

DESCRIPTION/JUSTIFICATION:

FIELD CHANGE 11

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE:

N/A

FINANCIAL PLAN:(\$in Millions)	FY 96 & PRIOR		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE	TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E NONE																				
PROCUREMENT																			0	0.0
Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	66	99.0	4	6.7														70	105.7	
Equipment Nonrecurring																			0	0.0
Engineering Change Orders																			0	0.0
Data																			0	0.0
Training Equipment																			0	0.0
Support Equipment																			0	0.0
Other																			0	0.0
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
FY 96 & Prior Equipment (66)	66	8.3																	66	8.3
FY 97 Equipment (4)					4	0.7													4	0.7
																			0	0.0
Total Installation Cost	66	8.3		0.0	4	0.7		0.0	0.0		0.0		0.0		0.0		0.0	70	9.0	
Total Procurement Cost		99.0		6.7		0.0		0.0	0.0		0.0		0.0		0.0		0.0			105.7
Total Cost		107.3		6.7		0.7		0.0	0.0		0.0		0.0		0.0		0.0			114.7

METHOD OF IMPLEMENTATION: AIT

Administrative Leadtime: 4 mos.

Production Leadtime: 18 mos.

CONTRACT DATE:

Prior Year: N/A

Current Year: 1/97

Budget Year: N/A

Budget Year + 1: N/A

DELIVERY DATE:

Prior Year: N/A

Current Year: 7/98

Budget Year: N/A

Budget Year + 1: N/A

INSTALLATION SCHEDULE:

INPUT	FY 96				FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				FY 03				To Complete				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	1	2	3	4	1	2	3	4												
FY 96&Prior	17	16	17	16																																					66											
FY 97									4																																4											
FY 98																																																				
OUTPUT																																																				
FY 96&Prior	17	16	17	16																																									66							
FY 97									4																																4											
FY 98																																																				
Notes:																																																				

UNCLASSIFIED <h2 style="text-align: center; margin: 0;">BUDGET ITEM JUSTIFICATION SHEET</h2>	DATE FEBRUARY 1997
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APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OPN/BA-2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT					AN/SPS-48 (82KB/201000)			
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY								
COST In Millions	9.1	12.6	0.2	0.0	0.0	0.0	0.0	0.0

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.

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.

THE BUDGET REFLECTS THE TRANSFER OF DESIGN SERVICES INTO THE APPROPRIATE EQUIPMENT P-1 LINE ITEM BEGINNING IN FY 1998.

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT

AN/SPS-48 (82KB/201000)

ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY 96		FY 97		FY 98		FY 99	
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
SURFACE SHIPS (N-86)									
KB830 PRODUCTION ENGINEERING	A				563			7	
KB5IN INSTALLATION OF EQUIPMENT(FMP)	A		9,145		12,017			223	
TOTAL			9,145		12,580			230	0

INDIVIDUAL MODIFICATION

UNCLASSIFIED

P-1 ITEM NOMENCLATURE

AN/SPS-48 (82KB/201000)

FEBRUARY 1997

MODIFICATION TITLE:

AN/SPS-48 MODIFICATION

MODELS OF SYSTEMS AFFECTED:

AN/SPS-48

DESCRIPTION/JUSTIFICATION:

INSTALL SPS-49(V) ATD MOD

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE:

N/A

FINANCIAL PLAN:(\$in Millions)	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL		
	Qty	\$	Qty	\$	Qty	\$															
RDT&E NONE																					
PROCUREMENT																					0 0.0
Quantity																					0 0
Installation Kits																					0 0.0
Installation Kit Nonrecurring																					0 0
Equipment	2	5.0																			2 5.0
Equipment Nonrecurring																					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
Interim Contractor Support																					0 0 0
Installation of Hardware																					0 0.0
FY 96 & Prior Equipment (2)	1	0.4	1	0.7																	2 1.1
Total Installation Cost	1	0.4	1	0.7	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	0.0	2	1.1
Total Procurement Cost		5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		5
Total Cost		5.4		0.7	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	0.0		6.1

METHOD OF IMPLEMENTATION: Contractor

Administrative Leadtime: N/A

Production Leadtime: N/A

CONTRACT DATE:

Prior Year: N/A

Current Year: N/A

Budget Year: | Budget Year: N/A

Budget Year + 1: N/A

DELIVERY DATE:

Prior Year: N/A

Current Year: N/A

Budget Year: N/A | Budget Year: N/A

Budget Year + 1: N/A

INSTALLATION SCHEDULE:

INPUT	FY 96				FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				FY 03				To Complete				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	1	2	3	4										
FY 96&Prior	0	0	1	0	0	0	1	0																																						
OUTPUT																																														
FY 96&Prior	0	0	1	0	0	0	1	0																																						

NOTES: FY 96 & Prior equipment procured in FY 93 and prior - no detailed history available.

INDIVIDUAL MODIFICATION

UNCLASSIFIED

P-1 ITEM NOMENCLATURE

AN/SPS-48 (82KB/201000)

FEBRUARY 1997

MODIFICATION TITLE:

AN/SPS-48 MODIFICATION

MODELS OF SYSTEMS AFFECTED:

AN/SPS-48

DESCRIPTION/JUSTIFICATION:

ORDNANCE ALTS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE:

N/A

FINANCIAL PLAN:(\$in Millions)	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL		
	& PRIOR																				
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E NONE																					
PROCUREMENT																					0 0.0
Quantity																					0 0.0
Installation Kits																					0 0.0
Installation Kit Nonrecurring																					0 0.0
Equipment	22	8.1																			22 8.1
Equipment Nonrecurring																					0 0.0
Engineering Change Orders																					0 0.0
Data																					0 0.0
Training Equipment																					0 0.0
Support Equipment																					0 0.0
Other																					0 0.0
Interim Contractor Support																					0 0.0
Installation of Hardware																					0 0.0
FY 96 & Prior Equipment (22)	18	1.0	2	0.2	2	0.2															22 1.4
Total Installation Cost	18	1.0	2	0.2	2	0.2		0.0		0.0		0.0		0.0		0.0			0.0		22 1.4
Total Procurement Cost		8.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0			0.0		8.1
Total Cost		9.1		0.2		0.2		0.0		0.0		0.0		0.0		0.0			0.0		9.5

METHOD OF IMPLEMENTATION: Contractor

Administrative Leadtime: N/A

Production Leadtime: N/A

CONTRACT DATE:

Prior Year: N/A

Current Year: N/A

Budget Year: N/A

Budget Year + 1: N/A

DELIVERY DATE:

Prior Year: N/A

Current Year: N/A

Budget Year: N/A

Budget Year + 1: N/A

INSTALLATION SCHEDULE:

INPUT	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		To Complete		TOTAL		
	& Prior																				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
FY 96&Prior	4	4	4	6		2															22
OUTPUT																					
FY 96&Prior	4	4	4	6		2															22

NOTES: FY 96 & Prior equipment procured in FY 93 and prior - no detailed history available.
 FY 96 & Prior equipment quantities comprise FC #5 & 11.

INDIVIDUAL MODIFICATION

UNCLASSIFIED

P-1 ITEM NOMENCLATURE AN/SPS-48 (82KB/201000)
MODIFICATION TITLE: AN/SPS-48 MODIFICATION
MODELS OF SYSTEMS AFFECTED: AN/SPS-48
DESCRIPTION/JUSTIFICATION: INSTALL AN/SPS-48E RADAR SET
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE: N/A

FEBRUARY 1997

FINANCIAL PLAN:(\$in Millions)	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL		
	& PRIOR		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		COMPLETE		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E NONE																					
PROCUREMENT																					0 0.0
Quantity																					0 0.0
Installation Kits																					0 0.0
Installation Kit Nonrecurring																					0 0.0
Equipment	6	91.4																			6 91.4
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
Interim Contractor Support																					0 0.0
Installation of Hardware																					0 0.0
FY 96 & Prior Equipment (6)	3	21.3	3	11.1																	6 32.4
Total Installation Cost	3	21.3	3	11.1	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	6 32.4
Total Procurement Cost		91.4		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	91.4
Total Cost		112.7		11.1	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	123.8

METHOD OF IMPLEMENTATION: Contractor Administrative Leadtime: N/A Production Leadtime: N/A
CONTRACT DATE: Prior Year: N/A Current Year: N/A Budget Year: N/A Budget Year + 1: N/A
DELIVERY DATE: Prior Year: N/A Current Year: N/A Budget Year: N/A Budget Year + 1: N/A
INSTALLATION SCHEDULE:

INPUT	FY 96				FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				FY 03				To Complete				TOTAL								
	& Prior				FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				FY 03				To Complete												
	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	1	2	3	4	1	2	3	4					
FY 96&Prior	0	0	1	2	0	1	1	1																																					6
OUTPUT																																													6
FY 96&Prior	0	0	0	3	0	0	0	3																																					6

NOTES: FY 96 & Prior equipment procured in FY 93 and prior - no detailed history available.

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

OPN/BA-2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT

P-1 ITEM NOMENCLATURE

AN/SPS-49 (82KH/201500)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY								
COST (In Millions)	8.4	11.9	13.4	11.5	13.5	6.5	1.7	0.5

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.

THE AN/SPS-49A(V)1 MEDIUM PULSE REPETITION FREQUENCY 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)2 VARIANT OF MPU WILL ALSO IMPROVE THE RADARS' RESISTANCE TO ELECTRONIC COUNTERMEASURES. 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)1/2 VARIANT ON LSD, LHD,FFG CLASS SHIPS AND CARRIERS (CV/CVN) .

THE TOTAL OBJECTIVE IS TO PROCURE 44 (INCLUDING 6 SCN HULLS) MPU MODIFICATION KITS (41 SHIPS, 2 TRAINERS AND 1 PRODUCTION TEST BED).

THE BUDGET REFLECTS THE TRANSFER OF DESIGN SERVICES INTO THE APPROPRIATE EQUIPMENT P-1 LINE ITEM BEGINNING IN FY 1998.

UNCLASSIFIED	DATE
WEAPON SYSTEM COST ANALYSIS	FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE AN/SPS-49 (82KH/201500)
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ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY 96		FY 97		FY 98		FY 99	
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
SURFACE SHIPS (N-86)									
KH008 AN/SPS-49 A(V)1	A	4	6,587	2	2,518	8	10,371	6	8,327
KH009 AN/SPS-49A(V)2	A			2	6,400				
KH830 PRODUCTION ENGINEERING *	A		766						120
KH840 QUALITY ASSURANCE	A		180		165		176		125
KH850 PRODUCT IMPROVEMENT	A		356		239		102		100
KH860 ACCEPTANCE TEST & EVALUATION	A		190		240		162		207
KH900 CONSULTING SERVICES	A		238		125		227		240
KHDSA DESIGN AGENT	A						302		244
KH5IN INSTALLATION OF EQUIPMENT(FMP)	A		42		2,072		2,061		1,752
KH6IN INSTALLATION OF EQUIPMENT(NON-FMP)	A				125				350
TOTAL			8,359		11,884		13,401		11,465

P-1 SHOPPING LIST

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT

AN/SPS-49 (82KH/201500)

LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
<u>KH008 AN/SPS-49A(V)1</u>										
FY 1996 *	Raytheon - Sudbury MA	SS/FP	NAVSEA	11/95	11/97	4	1,646,750	YES	NO	
FY 1997	Raytheon - Sudbury MA	SS/FP	NAVSEA	02/97	10/98	2	1,259,000	YES	NO	
FY 1998	Raytheon - Sudbury MA	SS/FP	NAVSEA	11/97	12/99	8	1,296,375	YES	NO	
FY 1999	Raytheon - Sudbury MA	SS/FP	NAVSEA	12/98	12/00	6	1,387,833	YES	NO	
<u>KH009 AN/SPS-49A(V)2</u>										
FY 1997 **	Raytheon - Sudbury MA	SS/FP	NAVSEA	02/97	12/98	2	3,200,000	YES	NO	

* - AN/SPS-49A(V)1 UNIT COST INCLUDES PRODUCTION START-UP COSTS.

**- AN/SPS-49A(V)2 IN FY 97 INCLUDES PRODUCTION START-UP COSTS ASSOCIATED WITH (V)2 VARIANT.

P-1 SHOPPING LIST

INDIVIDUAL MODIFICATION

UNCLASSIFIED

P-1 ITEM NOMENCLATURE AN/SPS-49 (82KH/201500)
 MODIFICATION TITLE: AN/SPS-49(V)6 TO (V) 7 UPGRADE
 MODELS OF SYSTEMS AFFECTED: AN/SPS-49
 DESCRIPTION/JUSTIFICATION: AN/SPS-49(V)6 TO (V) 7 UPGRADE
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE: N/A

FEBRUARY 1997

FINANCIAL PLAN:(\$in Millions)	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL				
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			
RDT&E	NONE																						
PROCUREMENT																				0	0.0		
Quantity																				0	0.0		
Installation Kits																				0	0.0		
Installation Kit Nonrecurring																				0	0.0		
Equipment	5	12.5																				5	12.5
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		
Interim Contractor Support																				0	0.0		
Installation of Hardware																				0	0.0		
FY 96 & Prior Equipment (5)	4	3.0	1	0.6																	5	3.6	
Total Installation Cost	3.0		0.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		5	3.6			
Total Procurement Cost	12.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0	12.5			
Total Cost	15.5		0.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0	16.1			

METHOD OF IMPLEMENTATION: AIT

Administrative Leadtime: N/A

Production Leadtime: N/A

CONTRACT DATE: Prior Year: N/A

Current Year: N/A

Budget Year: N/A

Budget Year + 1: N/A

DELIVERY DATE: Prior Year: N/A

Current Year: N/A

Budget Year: N/A

Budget Year + 1: N/A

INSTALLATION SCHEDULE:

INPUT	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		To Complete		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	1	2 3 4	1	2 3 4			
FY 96&Prior	0	1 3	1																				5
OUTPUT																							
FY 96&Prior	0	1 3	1																				5

NOTES: FY 96 & Prior equipment procured in FY 93 and prior - no detailed history available.

INDIVIDUAL MODIFICATION

UNCLASSIFIED

P-1 ITEM NOMENCLATURE AN/SPS-49 (82KH/201500)

FEBRUARY 1997

MODIFICATION TITLE: AN/SPS-49A(V)1 RADAR

MODELS OF SYSTEMS AFFECTED: AN/SPS-49

DESCRIPTION/JUSTIFICATION: DETECTION CAPABILITY IMPROVEMENT

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE: N/A

FINANCIAL PLAN:(\$in Millions)	FY 96		FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	TO COMPLETE		TOTAL		
	& PRIOR	Qty								Qty	Qty	Qty	Qty	Qty
RDT&E	NONE													
PROCUREMENT												0	0.0	
Quantity												0	0.0	
Installation Kits												0	0.0	
Installation Kit Nonrecurring												0	0.0	
Equipment	19	31.9	2	2.5	8	10.4	6	8.3				35	53.1	
Equipment Nonrecurring		7.0										0	7.0	
Engineering Change Orders												0	0.0	
Data												0	0.0	
Training Equipment	1	1.6										1	1.6	
Support Equipment												0	0.0	
Other												0	0.0	
Interim Contractor Support												0	0.0	
Installation of Hardware												0	0.0	
FY 96 & Prior Equipment (20)	1	0.0	7	2.2	8	2.1	4	1.0				20	5.3	
FY 97 Equipment (2)						1	0.2					2	0.4	
FY 98 Equipment (8)							7	2.2	1	0.2		8	2.4	
FY 99 Equipment (6)									6	2.2		6	2.2	
FY 00 Equipment (0)												0	0.0	
FY 01 Equipment (0)												0	0.0	
FY 02 Equipment (0)												0	0.0	
FY 03 Equipment (0)												0	0.0	
To Complete												0	0.0	
Total Installation Cost	1	0.0	7	2.2	8	2.1	5	1.2	8	2.4	7	2.4	0	0.0
Total Procurement Cost		40.5		2.5		10.4		8.3		0.0		0.0		0.0
Total Cost		40.5		4.7		12.5		9.5		2.4		2.4		0.0

METHOD OF IMPLEMENTATION: AIT Administrative Leadtime: 9 Mos. Production Leadtime: 24 Mos.

CONTRACT DATE: Prior Year: 11/95 Current Year: 02/97 Budget Year: N/A Budget Year + 1: N/A

DELIVERY DATE: Prior Year: 11/97 Current Year: 02/99 Budget Year: N/A Budget Year + 1: N/A

INSTALLATION SCHEDULE:	FY 96		FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	To Complete	TOTAL
	& Prior	Qty									
INPUT	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	1 2 3 4	1 2 3 4	
FY 96&Prior	1		2 3 2	3 3 2	3 1						20
FY 97						1					2
FY 98						12 2 2	1				8
FY 99							1 2 2 1				6
FY 00											0
FY 01											0
FY 02											0
FY 03											0
To Complete											0
											Total= 36
OUTPUT											
FY 96&Prior	1		2 3 2	3 3 2	3						20
FY 97						1					2
FY 98						1 2 2 2	1				8
FY 99							1 2 2 1				6
FY 00											0
FY 01											0
FY 02											0
FY 03											0
To Complete											0
											Total= 36

NOTES: FY 96 & Prior equipment procured in FY 93 and prior - no detailed history available.
FY 96 install funded with non-SEA 91W3D funds.

INDIVIDUAL MODIFICATION

UNCLASSIFIED

P-1 ITEM NOMENCLATURE

AN/SPS-49 (82KH/201500)

FEBRUARY 1997

MODIFICATION TITLE:

AN/SPS-49A(V)2 RADAR

MODELS OF SYSTEMS AFFECTED:

AN/SPS-49

DESCRIPTION/JUSTIFICATION:

DETECTION CAPABILITY IMPROVEMENT

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE:

N/A

FINANCIAL PLAN:(\$in Millions)	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL				
	Qty	\$	Qty	\$	Qty	\$																	
RDT&E	NONE																						
PROCUREMENT																				0	0.0		
Quantity																				0	0.0		
Installation Kits																				0	0.0		
Installation Kit Nonrecurring																				0	0.0		
Equipment			1	2.0																	1	2.0	
Equipment Nonrecurring			2.4																		0	2.4	
Engineering Change Orders																				0	0.0		
Data																				0	0.0		
Training Equipment			1	2.0																	1	2.0	
Support Equipment																				0	0.0		
Other																				0	0.0		
Interim Contractor Support																				0	0.0		
Installation of Hardware																				0	0.0		
FY 96 & Prior Equipment																				0	0.0		
FY 97 Equipment (2)							2	0.9														2	0.9
FY 98 Equipment (0)																				0	0.0		
FY 99 Equipment (0)																				0	0.0		
FY 00 Equipment (0)																				0	0.0		
FY 01 Equipment (0)																				0	0.0		
FY 02 Equipment (0)																				0	0.0		
FY 03 Equipment (0)																				0	0.0		
To Complete (0)																				0	0.0		
Total Installation Cost	0	0.0	0	0.0	0	0.0	2	0.9	5	0.0	4	0.0	4	0.0	1	0.0	0	0.0	2	0.9			
Total Procurement Cost			6.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0		6.4				
Total Cost			6.4		0.0		0.9		0.0		0.0		0.0		0.0		0.0		7.3				

METHOD OF IMPLEMENTATION: AIT

Administrative Leadtime: 9 Mos.

Production Leadtime: 24 Mos.

CONTRACT DATE:

Prior Year: N/A

Current Year: 1/02/97

Budget Year: 11/97

Budget Year + 1: 12/98

DELIVERY DATE:

Prior Year: N/A

Current Year: 1/02/99

Budget Year: 12/99

Budget Year + 1: 12/00

INSTALLATION SCHEDULE:

INPUT	FY 96				FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				FY 03				To Complete				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	1	2	3	4																																		
FY 96&Prior																																																																						
FY 97																	2																	2																																				
FY 98																																																																						
FY 99																																																																						
FY 00																																																																						
FY 01																																																																						
FY 02																																																																						
TO COMPLETE																																																																						
																																	Total=					2																																
OUTPUT																																																																						
FY 96&Prior																																																																						
FY 97																	2																	2																																				
FY 98																																																																						
FY 99																																																																						
FY 00																																																																						
FY 01																																																																						
FY 02																																																																						
TO COMPLETE																																																																						
																																	Total=					2																																

UNCLASSIFIED TIME PHASED REQUIREMENTS SCHEDULE				APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT										P-1 ITEM NOMENCLATURE AN/SPS-49A(V)1						DATE FEBRUARY 1997							
				FY 96				FY 97				FY 98				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
ACTIVE FORCE INVENTORY	(P)			1				1	3	2	3	3	2		3	1	1		3	3	2		1	3	1	2	
SCHOOLS/OTHER TRAINING	(P)							1																			
OTHER	(P)																										
OTHER (SCN)	(P)																										
TOTAL PHASED REQ	(C)	0	0	0	1	1	3	6	8	11	14	16	16	19	20	21	21	24	27	29	29	30	33	34	36		
ASSETS ON HAND	(BP)																										
DELIVERY FY 96 & PRIOR(OPN)	20	(P)		1	3	3	3	3	3	3	2	2															
DELIVERY FY 96 & PRIOR (SCN)	0	(P)																									
OPN FY 97	2	(P)				S								2													
OPN FY 98	8	(P)							S									2	2	2	2						
OPN FY99	6	(P)												S								2	2	2			
FY (Later)	(P)																										
FY	(P)																										
TOTAL ASSETS	(C)	0	0	0	1	4	7	10	13	16	18	20	20	20	22	22	22	24	26	28	30	32	34	36	36		
QTY OVER (+)OR(-)		0	0	0	0	3	4	4	5	5	4	4	4	1	2	1	1	0	-1	-1	1	2	1	2	0		
REMARKS											TOTAL		INSTALLED		ON		FY 98 PRIOR		UNFUNDED								
ALL INSTALLATIONS WILL BE PERFORMED BY AIT											ROMT(QTY)		REOMT		HAND		UNDELIVERED										
											1.APPN-OPN		36		1		0		29		6						
											2.APPN-SCN		0		0		0		0		0						
											3.PROCUREMENT LEADTIME		ADMIN		INITIAL ORDER		REORDER										
													9		24		22										

P-1 SHOPPING LIST

UNCLASSIFIED		APPROPRIATION/BUDGET ACTIVITY OPN/BA-2												P-1 ITEM NOMENCLATURE								DATE			
TIME PHASED REQUIREMENTS SCHEDULE		COMMUNICATIONS AND ELECTRONIC EQUIPMENT												AN/SPS-49A(V)2								FEBRUARY 1997			
		FY 96				FY 97				FY 98				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
ACTIVE FORCE INVENTORY	(P)																1								
SCHOOLS/OTHER TRAINING	(P)																1								
OTHER	(P)																								
OTHER (SCN)	(P)																								
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2
ASSETS ON HAND	(BP)																								
DELIVERY FY 96 & PRIOR(OPN)	0 (P)																								
DELIVERY FY 96 & PRIOR (SCN)	0 (P)																								
OPN FY 97	2 (P)						S								2										
OPN FY 98	0 (P)																								
OPN FY 99	0 (P)																								
FY (Later)	(P)																								
FY	(P)																								
TOTAL ASSETS	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2
QTY OVER (+)OR(-)		0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
REMARKS												TOTAL REQMT		INSTALLED		ON HAND		FY 98 PRIOR UNDELIVERED		UNFUNDED					
ALL INSTALLATIONS WILL BE PERFORMED BY AIT												1.APPN-OPN		2		0		0		0					
												2.APPN-SCN		0		0		0		0					
3.PROCUREMENT LEADTIME												ADMIN		9		INITIAL ORDER		24		REORDER		24			

P-1 SHOPPING LIST

**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENTAL SHEET - INSTALLATION DATA)**

DATE
FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY												P-1 ITEM NOMENCLATURE					
OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT												AN/SPS-49A(V)1					
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 96								FY 97									
						LSD 48	1			LSD 42 FTC, NOR	1 1	LSD 49 FFG 59 FFG 52	1 1 1	FFG 53 LSD 44	1 1		
<p>FY 98 MPU MOD KIT INSTALLATION DOES NOT REQUIRE AN INDUSTRIAL AVAILABILITY, THEREFORE INSTALLATION DATA SHOWN WILL NOT MATCH SHIPYARD AVAILABILITY DATA FY 99</p>																	
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		
LSD 41	1	FFG 36	1	LSD50	1			LSD 51	1	LSD 43	1	FFG 47	1				
LSD 45	1	FFG 57	1	LSD 51	1			FFG 55	1								
LSD 43	1	FFG 50	1					FFG 48	1								

P-I SHOPPING LIST

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENTAL SHEET - INSTALLATION DATA)														DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT										P-1 ITEM NOMENCLATURE AN/SPS-49A(V)1					
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 00								FY 01							
FFG 51	1	CVN 70	1	LHD 5	1			CV 63	1	FFG 61	1	CVN 74	1	FFG 54	1
CV 67	1	CVN 71	1	CVN 73	1					CVN 72	1			LHD 2	1
LHD 4	1	LHD 3	1							CVN 75	1				
FY 02 FY 03 MPU MOD KIT INSTALLATION DOES NOT REQUIRE AN INDUSTRIAL AVAILABILITY, THEREFORE INSTALLATION DATA SHOWN WILL NOT MATCH SHIPYARD AVAILABILITY DATA															
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

P-I SHOPPING LIST

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENTAL SHEET - INSTALLATION DATA)														DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT										P-1 ITEM NOMENCLATURE AN/SPS-49A(V)2					
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 96								FY 97							
MPU MOD KIT INSTALLATION DOES NOT REQUIRE AN INDUSTRIAL AVAILABILITY, THEREFORE INSTALLATION DATA SHOWN WILL NOT MATCH SHIPYARD AVAILABILITY DATA															
FY 98				FY 99											
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
														LHD 1 TRAINER	1 1

P-I SHOPPING LIST

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENTAL SHEET - INSTALLATION DATA)	DATE FEBRUARY 1997
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APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE AN/SPS-49A(V)2
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1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY														

FY 96								FY 97							
-------	--	--	--	--	--	--	--	-------	--	--	--	--	--	--	--

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

FY 98	MPU MOD KIT INSTALLATION DOES NOT REQUIRE AN INDUSTRIAL AVAILABILITY, THEREFORE INSTALLATION DATA SHOWN WILL NOT MATCH SHIPYARD AVAILABILITY DATA	FY 99
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1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY														

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

P-1 SHOPPING LIST

UNCLASSIFIED BUDGET ITEM JUSTIFICATION SHEET	DATE FEBRUARY 1997
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APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT					P-1 ITEM NOMENCLATURE AN/SYS-() (82KT/202705)			
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY								
COST (In Millions)	0.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0

THE AN/SYS-() INTEGRATED AUTOMATIC DETECTION AND TRACKING (IADT) SYSTEM PROVIDES THE CAPABILITY TO CORRELATE CONTACT DATA FROM UP TO THREE RADARS, DETERMINE TARGET TRACKS AND PROVIDE A SINGLE TRACK OUTPUT TO THE SHIPS'S COMMAND AND DECISION SYSTEM AUTOMATICALLY. THE NET RESULT IS IMPROVED REACTION TIME AND GREATER RESISTANCE TO DEGRADATION BY ELECTRONIC COUNTERMEASURES.

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.

BUDGET ITEM JUSTIFICATION SHEET							DATE February 1997																						
APPROPRIATION/BUDGET ACTIVITY OPN BA 2: COMMUNICATION AND ELECTRONICS					P-1 ITEM NOMENCLATURE MK 23 TARGET ACQUISITION SYSTEM (TAS) #203100																								
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																					
QUANTITY																													
COST <small>(In Millions)</small>	\$ 5.4	\$ 1.3	\$ 1.9	\$ 2.0	\$ 1.9	\$ 1.9	\$ 1.8	\$ 1.9																					
<p><u>MK 23 TAS Radar</u></p> <p>MK 23 TAS is 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 MK 23 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.</p> <p>The current inventory objective is 78 systems (62 OPN, 16 SCN).</p> <p>The MK 23 TAS system is installed as follows:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><u>With NATO SEASPARROW (AN/SWY-1)*</u></td> <td style="width: 33%;"><u>With RAM (MK 31 GMVLS) (AN/SWY-2)</u></td> <td style="width: 33%;"><u>Other (Training)</u></td> </tr> <tr> <td>31 - DD 963 Class Destroyers</td> <td>5 LHA Amphibious Assault Ships</td> <td>1 - NOS/L (AERP)</td> </tr> <tr> <td>12 - CV/CVN Class Aircraft Carriers</td> <td></td> <td>1 - SWEF, NSW/PHD</td> </tr> <tr> <td>7 - LHD Amphibious Assault Docks</td> <td></td> <td>2 - Trainer Dam Neck</td> </tr> <tr> <td>8 - AOE Auxiliaries</td> <td></td> <td></td> </tr> <tr> <td>1 - AOR Auxiliaries</td> <td></td> <td></td> </tr> <tr> <td>1 - Self Defense Test Ship</td> <td></td> <td></td> </tr> </table> <p>The MK 23 TAS integrates NATO SEASPARROW and RAM weapons systems with high-data-rate, medium-range air search radar and provides weapon control system for AAW self defense.</p>									<u>With NATO SEASPARROW (AN/SWY-1)*</u>	<u>With RAM (MK 31 GMVLS) (AN/SWY-2)</u>	<u>Other (Training)</u>	31 - DD 963 Class Destroyers	5 LHA Amphibious Assault Ships	1 - NOS/L (AERP)	12 - CV/CVN Class Aircraft Carriers		1 - SWEF, NSW/PHD	7 - LHD Amphibious Assault Docks		2 - Trainer Dam Neck	8 - AOE Auxiliaries			1 - AOR Auxiliaries			1 - Self Defense Test Ship		
<u>With NATO SEASPARROW (AN/SWY-1)*</u>	<u>With RAM (MK 31 GMVLS) (AN/SWY-2)</u>	<u>Other (Training)</u>																											
31 - DD 963 Class Destroyers	5 LHA Amphibious Assault Ships	1 - NOS/L (AERP)																											
12 - CV/CVN Class Aircraft Carriers		1 - SWEF, NSW/PHD																											
7 - LHD Amphibious Assault Docks		2 - Trainer Dam Neck																											
8 - AOE Auxiliaries																													
1 - AOR Auxiliaries																													
1 - Self Defense Test Ship																													

BUDGET ITEM JUSTIFICATION SHEET		DATE February 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OPN BA 2: COMMUNICATION AND ELECTRONICS	MK 23 TARGET ACQUISITION SYSTEM (TAS)	
<p><u>Engineering Changes/Ordance Alterations (KY006)</u> Engineering changes (software or hardware) and OrdAlts are procured in response to the Fleet concerns of the Combat Readiness (including safety and reliability) of the system. End of system production mandates re-use of reconditioned systems for new construction ships. In order to ensure the 72 systems in inventory are provided needed performance improvements, procurement of OrdAlts and engineering changes are required. These upgrades include the TAS Common Operational Computer Program (OCP), the Signal Processor ECP and the Coupler Asimuth Encoder OrdAlt, etc.</p> <p><u>Maintenance Facilities (KY007)</u> Provides engineering support for the computer program maintenance facility. Provides for the standard Configuration Management (CM) Program for MK 23 Post Production. Repair of the TAS at the organizational level calls for modular replacement with all other repair to be accomplished at the depot level. Documentation must be updated for ECPs, Vendor Part Identification and changes to Computer Program Maintenance/Certification Capabilities.</p> <p><u>Engineering Support (KY830)</u> Provide system engineering and technical services necessary to resolve operational problems of the system on deployed ships or land based facilities. Provide techncial assistance for identification and resolution of engineering problems. Engineering support is also associated with efforts for Engineering Changes (software and hardware), OrdAlt Improvements, etc. Engineering efforts will continue to be pro-rated between SCN and OPN based on ship requirements.</p> <p><u>Installation of Equipment (KY5IN)</u> Funding is for the installation of equipment including Fleet Modernization Program installations, installation of training equipment and installation of equipment in other shore facilities. Installation will be accomplished in a regular overhaul or a restricted availability, Naval Surface Warfare Center, Port Hueneme Division is the supporting agent.</p> <p>The budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>		

WEAPON SYSTEM COST ANALYSIS								February 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				
OPN BA2: COMMUNICATION AND ELECTRONICS					MK 23 TARGET ACQUISITION SYSTEM (TAS)				
ELEMENT OF COST (1)	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY96		FY97		FY98		FY99	
		QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
KY006 ECP/ORDALTS			1,145		366		713		682
KY007 MAINTENANCE FACILITIES			250		219		300		300
KY830 PRODUCTION ENGINEERING			1,395				400		400
KY900 CSS			154						
KY5IN INSTALLATION OF EQUIPMENT (FMP)			2,475		736		443		545
KYDSA DESIGN CHANGES							67		34
TOTAL			5,419		1,321		1,923		1,961

MODIFICATION TITLE: MK 23 TARGET ACQUISITION SYSTEM (TAS)												
MODELS OF SYSTEM AFEC Self Defense Surface Missile System (SDSMS) (SWY - 1/2)												
DESCRIPTION/JUSTIFICATIC Engineering Changes/OrdAlts (software or hardware) are procured in response to the fleet concerns of the Combat Readiness (including safety and reliability) of the MK23 TAS.												
DEVELOPMENT STATUS/MAJOR												
DEVELOPMENT MILESTONE Development is Complete												
		FY96										
		& PRIOR	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	TC	Total	
	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	
OPN												
PROCUREMENT		4.3	0.4	0.7	0.7	0.7	0.6	0.5	0.6		8.5	
Kit Quantity												
Installation Kits												
Installation Kits Nonrecurring												
Equipment -- (Various Ordalts)		4.3	0.4	0.7	0.7	0.7	0.6	0.5	0.6		8.5	
Equipment Nonrecurring												
Engineering Change Orders												
Data												
Training Equipment												
Support Equipment												
Other												
Interim Contractor Support												
Installation of Hardware												
(FY96 & Prior Equipment)		0.5									0.5	
(FY97 Various Ordalt)			0.7								0.7	
(FY98 Various Ordalt)				0.5							0.5	
(FY99 Various Ordalt)					0.5						0.5	
(FY00 Various Ordalt)						0.5					0.5	
(FY01 Various Ordalt)							0.5				0.5	
(FY02 Various Ordalt)								0.6			0.6	
(FY03 Various Ordalt)									0.6		0.6	
Total Installation Cost		0.5	0.7	0.5	0.5	0.5	0.5	0.6	0.6		4.4	
Total Procurement Cost		4.3	0.4	0.7	0.7	0.7	0.6	0.5	0.6		8.4	
Total Cost		4.8	1.1	1.2	1.2	1.2	1.1	1.1	1.2		12.8	
METHOD OF IMPLEMENTATION: * SEE B ADMINISTRATIVE LEADTIME: 6 MONTHS. PRODUCTION LEADTIME: 14 MONTHS.												
CONTRACT DATE: Current Year: Budget Year : Budget Year 2: N/A												
PRODUCTION DELIVER DAT Current Year: Budget Year : Budget Year 2: N/A												
INSTALLATION SCHEDULE:		<u>FY96 & PY</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>TC</u>	<u>TOTAL</u>	
INPUT =====>												
FY96 & Prior		Various									Various	
OUTPUT =====>												
FY96 & Prior		Various									Various	
NOTES: [1]: Installation is with Tiger Team or in regular overhaul or restricted availability												

MODIFICATION TITLE: MK23 TARGET ACQUISITION SYSTEM (TAS)																				
MODELS OF SYSTEM AFFECTED Self Defense Surface Missile System (SDSMS) (SWY - 1/2)																				
DESCRIPTION/JUSTIFICATION: MK23 TAS is a rapid reaction, fully automatic Electronic Counter Counter Measures (ECCM) capable radar system developed as the Target Acquisition System for the SDSMS used with NATO SEASPARROW and RAM Launching Systems. Production completed in FY93.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Development is Complete																				
		FY96																		
	Qty	<u>PRIOR</u>	Qty	<u>FY 97</u>	Qty	<u>FY 98</u>	Qty	<u>FY 99</u>	Qty	<u>FY 00</u>	Qty	<u>FY01</u>	Qty	<u>FY02</u>	Qty	<u>FY03</u>	Qty	<u>TC</u>	Qty	<u>Total</u>
OPN																				
PROCUREMENT	7	38.1																	7	38.1
Kit Quantity		[1]																		
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment -- (Various Ordalts)	7	38.1																	7	38.1
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
(FY96 & Prior Equipment)	7	19.6																	7	19.6
(FY97 Equipment)																			0	0.0
(FY98 Equipment)																			0	0.0
(FY99 Equipment)																			0	0.0
(FY00 Equipment)																				
Total Installation Cost	7	19.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0					7	19.6
Total Procurement Cost		38.1		0.0		0.0		0.0		0.0		0.0		0.0						38.1
Total Cost		57.7		0.0		0.0		0.0		0.0		0.0		0.0						57.7
METHOD OF IMPLEMENTATION: AIT/SHIP INSTL ADMINISTRATIVE LEADTIME: 9 MONTHS. PRODUCTION LEADTIME: 15 MONTHS																				
CONTRACT DATE: Current Year: Budget Year 1: Budget Year 2: N/A																				
PRODUCTION DELIVER DATE: Current Year: Budget Year 1: Budget Year 2: N/A																				
INSTALLATION SCHEDULE:																				
INPUT =====>		<u>FY96 & PY</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>TC</u>	<u>TOTAL</u>									
		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											
FY96 & Prior																				
		2 2 2 1																		7
OUTPUT =====>																				
FY96 & Prior		3 1 1 2																		7
NOTES: [1] Production of this system ended in FY93 with deliveries ending in FY96.																				

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TIME PHASED REQUIREMENT SCHEDULE																	DATE			
APPROPRIATION/BUDGET ACTIVITY																	P-1 ITEM NOMENCLATURE			
OPN BA 2: COMMUNICATIONS AND ELECTRONICS																	MK 23 TARGET ACQUISITION SYSTEM (TAS)			
	FY 95				FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. ACTIVE FORCE INVENTORY (P)		1				1														
2. SCN (P)								2	1		2									
3. SCHOOLS/OTHER TRAINING (P)		1						1												
4. OTHER (Self Def. Test Ship) (P)																				
5. TOTAL PHASED REQUIREMENT (C)	8	10	10	10	10	11	11	14	15	15	17									
6. ASSETS ON HAND (SCN/OPN) (BP)																				
7. DELIVERY FY 92 AND PRIOR, OPN (P)																				
The curren FY 92 AND PRIOR, OPN (P)																				
9. FY 93 OPN (2) (P)	2																			
10. FY 93 OPN (0) (P)																				
11. FY 94 OPN (0) (P)																				
12. FY 94 OPN (0) (P)																				
13.																				
14.																				
15. TOTAL ASSETS (C)	14	14	14	14	14	14	14	14	14	14	14									
16. QUANTITY OVER (+) OR SHORT (-)	6	4	4	4	4	3	3	0	-1	-1	-3									

REMARKS: Although #16 reflects -3 systems, there are sufficient TAS to satisfy requirements from decommissioned assets. 1/ Future SCN requirements will be satisfied from decommissioned assets.	TOTAL				FY 96 PRIOR		
	REQUIREMENT (QTY):	<u>REQD.</u>	<u>INSTALLED</u>	<u>ON HAND</u>	<u>UNDELIVERED</u>	<u>UNFUNDED</u>	<u>1/</u>
	APPN. - OPN	62	45	3	2	0	
	APPR. - SCN	16	16	2	2	0	
PROCUREMENT LEADTIME:		ADMNIS 9	INITIAL 18	REORDER 15			

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A											DATE February 1997				
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE/PROJECT UNIT								
OPN BA 2: COMMUNICATIONS AND ELECTRONICS							MK 23 TARGET ACQUISITION SYSTEM (TAS)								
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1996							FY 1997 1/								
O P N		AOE-1	1			ROTAE SPARE NOS/L	1								
						AOE-10 CVN-75	1 1	LHD-6	1			CVN-76 LHD	1 1		
S C N															
	FY 1998							FY 1999							
**															
O P N															
S C N															

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P-1 SHOPPING LIST

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ITEM PAGE NO.
NO. NO.
39 7

1/ Specific qtr for CVN-76 unknown. LPD's are not included pending decision on Combat System.

UNCLASSIFIED						DATE FEBRUARY 1997		
BUDGET ITEM JUSTIFICATION SHEET								
APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT						P-1 ITEM NOMENCLATURE RADAR SUPPORT (82KG/204000)		
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY								
COST (In Millions)	13.9	15.7	1.7	1.3	1.1	1.3	1.4	1.4
<p>AN/BPS RADAR AND UPGRADE KITS - PROVIDE FOR UPGRADES TO IMPROVE RELIABILITY AND MAINTAINABILITY AND RESOLVE CRITICAL PROBLEMS IN THE SUBMARINE RADAR.</p> <p>AN/SPA-25() MODS - THIS SERIES OF IMPROVEMENTS WILL INCREASE OPERATIONAL CAPABILITY, ACCURACY AND RELIABILITY.</p> <p>AN/SPA-25() RADAR REPEATERS - PROVIDE THE NAVY WITH LOW COST REPLACEMENT FOR SPA-4,8,25,34 AND 66 DISPLAYS NOW IN EXISTENCE, WHICH USE THE VACUUM TUBE TECHNOLOGY AND ARE BECOMING UNECONOMICAL TO REPAIR. PROGRAM WILL UTILIZE TECHNOLOGY ALREADY AVAILABLE TO INDUSTRY. THE AN/SPA-25() IS SOLID STATE, HAS A MUCH GREATER MEAN-TIME-BETWEEN-FAILURE (MTBF), REDUCED MEAN-TIME-TO-REPAIR (MTTR), AND INCREASED ACCURACY. THE TOTAL QUANTITY TO REPLACE ALL ANALOG RADAR INDICATORS PRESENTLY IN THE FLEET WITH THE DIGITAL AN/SPA-25G IS 1,993 AT AN ESTIMATED COST OF \$55K EACH, OR A TOTAL COST OF \$109.6M. ONE THOUSAND THREE HUNDRED EIGHTY-FIVE (1,385) UNITS HAVE BEEN PROCURED IN PRIOR YEARS AND 21 UNITS WILL BE PROCURED IN FY 96, LEAVING 587 UNITS TO BE PROCURED IN SUBSEQUENT YEARS.</p> <p>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 (OVER 20 YEARS) SWITCHBOARDS CURRENTLY INSTALLED IN THE FLEET.</p> <p>MISC SPS FIELD CHANGES - RELIABILITY, MAINTAINABILITY FIELD CHANGES TO UPGRADE OPERATIONAL RADAR EQUIPMENTS AND TO ADDRESS THE REPLACEMENT OF OBSOLETE COMPONENTS.</p> <p>MISC SPA FIELD CHANGES - RELIABILITY, MAINTAINABILITY FIELD CHANGES TO UPGRADE OPERATIONAL RADAR DISPLAYS AND ADDRESS THE REPLACEMENT OF OBSOLETE COMPONENTS.</p> <p>AMPLIFIER 7115/7116-PROVIDE A SOLID STATE REPLACEMENT FOR VACUUM TUBE TYPE TRIGGER/VIDEO AMPLIFIER TO IMPROVE RELIABILITY AND MAINTAINABILITY.</p> <p>AN/SPS-73(V) RADAR - PROVIDES REPLACEMENT RADAR FOR AN/SPS-10/55//64/67(V)1 RADARS ON ALL SHIP CLASSES.</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> <p>THE BUDGET REFLECTS THE TRANSFER OF DESIGN SERVICES INTO THE APPROPRIATE EQUIPMENT P-1 LINE ITEM BEGINNING IN FY 1998.</p>								

UNCLASSIFIED						WEAPON SYSTEM COST ANALYSIS				DATE	
						FEBRUARY 1997					
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE							
OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT				RADAR SUPPORT (82KG/204000)							
ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS									
		FY 96		FY 97		FY 98		FY 99			
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST		
SUBMARINES (N-87)											
KG015 AN/BPS RADAR, UPGRADE KITS	A	35	8,648	23	15,465						
KG900 CONSULTING SERVICES	A		148		200						
SURFACE SHIPS (N-86)											
KG003 AN/SPA-25 MODS (VARIOUS)	A		350								
KG005 AN/SPA-25() REPEATERS	A	21	1,152								
KG009 RADAR SWITCHBOARD UPGRADE	A		482								
KG014 MISC SPS FIELD CHANGES	A		200								
KG016 MISC SPA FIELD CHANGES	A		1,364								
KG017 AMPLIFIER 7115/7116	A										
KG018 AN/SPS-73(V) RADAR	A					7	973	5	722		
KG830 PRODUCTION ENGINEERING	A		250				195		150		
KG840 QUALITY ASSURANCE	A		250								
KG850 PRODUCT IMPROVEMENT	A		311								
KG860 ACCEPTANCE TEST & EVALUATION	A		250								
KG901 CONSULTING SERVICES	A						95		80		
KGDSA DESIGN AGENT	A						34		30		
KG5IN INSTALLATION OF EQUIPMENT (FMP)	A		453				411		307		
TOTAL			13,858		15,665		1,708		1,289		

APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE RADAR SUPPORT (82KG/204000)
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LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQD	IF YES, WHEN AVAILABLE
<u>KG005 AN/SPA-25 REPEATERS</u>										
FY 1996	SECHAN - LITITZ, PA	C/FP(OPT)	NAVSEA	07/96	07/97	9	44,417	YES	NO	
FY 1996	SECHAN - LITITZ, PA	C/FP(OPT)	NAVSEA	04/97	04/98	12	62,687	YES	NO	
<u>KG015 AN/BPS RADAR UPGRADE KITS</u>										
*FY 1996	RSI-LARGO, FL	SS/FP	NAVSEA	06/96	09/97	31	153,106	YES	NO	
**FY 1996	SPERRY-CHARLOTTESVILLE, VA	SS/FP	NAVSEA	06/96	11/97	4	975,040	YES	NO	
**FY 1997	SPERRY-CHARLOTTESVILLE, VA	SS/FP	NAVSEA	02/97	04/98	23	672,391	YES	NO	
<u>KG018 AN/SPS-73(V) RADAR</u>										
FY 1998	HUGHES-FULLERTON, CA	SS/FP	USCG	01/98	04/98	7	139,000	YES	NO	
FY 1999	HUGHES-FULLERTON, CA	SS/FP	USCG	01/99	04/99	5	144,000	YES	NO	

*FY 1996 PROCUREMENT OF AN/BPS-15H RADAR KITS
 **FY 1996 & 1997 PROCUREMENT OF AN/BPS-16(V)4 RADAR KITS.

INDIVIDUAL MODIFICATION

UNCLASSIFIED

P-1 ITEM NOMENCLATURE

RADAR SUPPORT

FEBRUARY 1997

MODIFICATION TITLE:

AN/SPA-25 RADAR REPEATERS

MODELS OF SYSTEMS AFFECTED:

AN/SPA-25 ()

DESCRIPTION/JUSTIFICATION:

PROVIDE LOW COST RM&A REPLACEMENT OF SPA-4,8,25,34&66 REPEATERS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE:

N/A

FINANCIAL PLAN:(\$in Millions)	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL			
	Qty	\$	Qty	\$	Qty	\$																
RDT&E	NONE																					
PROCUREMENT																			0	0.0		
Quantity																			0	0.0		
Installation Kits																			0	0.0		
Installation Kit Nonrecurring																			0	0.0		
Equipment	77	5.8																			77	5.8
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		
Interim Contractor Support																			0	0.0		
Installation of Hardware																			0	0.0		
FY 96 & Prior Equipment (56)	77	2.7																			77	2.7
FY 97 Equipment																			0	0.0		
FY 98 Equipment																			0	0.0		
FY 99 Equipment																			0	0.0		
FY 00 Equipment																			0	0.0		
FY 01 Equipment																			0	0.0		
FY 02 Equipment																			0	0.0		
To Complete																			0	0.0		
Total Installation Cost	77	2.7	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	77	2.7	
Total Procurement Cost			5.8	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	5.8		
Total Cost			8.5	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	0.0	0.0	0.0	8.5		

METHOD OF IMPLEMENTATION: Contractor

Administrative Leadtime: N/A

Production Leadtime: N/A

CONTRACT DATE:

Prior Year: 6/96

Current Year: N/A

Budget Year: N/A

Budget Year + 1: N/A

DELIVERY DATE:

Prior Year: 6/97

Current Year: N/A

Budget Year: N/A

Budget Year + 1: N/A

INSTALLATION SCHEDULE:

	FY 96		FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	To Complete	TOTAL
	& Prior										
INPUT	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	1 2 3 4	
FY 96&Prior	18 20 20 19										77
FY 97											
FY 98											
FY 99											
FY 00											
FY 01											
FY 02											
To Complete											Total= 77
OUTPUT											
FY 96&Prior	18 20 20 19										77
FY 97											
FY 98											
FY 99											
FY 00											
FY 01											
FY 02											
To Complete											Total= 77

INDIVIDUAL MODIFICATION

UNCLASSIFIED

P-1 ITEM NOMENCLATURE

RADAR SUPPORT

FEBRUARY 1997

MODIFICATION TITLE:

AN/SPS-73(V) RADAR

MODELS OF SYSTEMS AFFECTED:

AN/SPS-73(V) RADAR

DESCRIPTION/JUSTIFICATION:

PROVIDE REPLACEMENT RADAR FOR AN/SPS-10/55/64/67(V)1 RADARS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE:

N/A

FINANCIAL PLAN:(\$in Millions)	FY 96 & PRIOR		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL																
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$															
RDT&E	NONE																																		
PROCUREMENT																				0	0.0														
Quantity																				0	0.0														
Installation Kits																				0	0.0														
Installation Kit Nonrecurring																				0	0.0														
Equipment																				7	1.0	5	0.7	4	0.6	5	0.8	5	0.8	5	0.8	289	49.4	320	54.0
Equipment Nonrecurring																				0	0.0														
Engineering Change Orders																				0	0.0														
Data																				0	0.0														
Training Equipment																				0	0.0														
Support Equipment																				0	0.0														
Other																				0	0.0														
Interim Contractor Support																				0	0.0														
Installation of Hardware																				0	0.0														
FY 96 & Prior Equipment																				0	0.0														
FY 97 Equipment																				0	0.0														
FY 98 Equipment (7)																				7	0.4														
FY 99 Equipment (5)																				5	0.3														
FY 00 Equipment (4)																				4	0.3														
FY 01 Equipment (5)																				5	0.3														
FY 02 Equipment (5)																				5	0.3														
FY 03 Equipment (5)																				5	0.3														
To Complete (289)																				289	17.3	289	17.3												
Total Installation Cost	0	0.0	0	0.0	7	0.4	5	0.3	4	0.3	5	0.3	5	0.3	5	0.3	289	17.3	289	17.3	320	19.0													
Total Procurement Cost	0.0		0.0		1.0		0.7		0.6		0.8		0.8		0.8		49.4		54.0																
Total Cost	0.0		0.0		1.3		1.0		0.9		1.0		1.1		1.1		66.7		73.0																

METHOD OF IMPLEMENTATION: Contractor

Administrative Leadtime: 6 Mos

Production Leadtime: 3 Mos

CONTRACT DATE:

Prior Year: N/A

Current Year: N/A

Budget Year: 1/98

Budget Year + 1:1/99

DELIVERY DATE:

Prior Year: N/A

Current Year: N/A

Budget Year: 4/98

Budget Year + 1: 4/99

INSTALLATION SCHEDULE:

INPUT	FY 96				FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				To Complete				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	1	2	3	4
FY 96&Prior																																				
FY 97																																				
FY 98																																				
FY 99																																				
FY 00																																				
FY 01																																				
FY 02																																				
FY 03																																				
To Complete																																				
OUTPUT																																				
FY 96&Prior																																				
FY 97																																				
FY 98																																				
FY 99																																				
FY 00																																				
FY 01																																				
FY 02																																				
FY 03																																				
To Complete																																				
Total=																																		289	289	320

NOTES:

**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENTAL SHEET - INSTALLATION DATA)**

DATE FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE					
OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT										RADAR SUPPORT (82KG) - AN/SPS-73(V) RADAR (KG018)					
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 96								FY 97							
FY 98								FY 99							
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
		CG 52	1	DDG 52	1	MCM 1	1			CG 55	1	LHD 2	1		
		CV 63	1	LHD 4	1					CG 59	1	LSD 43	1		
		DD 974	1	LPD 14	1					CV 64	1				

P-1 SHOPPING LIST

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENTAL SHEET - INSTALLATION DATA)													DATE			FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE										
OPN/BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT								RADAR SUPPORT (82KG) - AN/SPS-73(V) RADAR (KG018)										
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 00								FY 01										
		CVN 68	1	DD 972	1					CG 54	1	DDG 51	1					
		CVN 70	1	DDG 64	1					DD 963	1	LPD 10	1					
										DD 979	1							
FY 02								FY 03										
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			
		CG 53	1	DDG 54	1					CG 49	1	DD 964	1					
		CVN 67	1	LSD 42	1					CG 66	1	DDG 53	1					
		DD 980	1							CVN 69	1							

P-I SHOPPING LIST

BUDGET ITEM JUSTIFICATION SHEET				DATE: FEBRUARY 1997																																		
APPROPRIATION/BUDGET ACTIVITY BA2 Communication and Electronics Equipment			P-1 ITEM NOMENCLATURE SURFACE ELECTRO OPTICS (TISS) 12KC--2042																																			
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03																														
QUANTITY																																						
COST (in millions)	\$8.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0																														
<p>DESCRIPTION: This program procures the Electro-Optic (EO) capabilities for improvement of Integrated Ship Defense (ISD) System against air Anti-Ship Missile Defense and surface (mine and small boat attack) threats. Beginning with the FY-1998 budget submission the Thermal Imaging Sensor System (TISS) will be budgeted in a new line item titled TISS PROCUREMENT.</p> <p>In FY-1995, \$2.4M was utilized to prepare ship installation drawings applicable to a total of nine ship classes (12 FFG, 27 DD/DDG, 27 CG, 12 LSD, 7 LHD, 5 LHA, 8 AOE, and 11 CV/CVN). The TISS systems will be installed by Tiger Team prior to ship deployment. The TISS is an NDI procurement which was funded from RDT & E,N FY-1995 Program Element 0604755N, Project U0665 IRST at a contractual cost of \$3.0M. The date of limited approval for service use was approved in August 1996.</p> <p>KC001--The FY 96 program consists of procurement of seven Thermal Imaging Sensor Systems and associated production support utilizing a Congressional add-on. In consonance with the Navy plan and approved Operational Requirement document (ORD) 410-86-95, TISS will be procured for all ship classes.</p> <p>No procurement of TISS is budgeted in this line item in FY-97 and subsequent years. In FY-98 a new line item titled TISS PROCUREMENT (2043) has been established.</p> <p>The TISS is a lightweight, state-of-the-art imaging/laser system manufactured by McDonnell Douglas Aircraft, Huntington Beach, California. The initial 24 TISS will be used as a rotatable asset and will be crossdecked from ship-to-ship with follow-on units planned for permanent installation.</p> <p>Consulting Services</p> <p>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> <p>CURRENT DEVELOPMENT AND TEST STATUS</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2" style="text-align: center;">SCHEDULE DATE</th> </tr> <tr> <th style="text-align: center;">CURRENT</th> <th style="text-align: center;">LAST REPORTED</th> <th style="text-align: center;">REASON FOR DELAY</th> </tr> </thead> <tbody> <tr> <td>a. DEV TEST & EVAL (DT&E)</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">N/A</td> <td></td> </tr> <tr> <td>b. INITIAL OPER TEST & EVAL (IOT&E)</td> <td style="text-align: center;">7/93</td> <td style="text-align: center;">7/93</td> <td></td> </tr> <tr> <td>c. OPER TEST & EVAL (OT&E)</td> <td style="text-align: center;">4/96</td> <td style="text-align: center;">4/96</td> <td></td> </tr> <tr> <td>d. AVAIL DATE OF PERFORMANCE SPECIFICATIONS</td> <td style="text-align: center;">5/95</td> <td style="text-align: center;">5/95</td> <td></td> </tr> <tr> <td>e. LRIP</td> <td style="text-align: center;">8/96</td> <td style="text-align: center;">8/96</td> <td></td> </tr> <tr> <td>f. APPROVAL FOR SERVICE USE</td> <td style="text-align: center;">3/97</td> <td style="text-align: center;">3/97</td> <td></td> </tr> </tbody> </table> <p>An Engineering Test Unit (ETU) performance test was successfully completed aboard the PEO(TAD) Self Defense Test Ship in May 1996. All detection parameters for floating mines, small crafts, and aircraft were demonstrated successfully. Maintenance demonstration and suitability testing were also successfully conducted on the USS TICONDEROGA during the first quarter of FY 97.</p>										SCHEDULE DATE		CURRENT	LAST REPORTED	REASON FOR DELAY	a. DEV TEST & EVAL (DT&E)	N/A	N/A		b. INITIAL OPER TEST & EVAL (IOT&E)	7/93	7/93		c. OPER TEST & EVAL (OT&E)	4/96	4/96		d. AVAIL DATE OF PERFORMANCE SPECIFICATIONS	5/95	5/95		e. LRIP	8/96	8/96		f. APPROVAL FOR SERVICE USE	3/97	3/97	
	SCHEDULE DATE																																					
	CURRENT	LAST REPORTED	REASON FOR DELAY																																			
a. DEV TEST & EVAL (DT&E)	N/A	N/A																																				
b. INITIAL OPER TEST & EVAL (IOT&E)	7/93	7/93																																				
c. OPER TEST & EVAL (OT&E)	4/96	4/96																																				
d. AVAIL DATE OF PERFORMANCE SPECIFICATIONS	5/95	5/95																																				
e. LRIP	8/96	8/96																																				
f. APPROVAL FOR SERVICE USE	3/97	3/97																																				

UNCLASSIFIED

COST ANALYSIS						A. DATE: FEBRUARY 1997			
B. APPROPRIATION/BUDGET ACTIVITY BA2 Communication and Electronics Equipment					C. P-1 ITEM NOMENCLATURE SURFACE ELECTRO OPTICS (TISS) 12KC--2042				
ELEMENT OF COST (1)	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY 96		FY 97		FY 98		FY 99	
		QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
KC001 Thermal Imaging Sensor System (TISS)	B	7	3850				*		
KC830 Contractor Production Support			1030						
KC830 In-House Production Support			2500						
KC900 CSS Consulting Services			900						
TOTAL			8280						
* Program moves into line item 2043									

PROCUREMENT HISTORY & PLANNING					A. DATE: FEBRUARY 1997					
B. APPROPRIATION/BUDGET ACTIVITY OPN BA2 Communication and Electronics Equipment					C. P-1 ITEM NOMENCLATURE SURFACE ELECTRO OPTICS (TISS) 12KC--2042					
LINE ITEM/ FISCAL YEAR	CONTRACTOR LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW?	SPECS REVISIONS REQUIRED?	IF YES WHEN AVAILABLE
KC001 FY 96	McDONNELL- DOUGLAS	SS/FP	NAVSEA	MARCH 97 OPTION EXERCISE	MARCH 98	7	550	YES	NO	
The unit cost above is the contract negotiated price for this NDI procurement.										

THERMAL IMAGING SENSOR SYSTEM (TISS)

THE INVENTORY OBJECTIVE IS 116 TISS UNITS

MODIFICATION TITLE:

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 96 &		FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
	QTY	PRIOR											
FINANCIAL PLAN (IN MILLIONS)													
<i>RD&E</i>	1	6.0										1	6.0
<i>PROCUREMENT</i>													
QUANTITY	12	0	0	0	0	0	0	0	0	104		116	
INSTALLATION KITS													
INSTALLATION KITS NONRECURRING													
EQUIPMENT	12	6.5	0	0.0	0	0.0	0	0.0	0	0.0	0	104	130.6
EQUIPMENT NONRECURRING													0
ENGINEERING CHANGE ORDERS													0
UNIT COST DATA OF EQUIPMENT		0.54											
TRAINING EQUIPMENT													0
SUPPORT EQUIPMENT													0
OTHER		8.8											8.8
INTERIM CONTRACTOR SUPPORT													0

NOTE INSTALL OF THESE SYSTEMS IS FUNDED IN THE LINE ITEM TITLED TISS PROCUREMENT 12UT--2043

INSTALLATION OF HARDWARE

FY96 EQUIPMENT & PRIOR		0	0										0	0.0
FY97 EQUIPMENT			0	0									0	0.0
FY98 EQUIPMENT				0	0.00								0	0.0
FY99 EQUIPMENT					0	0.00							0	0.0
FY00 EQUIPMENT						0	0.00						0	0.0
FY01 EQUIPMENT							0	0.00				0	0	0.0
FY02 EQUIPMENT													0	0.0
FY03 EQUIPMENT													0	0.0
TO COMPLETE										104	21.1	104	21.1	
TOTAL INSTALLATION COST		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		21.1	0	21.1	
TOTAL PROCUREMENT COST		15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	104.0	130.6
TOTAL COST		15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	151.7	116
METHOD OF IMPLEMENTATION: SHIPYARD/TIGER TEAM ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: 12 MONTHS														
CONTRACT DATE: PRIOR YEAR: MARCH 97 CURRENT YEAR: N/A BUDGET YEAR: N/A BUDGET YEAR 2: N/A														
PRODUCTION DELIVER DATE: PRIOR YEAR: MARCH 98 CURRENT YEAR: N/A BUDGET YEAR: N/A BUDGET YEAR 2: N/A														

INSTALLATION SCHEDULE:

INPUT =====>	FY97	FY98	FY99	FY00	FY01	FY02	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	
AIT INSTALLATIONS								
FY96 EQUIPMENT & PRIOR		00,00,00,00						0
FY97 EQUIPMENT								0
FY98 EQUIPMENT			00,00,00,00					0
FY99 EQUIPMENT				00,00,00,00				0
FY00 EQUIPMENT					00,00,00,00			0
FY01 EQUIPMENT						00,00,00,00		0
FY02 EQUIPMENT								0
FY03 EQUIPMENT								0
To Complete							0	0
TOTAL								0
OUTPUT =====>	FY97	FY98	FY99	FY00	FY01	FY02	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	
FY96 EQUIPMENT & PRIOR		00,00,00,00						0
FY97 EQUIPMENT								0
FY98 EQUIPMENT			00,00,00,00					0
FY99 EQUIPMENT				00,00,00,00				0
FY00 EQUIPMENT					00,00,00,00			0
FY01 EQUIPMENT						00,00,00,00		0
FY02 EQUIPMENT								0
FY03 EQUIPMENT								0
To Complete							0	0
TOTAL								0

UNCLASSIFIED							REQUIREMENTS STUDY -INSTALLED NONCONSUMABLES		DATE FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN/BA-2 COMMUNICATION & ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE SURFACE ELECTRO OPTICS 12KC			
ITEM	TOTAL I.O./ REQUIREMENT	QUANTITY ON HAND NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 & PRIOR FUNDS FY95 FY-96	QUANTITY DUE IN WITH FY 97	PLANNED 98/99 BUDGET YEAR PROCUREMENT	BALANCE	PHASING RATIONAL	
KC001 THERMAL IMAGING SENSOR SYSTEM(TISS)	116			5 7		0	104	FUNDING CONSTRAINT	
MEMO ENTRIES									
ITEM #1 THE FIRST TWENTY-FOUR TISS UNITS WILL BE ROTATED FROM SHIP TO SHIP ON NINE SHIP CLASSES CONSISTING OF 12 FFG, 27 DD/DDG, 27 CG, 12 LSD, 7 LHD, 5 LHA, 8 AOE, 7 TRAINING UNITS AND 11 CV/CVNs FOR A TOTAL OF 116 SYSTEMS. UNITS #25 AND SUBSEQUENT WILL BE PERMANENTLY INSTALLED.	ITEM #2	ITEM #3			ITEM #4	ITEM #5			
ITEM #5	ITEM #7	ITEM #8			ITEM #9	ITEM #10			

P1 SHOPPING LIST

BUDGET ITEM JUSTIFICATION SHEET

DATE:

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

BA-2: Communication and Electronics Equipment

TISS PROCUREMENT 12UT-2043

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY								
COST (in millions)	\$0.0	\$0.0	\$13.7	\$18.6	\$6.1	\$13.2	\$8.2	\$5.1

DESCRIPTION: Funds are requested to acquire Electro-Optic (EO) capabilities for improvement of Integrated Ship Defense (ISD) System against air Anti-Ship Missile Defense and surface (mine and small boats) (12 FFG, 27 DD/DDG, 27 CG, 12 LSD, 7 LHD, 5 LHA, 8 AOE, and 11 CV/CVN). The TISS systems will be installed by Tiger Team prior to ship deployment. The TISS is an NDI procurement which was developed in FY-95 RDT &EN, Program Element 0604755N, Project U0665 IRST at a contractual cost of \$3.0M. The date of limited approval for service use was approved in August 1996 with approval for full rate production planned for March 1997.

UT001--The FY 98 program consists of procurement of thirteen Thermal Imaging Sensor Systems and associated production support.

UT001--The FY 99 program consists of procurement of twenty Thermal Imaging Sensor Systems and associated production support.

The TISS is a lightweight, state-of-the-art imaging/laser system manufactured by McDonnell Douglas Aircraft, Huntington Beach, California. The initial 24 TISS will be used as a rotatable asset and will be crossdecked from ship-to-ship. The follow-on units will be permanently installed aboard the above listed ship classes and 7 units will be installed at two training sites and other Navy facilities.

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.

This budget request reflects the transfer of Design Support Services into the appropriate P-1 line item beginning in FY 1998.

* FY-1996 program funded in Surface Electro Optics line item # 41.

CURRENT DEVELOPMENT AND TEST STATUS

- a. DEV TEST & EVAL (DT&E)
- b. INITIAL OPER TEST & EVAL (IOT&E)
- c. OPER TEST & EVAL (OT&E)
- d. AVAIL DATE OF PERFORMANCE SPECIFICATIONS
- e. LRIP
- f. APPROVAL FOR SERVICE USE

SCHEDULE DATE		
CURRENT	LAST REPORTED	REASON FOR DELAY
N/A	N/A	
7/93	7/93	
4/96	4/96	
5/95	5/95	
8/96	8/96	
3/97	3/97	

An Engineering Test Unit (ETU) performance test was successfully completed aboard the PEO(TAD) Self Defense Test Ship in May 1996. All detection parameters for floating mines, small crafts, and aircraft were demonstrated successfully. Maintenance demonstration and suitability testing were also successfully conducted on the USS TICONDEROGA during the first quarter of FY 97.

UNCLASSIFIED

COST ANALYSIS						A. DATE: FEBRUARY 1997			
B. APPROPRIATION/BUDGET ACTIVITY BA2 Communication and Electronics Equipment					C. P-1 ITEM NOMENCLATURE TISS PROCUREMENT 12UT-2043				
ELEMENT OF COST (1)	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY 96		FY 97		FY 98		FY 99	
		QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
UT001 Thermal Imaging Sensor System (TISS)	B	7	3850			13	8294	20	13000
UT830 Contractor Production Support			1030				1086		1389
UT830 In-House Production Support			2500				1275		1375
UT900 CSS Consulting Services			900				600		618
UTDSA Design Support Services							547		303
UT5IN Installation of Eqpt. - FMP							1901		1568
UT6IN Installation of Eqpt. - NON FMP									338
TOTAL			8280 *		0		13703		18591
* FY-96 program is funded in line item 2042.									

UNCLASSIFIED

PROCUREMENT HISTORY & PLANNING					A. DATE: FEBRUARY 1997					
B. APPROPRIATION/BUDGET ACTIVITY OPN BA2 Communication and Electronics Equipmen					C. P-1 ITEM NOMENCLATURE TISS PROCUREMENT 12UT-2043					
LINE ITEM/ FISCAL YEAR COST CODE	CONTRACTOR LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW?	SPECS REVISIONS REQUIRED?	IF YES WHEN AVAILABLE
FY 96 KC001	McDONNELL DOUGLAS	SS/FP	NAVSEA	MAR 1997 (OPTION EXERCISE)	MAR 1998	7	550	YES	NO	
FY 98 UT001	McDONNELL DOUGLAS	SS/FP	NAVSEA	OCT 1997 (OPTION EXERCISE)	OCT 1998	13	638	YES	NO	
FY 99 UT001	McDONNELL DOUGLAS	SS/FP	NAVSEA	JAN 1999	JAN 2000	20	650	YES	NO	
D. REMARKS: The FY96 units are funded in the Surface Electro Optics Program line item 204200. The FY-98 & prior unit costs above are the contract negotiated prices for this NDI procurement.										

UNCLASSIFIED

THERMAL IMAGING SENSOR SYSTEM (TISS)

MODIFICATION TITLE:

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 96 &															TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
	QTY	PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY				
FINANCIAL PLAN (IN MILLIONS)																			
RDT&E	1	6.0																1	6.0
PROCUREMENT																			
QUANTITY	* 12	0	13		20	0	15	5	2	49	34.3	116							
INSTALLATION KITS																			
INSTALLATION KITS NONRECURRING																			
EQUIPMENT	* 12	6.3	0	0.0	13	8.3	20	13.0	0	0.0	15	10.1	5	3.4	2	1.4	49	24.2	116
EQUIPMENT NONRECURRING																			0
ENGINEERING CHANGE ORDERS																			0
DATA																			0
OTHER		8.8		0.0		3.0		3.4		2.7		2.4		2.1		2.3		10.1	0
INTERIM CONTRACTOR SUPPORT																			0

* THE FY-95/96 PROCUREMENTS WERE FUNDED IN SURFACE ELECTRO OPTICS LINE ITEM AND ARE SHOWN FOR INFORMATION .

INSTALLATION OF HARDWARE																				
	QTY	PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY-03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
* THE FY-95/96 PROCUREMENTS WERE FUNDED IN SURFACE ELECTRO OPTICS LINE ITEM AND ARE SHOWN FOR INFORMATION .																				
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR					12	2.45													12	2.4
FY97 EQUIPMENT																			0	0.0
FY98 EQUIPMENT						13	2.21												13	2.2
FY99 EQUIPMENT								20	3.39										20	3.4
FY00 EQUIPMENT										0	0.72								0	0.7
FY01 EQUIPMENT												15	2.70						15	2.7
FY02 EQUIPMENT														5	1.45				5	1.4
FY03 EQUIPMENT																	51	9.69	51	9.7
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST		0.0		0.0		2.45		2.21		3.39		0.72		2.70		1.45		9.69	0	22.6
TOTAL PROCUREMENT COST	12	15.0	0	0.0	13	11.3	20	16.4	0	2.7	15	12.4	5	5.5	2	3.7	49	34.3	116	101.3
TOTAL COST		15.0		0.0		13.7		18.6		6.1		13.2		8.2		5.1		44.0		123.9

METHOD OF IMPLEMENTATION: SHIPYARD/TIGER TEAM

ADMINISTRATIVE LEADTIME: N/A

PRODUCTION LEADTIME: 12 MONTHS

CONTRACT DATE: PRIOR YEAR: MAR 1997

CURRENT YEAR: N/A

BUDGET YEAR: OCT 1997

BUDGET YEAR 2: JAN 1999

PRODUCTION DELIVER DATE: PRIOR YEAR: MAR 1998

CURRENT YEAR: N/A

BUDGET YEAR: OCT 1998

BUDGET YEAR 2: JAN 2000

INSTALLATION SCHEDULE:

INPUT =====>	QTY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	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	
AIT INSTALLATIONS										
FY96 EQUIPMENT & PRIOR	* 12		04,04,04,00							12
FY97 EQUIPMENT	0									0
FY98 EQUIPMENT	13			04,04,03,02						13
FY99 EQUIPMENT	20				00,05,07,08					20
FY00 EQUIPMENT	0					00,00,00,00				0
FY01 EQUIPMENT	15						05,05,05,00			15
FY02 EQUIPMENT	5							05,00,00,00		5
FY03 EQUIPMENT	2								02,00,00,00	2
To Complete	49								49	49
TOTAL										116

OUTPUT =====>	QTY	FY97	FY98	FY99	FY00	FY01	FY02	FY03	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	
FY96 EQUIPMENT & PRIOR	* 12		04,04,04,00							12
FY97 EQUIPMENT	0									0
FY98 EQUIPMENT	13			04,04,03,02						13
FY99 EQUIPMENT	20				00,05,07,08					20
FY00 EQUIPMENT	0					00,00,00,00				0
FY01 EQUIPMENT	15						05,05,05,00			15
FY02 EQUIPMENT	5							05,00,00,00		5
FY03 EQUIPMENT	2								02,00,00,00	2
To Complete	49								49	49
TOTAL										116

UNCLASSIFIED

REQUIREMENTS STUDY -INSTALLED NONCONSUMABLES

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

ITEM	TOTAL I.O./ REQUIREMENT	QUANTITY ON HAND NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY 97	PLANNED 98/99 BUDGET YEAR PROCUREMENT		BALANCE	PHASING RATIONAL
						FY98	FY99		
SYSTEM(TISS)	116			12	0	13	20	71	FUNDING CONSTRAINT
*PROCUREMENT OF TISS WAS FUNDED IN LINE ITEM TITLED SURFACE ELECTREO OPTICS NR. 2042									

MEMO ENTRIES

ITEM #1	ITEM #2	ITEM #3	ITEM #4	ITEM #5
THE FIRST TWENTY-FOUR TISS 8 AOE, 7 TRAINING UNITS AND 11 BE PERMANENTLY INSTALLED.				
ITEM #5	ITEM #7	ITEM #8	ITEM #9	ITEM #10

P1 SHOPPING LIST

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BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY/ BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					SURFACE SONAR SUPPORT EQUIPMENT - 82WA BUDGET LINE ITEM - 213000 & 213005			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$20.8	\$6.7	\$3.8	\$5.5	\$0.8	\$0.0	\$0.0	\$0.0
<p>1. AN/SQS-53A EC-16, (WA031). 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 number of EC-16 installations planned is 14 (CG 47-55 (9), DDG 993 Class (4) and one Trainer). The first production EC-16 installation occurred in late FY 96.</p> <p>2. PRODUCTION SUPPORT, (WA830-WA983). Provides essential system engineering, quality assurance, acceptance test and evaluation, technical data, technical documentation and integrated logistics management support for the AN/SQS-53A EC-16 program.</p>								

P-1 SHOPPING LIST

Page 1 of 2 Pages

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ITEM NO. 43 PAGE NO. 1

Exhibit P-40 Budget Item Justification Sheet

NAVCOMPT061796.0

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BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE SURFACE SONAR SUPPORT EQUIPMENT - 82WA BUDGET LINE ITEM - 213000 & 213005	
<p>3. INSTALLATION OF EQUIPMENT. FMP INSTALLATION (WA5IN) funding is for the installation of equipment by AIT (Alteration Installation Team) on FFG 7 Class, DDG 993 Class and CG 47-55. Installation began in FY 1995 and will complete in FY 2000.</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>- Modifications: Miscellaneous ECs for AN/SQS-56 to be installed on FFG 7 Class ships. Specific ships currently to be determined during quarterly scheduling conference for Persian Gulf Deployers.</p> <p>EC-16, a digital upgrade to the AN/SQS-53A sonar, to be installed on CG 47-55, DDG 993-996 and at FLEASWTRACEN in FY96-99.</p> <p>SWAK - Shallow Water Active Kit to be installed on the FFG-7 CORT (Coherent Receiver Transmission) ships in FY 95-97 and FY 00. This includes all prerequisite ECs required for SWAK installations as well as Charnav systems, chart updates and interactive training EC.</p>		

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)								DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD SURFACE SONAR SUPPORT EQUIPMENT - 82WA BUDGET LINE ITEM - 213000 & 213005							
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
WA001	CANCELLED ACCT VOUCHER PAYMENT	A		254		0		0		0	
WA031	AN/SQS-53A EC-16	A	10	12,102		0		0		0	
WA830	PRODUCTION ENGINEERING	A		1,789		1,040		314		211	
WA840	QUALITY ASSURANCE	A		193		98		100		60	
WA850	PRODUCT IMPROVEMENT	A		193		98		100		60	
WA860	ACCEPTANCE TEST & EVALUATION	A		325		166		124		100	
WA900	CONSULTING SERVICE	A		217		215		221		160	
WA920	TECHNICAL DATA	A		275		140		96		96	
WA925	TECHNICAL DOCUMENTATION	A		679		346		150		100	
WA970	INTEGRATED LOGISTICS SUPPORT	A		345		185		155		155	
WA983	CETS	A		703		355		140		140	
WA5IN	FMP INSTALLATION	A		3,741		4,063		2,411		4,426	
TOTAL				20,816		6,706		3,810		5,508	

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ITEM NO. 43 PAGE NO. 3

Exhibit P-5 Weapon System Cost Analysis

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									DATE February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE SURFACE SONAR SUPPORT EQUIPMENT 82WA BUDGET LINE ITEM - 213000 & 213005						
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
WA031 AN/SQS-53A EC-16 1996	LOCKHEED MARTIN SYRACUSE, NY	C/FP	NAVSEA	12/96	12/97	10	1,210.2	YES	NO	

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PAGE NO. 4

Exhibit P-5A Procurement History and Planning

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REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B							DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE SURFACE SONAR SUPPORT EQUIPMENT - 82WA BUDGET LINE ITEM - 213000 & 213005					
ITEM/PROJECT UNIT	TOTAL I0 / REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY 97 PROGRAM FUNDS	PLANNED BUDGET YEAR 98 PROCUREMENT		BALANCE	PHASING RATIONALE
WA031 AN/SQS-53A EC-16	16	0	2 *	14	0	0		0	
COST CODE: WA031 CG-47 through 55 9 DDG-993 Class 4 Trainer 1 USS SCOTT, DDG 995) 1 EC-16 Preprod (Factory Test Unit) 1 * 2 PREPRODUCTION UNITS									

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TIME PHASED REQUIREMENT SCHEDULE		A. APPROPRIATION/BUDGET ACTIVITY												B. P-1 ITEM NOMENCLATURE								C. DATE											
P-23		Other Procurement, Navy - BA-2												Surface Sonar Support Equipment - 82WA BUDGET LINE ITEM - 213000 & 213005								February 1997											
		FY 1995				FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				LATER							
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
ACTIVE FORCE INVENTORY	(P)																																
AN/SQS-53A [WA031]	(P)								2				1					1	2	3	1	2	1										
SCHOOLS/OTHER TRAINING	(P)									1																							
OTHER																																	
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	2	3	4	4	4	5	7	10	11	13	14	14		14	14	14	14	14	14	14	14	14			
ASSETS ON HAND																																	
DELIVERY FY 95 & PRIOR - OPN	(P)								2	1	1																						
FY 96 - OPN	(P)						*							1	2	3	1	2	1														
FY 97 - OPN	(P)																																
FY 98 - OPN	(P)																																
FY 99 - OPN	(P)																																
FY 00 - OPN	(P)																																
FY 01 - OPN	(P)																																
TOTAL ASSETS	(C)	0	0	0	0	0	0	0	2	3	4	4	4	5	7	10	11	13	14	14		14	14	14	14	14	14	14	14	14			
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	0	0			
D. REMARKS		E. RQMT (QTY)												TOTAL RQMT				INSTALLED				ON HAND				FY96 & PRIOR UNDLVR				UNFUNDED			
* EC-16 UNITS ARE BEING FABRICATED BY L/ CORPORATION, SYRACUSE, NY.	43	1. OPN												14				0				0				14				0			
		2. APPN -																															
		3. PROCUREMENT LEADTIME												ADMIN 3 MOS				INITIAL ORDER 28 MOS				REORDER 12 MOS											

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NAVCOMPT061796.0

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OTHER PROCUREMENT, NAVY BUDGET ITEM JUSTIFICATION SHE							HIBIT P-40)		DATE: February 1997
NAVMAT FORMAT 7110/1									
BUDGET ACTIVITY: BA-2: Communications and Electronics Equipment - ASW					P-1 ITEM NOMENCLATURE: AN/SQQ-89(V) Surface Anti-Submarine Warfare Combat Systems				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
Quantity									
Cost (In Millions)	22.2	23.7	16.6	35.9	45.3	53.2	65.8	67.6	
ITEM DESCRIPTION/JUSTIFICATION									
<p>The AN/SQQ-89 is a fully integrated surface ship ASW combat system with capability to detect, classify, localize and attack submarine targets.</p> <p>AN/SQQ-89(V) is the ASW Combat System for new construction DDG 51 class ships and backfitted on CG 47 and DD 963 class ships.</p> <p>A AN/SQQ-89(V) configuration will vary based upon ship class, system production configuration, and pre-backfit configuration of each ship. Ships, shore systems, and trainers will receive several incremental upgrades over the program years to achieve AN/SQQ-89(V) capability.</p> <p>This budget supports modernization of existing AN/SQQ-89(V) systems. No complete systems are being procured for backfit. 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 additional equipment budgeted supports Block Upgrades that will improve the AN/SQQ-89(V) performance in the areas of torpedo alertment, shallow water operations, and multi-static operations.</p> <p>FMP Installation: Funding is for the installation of equipment by "K" ALTs through shipyards and/or Alteration Installation Teams (AIT).</p> <p><i>The budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</i></p>									

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	APPROPRIATION: Other Procurement, Navy	MANUFACTURER NAME / PLANT CITY / STATE NG, Sykesville, MD and LOCKHEED MARTIN, Syracuse, NY	DATE: February 1997
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BUDGET ACTIVITY BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT - ASW	P-1 ITEM NOMENCLATURE AN/SQQ-89(V) SURF ANTI-SUBMARINE WARFARE COMBAT SYS	SUBHEAD C2DB
---	--	-----------------

COST CODE	WEAPON SYSTEM COST ELEMENTS	I/C	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST						
DB100	DD 963 System Components	A		\$857		\$508		\$0		\$308
DB300	CG 47 System Components	A		\$0		\$2,805		\$3,028		\$7,779
DB400	DDG 51 System Components	A		\$0		\$0		\$0		\$7,495
DB600	Trainer System Components	A		\$0		\$0		\$0		\$1,125
DB700	Shore Site System Components	A		\$0		\$0		\$0		\$1,308
DB830	Production Engineering - In House	A		\$1,736		\$3,573		\$2,448		\$3,962
DB900	Consulting Services	A		\$2,170		\$3,196		\$2,286		\$3,762
DB984	Systems Technical Support	A		\$2,198		\$1,575		\$1,182		\$2,299
DBTRN	Training Curriculum	A		\$0		\$0		\$0		\$0
DBDSA	Design Services Transfer	A		\$0		\$0		\$1,550		\$1,090
DB5IN	FMP Installation	A		\$15,237		\$12,062		\$6,134		\$6,728
				\$22,198		\$23,719		\$16,628		\$35,856

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APPROPRIATION OTHER PROCUREMENT, NAVY										DATE FEBRUARY 1997	
OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT										SUBHEAD C2DB	
BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										P-1 ITEM NOMENCLATURE AN/SQQ-89	
COST CODE	FISCAL YEAR ELEMENT OF COST	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY *	QTY	UNIT COST	SPECS AVAIL NOW WHEN	ARE SPEC REVISIONS REQUIRED?	IF YES, WHEN AVAIL
FY 96											
DB100	AN/SQQ-89(V)8 ->(V)7	Various	Option FP	NAVSEA	Feb-96	Oct-97	4	\$214	Yes	No	
FY 97											
DB100	UYQ-25B Adjunct Processor (MSTR	Lockheed, Syracuse NG, Sykesville	Option FP Option FP	NAVSEA NUWC/NL	Feb-97 Feb-97	Nov-97 Jan-98	8 1	\$21 \$340	Yes Yes	No No	
DB300	AN/SQQ-89(V)3 -> A(V)3 UYQ-25B	Various Lockheed, Syracuse	Option FP Option FP	NAVSEA NAVSEA	Feb-97 Feb-97	Jun-98 Nov-97	3 5	\$900 \$21	Yes Yes	No No	
FY 98											
DB300	AN/SQQ-89(V)12 UYQ-25B TDSS System Level Recorder Adjunct Processor (MSTR	Lockheed, Syracuse Lockheed, Syracuse Lockheed, Syracuse Lockheed, Syracuse NG, Sykesville	Option FP Option FP Option FP Option FP Option FP	NAVSEA NAVSEA NAVSEA NAVSEA NUWC/NL	Feb-98 Feb-98 Feb-98 Feb-98 Feb-98	Jun-99 Nov-98 Jan-99 Jan-99 Jan-99	2 6 1 1 1	\$1,185 \$21 \$153 \$39 \$340	Yes Yes Yes Yes Yes	No No No No No	
NOTES: * = Represents delivery of production systems.											

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#REF!

CLASSIFICATION: Unclassified

APPROPRIATION OTHER PROCUREMENT, NAVY	BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	DATE 1 February 1997
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BUDGET ACTIVITY: BA-2. Communications and Electronics Equipment - ASW	P-1 ITEM NOMENCLATURE: AN/SQQ-89(V) SURFACE ANTI-SUBMARINE WARFARE COMBAT SYSTEMS	SUBHEAD NO. C2DB
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COST CODE	FISCAL YEAR ELEMENT OF COST	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY *	QTY	UNIT COST	SPECS AVAIL NOW WHEN	ARE SPEC REVISIONS REQUIRED?	IF YES, WHEN AVAIL
FY 99											
DB100	UYQ-25B	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Nov-99	4	\$21	Yes	No	
	TSPs/Test Sets (MK 50 Blk II)	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	8	\$37	Yes	No	
DB300	AN/SQQ-89(V)12	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	2	\$2,445	Yes	No	
	UYQ-25B	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Nov-99	3	\$21	Yes	No	
	System Level Recorder	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	3	\$39	Yes	No	
	TDSS	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	3	\$153	Yes	No	
	TDSS Upgrade	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$75	Yes	No	
	TSPs/Test Sets (MK 50 Blk II)	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	5	\$37	Yes	No	
	ATES EMR	Lockheed, St Paul, MN	Option FP	NAVSEA	Feb-99	Feb-00	3	\$60	Yes	No	
	Adjunct Processor (MSTRAP)	NG, Sykesville	Option FP	NUWC/NL	Feb-99	Jan-00	3	\$340	Yes	No	
	LFA/TACTAS	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$500	Yes	No	
	OSA Upgrade	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$290	Yes	No	
DB400	TDSS	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	5	\$153	Yes	No	
	TDSS Upgrade	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$75	Yes	No	
	TSPs/Test Sets (MK 50 Blk II)	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	8	\$37	Yes	No	
	ATES EMR	Lockheed, St Paul, MN	Option FP	NAVSEA	Feb-99	Feb-00	1	\$60	Yes	No	
	Adjunct Processor (MSTRAP)	NG, Sykesville	Option FP	NUWC/NL	Feb-99	Jan-00	8	\$340	Yes	No	
	Adjunct Processor (TARS)	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$1,135	Yes	No	
	TARS Array	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$900	Yes	No	
	Adjunct Processor (ETC)	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$450	Yes	No	
	LFA/TACTAS Processing	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$500	Yes	No	
	OSA Upgrade	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$340	Yes	No	
	COTS OBT	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$170	Yes	No	
	UYQ-25B	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Nov-99	4	\$21	Yes	No	
	DB600	AN/SQQ-89(V)12	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Nov-99	1	\$1,125	Yes	No
DB700	AN/SQQ-89(V)12	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Dec-99	1	\$1,125	Yes	No	
	TDSS	Lockheed, Syracuse	Option FP	NAVSEA	Feb-99	Jan-00	1	\$183	Yes	No	

NOTES: * = Represents delivery of production systems.

INDIVIDUAL MODIFICATION

DATE: February 1997

MODIFICATION TITLE: AN/SQQ-89(V) Surface Anti-Submarine Warfare Combat System Components

MODELS OF SYSTEMS AFFECTED: DD963 Class ships

EXHIBIT P-3A

DESCRIPTION/JUSTIFICATION: Installation of AN/SQQ-89 ASW Combat Systems, modifications of Analog to Digital components, and block upgrades to provide improved performance on previously installed systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

FINANCIAL PLAN (SM)	FY 96 & Prior		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$			
PROCUREMENT																					
DD963 Equipment	30	246.6																	30	246.6	
MSTRAP			1	0.3							3	1.0							4	1.3	
UYQ-25			8	0.2			4	0.1											12	0.3	
TSPs/Test Sets							8	0.3	8	0.3	8	0.3	5	0.2					29	1.1	
AP-ETC									1	0.5	3	1.4							4	1.9	
COTS/OBT													4	0.7					4	0.7	
Block II									1	1.3	3	4.5	4	4.6	2	2.6			10	13.0	
Block III									3	6.1	4	8.6	1	2.2	2	4.4			10	21.3	
Training Equipment																				0.0	
Support Equipment																				0.0	
Engineering Support*		168.1		2.7		3.1		0.7		2.2		3.8		2.1		2.3		TBD		TBD	
Total Equipment Cost		414.7		3.2		3.1		1.1		10.4		19.6		9.8		9.3		TBD	103	TBD	
Installation of Hardware																					
FY 96 & Prior	(30)	23	90.6	2	9.1	5	2.2	10	0.3	10	0.4	10	0.3						30	101.9	
FLIR Mods	(0)																		30	1.0	
FY97 Eqpt																					
MSTRAP	(0)							1	0.1										1	0.1	
UYQ-25	(0)					5	0.4	3	0.2										8	0.6	
FY99 Eqpt																					
UYQ-25	(0)							4	0.4										4	0.4	
TSPs/Test Sets	(0)							8	0.4										8	0.4	
FY00 Eqpt																					
TSPs/Test Sets	(0)									8	0.3								8	0.3	
AP-ETC	(0)									1	0.1								1	0.1	
Block II	(0)									1	0.2								1	0.2	
Block III	(0)									2	0.6	1	0.3						3	0.9	
FY01 Eqpt																					
MSTRAP	(0)											3	0.2						3	0.2	
AP-ETC	(0)											3	0.3						3	0.3	
TSPs/Test Sets	(0)											8	0.3						8	0.3	
Block II	(0)											3	0.5						3	0.5	
Block III	(0)											4	1.1						4	1.1	
FY02 Eqpt																					
Block II	(0)													4	0.8				4	0.8	
Block III	(0)													1	0.3				1	0.3	
TSPs/Test Sets	(0)													5	0.2				5	0.2	
COTS/OBT	(0)													4	0.1				4	0.1	
DSA Transfer							0.7		0.1		0.3		0.3		0.7		0.5				
Total Installation Cost		23	90.6	2	9.1	10	3.3	14	0.7	22	1.5	22	1.8	22	3.4	14	1.9	0	TBD	129	TBD
Total Procurement Cost		505.3		12.3		6.4		1.8		11.9		21.4		13.2		11.2		TBD		TBD	

METHOD OF IMPLEMENTATION: Shipyard installations and AITs. Administrative Leadtime: 6 Months Production Leadtime: 30 Months for A(V)6 and 14 Months for (V)12 Various for intermediate upgrades

INSTALLATION SCHEDULE	FY 96 & Prior		FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				FY 03				To Complete	Total**
	1	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						
FY 96 & Prior	23	0	0	0	3	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		
INPUT	23	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
OUTPUT	20	1	1	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
FY 97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
INPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
OUTPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
FY 98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
INPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
OUTPUT	0	0	0	0	0	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	23	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
INPUT	23	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
OUTPUT	20	1	1	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

* Represents total support costs. Installation U/C's vary depending upon intermediate upgrades and major system installations

MODIFICATION TITLE: AN/SQQ-89(V) Surface Anti-Submarine Warfare Combat System Components

MODELS OF SYSTEMS AFFECTED: CG 47 Class ships

EXHIBIT P-3A

DESCRIPTION/JUSTIFICATION: Installation of AN/SQQ-89 ASW Combat System upgrades and modifications of Analog to Digital components to provide improved performance on previously installed systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

FINANCIAL PLAN (\$M)	FY 96 & Prior		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		To Complete Qty \$	Total Qty \$					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$							
PROCUREMENT																							
CG 47 Equipment																							
Block I	1	0.5			1	0.5	3	1.6	3	1.6	5	3.1	5	3.1				18	10.4				
UYO-25			5	0.1	5	0.1												10	0.2				
TSP/Test Sets							5	0.2	5	0.2	5	0.2	3	0.1				18	0.7				
Block II							1	0.9			1	1.4	3	4.0	1	1.3		6	7.6				
EC-84 (V12)	6	14.5			2	2.4	2	4.9	2	2.4								12	24.2				
MK 1167	3	2.7	3	2.7														6	5.4				
ATES EMR							3	0.2	3	0.2	2	0.1						8	0.5				
AP-ETC									1	0.4								1	0.4				
Training Equipment																		0	0.0				
Support Equipment																		0	0.0				
Engineering Support*		12.0		5.6		1.8		4.2		1.5		1.1		0.9		0.3		TBD	TBD				
Total Equipment Cost		29.7		8.4		4.8		12.0		6.3		5.9		8.1		1.6		TBD	79	TBD			
Installation of Hardware																							
FY 96 & Prior																							
Sonar Audio			1	0.1	1	0.1			1	0.1									3	0.3			
Block I (0)																			1	0.2			
UYO-25 (0)																			2	0.2			
EC-84 (V12) (6)																			5	7.3			
MK 1167 (0)	1	0.2						3	3.5										3	0.4			
FLIR Mods (0)									15	0.4									27	0.7			
FY 97 Eqpt																							
UYO-25 (0)																				5	0.3		
MK 1167 (0)																				3	0.6		
FY 98 Eqpt																							
Block I (0)												1	0.2							1	0.2		
UYO-25 (0)													1	0.1						5	0.4		
EC-84 (V12) (2)													1	1.2						2	2.4		
FY 99 Eqpt																							
Block I (0)												3	0.8							3	0.8		
Block II (0)														1	0.2					1	0.2		
EC-84 (V12) (2)														2	2.4					2	2.4		
ATES EMR (0)																				3	0.2		
TSP/Test Sets (0)																				5	0.2		
FY 00 Eqpt																							
Block I																					3	0.8	
ATES EMR																					3	0.2	
TSP/Test Sets (0)																					5	0.2	
AP-ETC (0)																					1	0.1	
EC-84 (V12) (2)																					2	2.6	
FY 01 Eqpt																							
Block I (0)																						5	1.0
Block II (0)																						1	0.2
TSP/Test Sets (0)																						5	0.2
ATES EMR (0)																						2	0.1
FY 02 Eqpt																							
Block I (0)																						5	1.0
Block II (0)																						3	0.5
TSP/Test Sets (0)																						3	0.1
ATES EMR (0)																						0.5	
DSA Transfer	1	0.2	18	3.0	9	2.9	25	6.7	15	3.5	16	6.2	15	6.7	11	2.1	0	TBD	93	TBD			
Total Installation Cost		1	0.2	18	3.0	9	2.9	25	6.7	15	3.5	16	6.2	15	6.7	11	2.1	0	TBD	93	TBD		
Total Procurement Cost		29.9		11.4		7.7		18.7		9.8		11.1		13.8		3.7		TBD	TBD				

METHOD OF IMPLEMENTATION: Shipyard installations and AITs.

Administrative Leadtime: 6 Months

Production Leadtime: 14 months for EC 84 (V12)

Various for intermediate upgrades

INSTALLATION SCHEDULE	FY 96 & Prior	FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				FY 03				To Complete	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						
FY 96 & Prior	INPUT	0	0	0	2	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	OUTPUT	0	0	0	0	1	1	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
FY 98	INPUT	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
	OUTPUT	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
FY 99	INPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	
	OUTPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	
FY 00	INPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	
	OUTPUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	
Total	INPUT	0	0	0	2	0	0	0	1	0	2	1	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	12	
	OUTPUT	0	0	0	0	1	1	0	0	1	0	2	1	1	0	1	0	1	0	1	0	1	1	0	0	0	0	0	0	12	

* Represents total support costs.
Installation UIC's vary depending upon intermediate upgrades and major system installations

INDIVIDUAL MODIFICATION

DATE: February 1997

MODIFICATION TITLE: AN/SQQ-89(V) Surface Anti-Submarine Warfare Combat System Components

page 7

MODELS OF SYSTEMS AFFECTED: DDG 51 Class ships

EXHIBIT P-3A

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 (\$M)	FY 96 & Prior		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		Qty	
PROCUREMENT																					
DDG 51 Equipment																					
MSTRAP	1	0.3					8	2.7	7	2.4	5	1.7							21	7.1	
TDSS	4	2.0					5	0.8	7	1.1	5	1.2							21	5.1	
UYQ-25	3	0.3					4	0.1											7	0.4	
OSA	6	3.0																	6	3.0	
TSP/Test Sets							8	0.3	8	0.3	8	0.3	5	0.2					29	1.1	
Block II							1	1.3	3	4.0	3	4.0	6	8.1	8	10.9			21	28.3	
Block III							1	2.2	1	2.2	3	6.6	9	19.9	14	30.9			28	61.8	
ATES EMR							1	0.1	1	0.1	1	0.1							3	0.3	
Training Equipment																			0	0.0	
Support Equipment																			0	0.0	
Engineering Support*		3.8				1.0		4.1		3.0		3.1		3.4		6.6				TBD	
Total Equipment Cost		9.4		0.0		1.0		11.6		13.1		17.0		31.6		48.4		TBD		136 TBD	
Installation of Hardware																					
FY 96 & Prior	(0)																				
MSTRAP	(0)	1	0.1																1	0.1	
TDSS	(0)	1	0.1			3	0.3												4	0.4	
UYQ-25	(0)					3	0.2												3	0.2	
OSA	(0)	2	0.2			4	0.4												6	0.6	
FLIR Mods	(0)					10	0.3	10	0.3	10	0.3								30	0.9	
FY99 Eqpt	(0)																				
MSTRAP	(0)								8	0.8										8	0.8
TDSS	(0)								5	0.5										5	0.5
UYQ-25	(0)								4	0.3											
Block II	(0)								1	0.2										1	0.2
Block III	(0)								1	0.3										1	0.3
ATES EMR	(0)								1	0.1										1	0.1
TSP/Test Sets	(0)								8	0.3										8	0.3
FY00 Eqpt	(0)																				
MSTRAP	(0)										7	0.6								7	0.6
TDSS	(0)										7	0.8								7	0.8
Block II	(0)										3	0.6								3	0.6
Block III	(0)										1	0.3								1	0.3
ATES EMR	(0)										1	0.1								1	0.1
TSP/Test Sets	(0)										8	0.3								8	0.3
FY01 Eqpt	(0)																				
MSTRAP	(0)												5	0.5						5	0.5
TDSS	(0)												5	0.6						5	0.6
Block II	(0)												3	0.6						3	0.6
Block III	(0)												3	0.9						3	0.9
ATES EMR	(0)												1	0.1						1	0.1
TSP/Test Sets	(0)												8	0.3						8	0.3
FY02 Eqpt	(0)																				
Block II	(0)																6	1.1		6	1.1
Block III	(0)																9	2.2		9	2.2
TSP/Test Sets	(0)																5	0.2		5	0.2
DSA Transfer						0.3		0.1		0.4		0.7		0.6		0.8					
Total Installation Cost	4	0.4	0	0.0	20	1.5	10	0.4	38	3.2	27	3.4	25	3.6	15	4.3	0	TBD		139	TBD
Total Procurement Cost		9.8		0.0		2.5		12.0		16.3		20.4		35.2		52.7		TBD		TBD	

METHOD OF IMPLEMENTATION: AITs. Administrative Leadtime: 6 Months. Production Leadtime: Various for intermediate upgrades.

CONTRACT DATE: Jan-95. DELIVERY DATE: Dec-95.

INSTALLATION SCHEDULE	FY 96 & Prior		FY 97			FY 98			FY 99			FY 00			FY 01			FY 02			FY 03			To Complete	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
DDG 51 CLASS																										0
INPUT																										0
OUTPUT																										0

* Represents total support costs.

**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENTAL SHEET - INSTALLATION DATA)**

CLASSIFICATION: UNCLASSIFIED

EXHIBIT P-23A

APPROPRIATION ACTIVITY: OTHER PROCUREMENT, NAVY
BA2: COMMUNICATION AND ELECTRONIC EQUIPMENT - ASW

P-1 ITEM NOMENCLATURE
DD-963 SYSTEM COMPONENTS

DTAE;
February-97

APPN	1ST QTR		2ND QTR		3RD QTR		4TH QTR	
	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY

1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY

FY96

FY97

S								
C								
N								
O			DD-991 (91)	1			DD-967 (92)	1
P							DD-972 (92)	1
N							DD-973 (92)	1

					DD-992 (93)	1	

FY98

FY99

S								
C								
N								
O			DD-974 (95)	1			DD-969 (93)	1
P			DD-976 (96)	1			DD-983 (96)	1
N			DD-979 (96)	1			DD-990 (96)	1

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APPROPRIATION ACTIVITY: OTHER PROCUREMENT, ANVY
BA2: COMMUNICATION AND ELECTRONIC EQUIPMENT - ASW

P-1 ITEM NOMENCLATURE
TRAINER SYSTEM COMPONENTS

Date: February 1997

APPN	1ST QTR		2ND QTR		3RD QTR		4TH QTR	
	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY

FY 96

S								
C								
N								

O					CG-61 (95)	*		
P								
N								

FY 98

S								
C								
N								

O					CG-60 (95)	*	CG-67 (93)	1
P								
N								

P-1 ITEM NO

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APPN	1ST QTR		2ND QTR		3RD QTR		4TH QTR	
	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY

FY 97

								1
							CG-62 (93) CG-66 (93)	1

FY 99

							CG-63 (95) CG-65 (94)	1 1	CG-60 (95)	1	CG-64 (98)	1

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**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENTAL SHEET - INSTALLATION DATA)**

CLASSIFICATION: UNCLASSIFIED

EXHIBIT P-23A

APPROPRIATION ACTIVITY: OTHER PROCUREMENT, NAVY
BA2: COMMUNICATION AND ELECTRONIC EQUIPMENT - ASW

P-1 ITEM NOMENCLATURE
DD-963 SYSTEM COMPONENTS Date: February 1997

APPN	1ST QTR		2ND QTR		3RD QTR		4TH QTR	
	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY

1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY

FY96

FY97

S C N								
O P N			CG-59 (98)	1				

		CG-58 (99)				CG-57 (99)	1

FY98

FY99

S C N							
O P N			CG-61 (00)	1	CG-56 (0	1	

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**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENTAL SHEET - INSTALLATION DATA)**

EXHIBIT P-23A

CLASSIFICATION: UNCLASSIFIED

APPROPRIATION ACTIVITY: OTHER PROCUREMENT, ANVY
BA2: COMMUNICATION AND ELECTRONIC EQUIPMENT - ASW

P-1 ITEM NOMENCLATURE
TRAINER SYSTEM COMPONENTS
Date: February 1997

APPN	1ST QTR		2ND QTR		3RD QTR		4TH QTR	
	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY

FY 96								
S								
C								
N								
O								
P								
N								

FY 98								
S								
C								
N								
O								
P								
N								

P-1 ITEM NO
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1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY

FY 97							
MT-53C (93)	1						

FY 99							

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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40	DATE: February 1997
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APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2	P-1 ITEM NOMENCLATURE/SUBHEAD SSN ACOUSTICS/82SA
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	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (In Millions)	\$42.7	\$44.2	\$78.0	\$116.3	\$150.4	\$160.0	\$131.5	\$144.8

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. Procurements provide upgrades/support to 688 Class, 688I Flight and SEAWOLF Class SSNs.

All future Acoustic Upgrades are incorporated 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/S0219. DEV TEST & EVAL (DT&E) is planned for 1Q/FY98. Initial OPER TEST & EVAL (IOT&E) is planned for 1Q/FY99 and OPER TEST & EVAL (OT&E) is planned for 1Q/FY00. The available date of the Tech Data Package is planned for 2Q/FY00. The estimated date of approval for service use is 3Q/FY00.

SA101 AN/BQQ-5 UPGRADES:

FY 1997: Procures one (1) A-RCI SV Kit; completes the procurement of Automated Sonar Contact Loggers (ASCL); and, supports the refurbishment and installation of the upgrades.

FY 1998: Procures four (4) A-RCI TA Kits and one (1) A-RCI TA to SA upgrade Kit; and supports the refurbishment and installation of these upgrades.

FY 1999: Procures two (2) A-RCI SA Kits; procures two (2) A-RCI TA to SA upgrade Kits; and, supports the refurbishment and installation of these 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. Towed Array Project Team is supported through this line.

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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40	DATE: <p style="text-align: center;">February 1997</p>
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APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2	P-1 ITEM NOMENCLATURE/SUBHEAD SSN ACOUSTICS/82SA
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SA103 AN/BSY-1 UPGRADES:

FY 1998: Procures ten (10) A-RCI TA Kits and one (1) A-RCI TA to SA upgrade Kit for AN/BSY-1.
 FY 1999: Procures four (4) A-RCI SA Kits; procures three (3) A-RCI TA to SA Kits for AN/BSY-1; and, begins procurement of A-RCI HF Material.

SA201 BLOCK CHANGES:

Minor ECPs and hardware changes affecting the SSN688 Class and 688I Flight submarines are procured through this line.

SA202 PRODUCTION/ENGINEERING/LOGISTIC SUPPORT:

Supports the procurement of equipment for AN/BSY-1, AN/BQQ-5 and Towed System hardware.

SA203 UNIQUE TEST EQUIPMENT:

Procures various towed array and towed array handling system/stowage tube inspection test equipment.

SA301 MODULE SCREEN AND REPAIR ACTIVITY (MSRA) /SOFTWARE MAINTENANCE FACILITY (SMF):

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 program sets (TPS), provides an enhanced capability to screen and repair Standard Electronic Modules (SEM) at the Intermediate Maintenance Activity.

SA302 OP TRAINER UPGRADES:

Procures hardware upgrades and production engineering for AN/BSY-1 and AN/BQQ-5 operational trainer sites.

SA303 ORGANIC REPAIR DEPOT/DMSMS:

Procures equipment to support AN/BSY-1 and AN/BQQ-5 organic repairs for items beyond the repair capabilities of the MSRA. The depot will be equipped with analog and digital ATE and TPSs necessary to screen and repair SEM modules. Also procures selected electronic components needed for production and support requirements for the AN/BSY-1 and AN/BQQ-5 systems in the face of a diminishing manufacturing source pool.

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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40	DATE: February 1997
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APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2	P-1 ITEM NOMENCLATURE/SUBHEAD SSN ACOUSTICS/82SA
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SA401 INITIAL TRAINING:

Provides for initial training curriculum development, training management materials, exercise control group development, Stage 5 efforts, pilot services and services to the Fleet.

SA500 AN/BQG-5 WAA:

Funding supports Diminished Manufacturing Sources/Material shortages (DMS/MS) requirements and engineering change parts procurement.

SA501 AN/BSY-2:

Outyear funding supports DMS/MS requirements and engineering change parts procurement.

SA5IN EQUIPMENT INSTALLATION:

Funds actual hardware installation during shipyard and pierside availabilities. The budget reflects the transfer of design services into the appropriate equipment P-1 item beginning in FY 1998..

SADSA INSTALLATION DESIGN SEVICES:

Funds installation design services. Budget reflects the transfer of design services into the appropriate P-1 line item beginning in FY 1998.

SA900 CONSULTING SERVICES:

Includes specification validation, contract deliverable monitoring, prime contractor monitoring for cost, schedule and performance slips, Integrated Logistics Support (ILS) planning and coordination of Government Furnished Information (GFI). Additional support will assess the impact of Diminishing Manufacturing Sources/Material shortages (DMS/MS) 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 TPSs for the AN/BSY-1 and AN/BQQ-5 Organic Repair Depot and MSRA.

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**WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5**

DATE:

February 1997

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT, NAVY/BA-2

P-1 ITEM NOMENCLATURE/SUBHEAD

SSN ACOUSTICS/82SA

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
SA101	<u>AN/BQQ-5 UPGRADES</u>			\$9,358		\$1,845		\$14,738		\$27,476
	ONBOARD TRAINERS	B	3	1,395						
	CDWS (ICDC)			3,258						
	ASCL			1,178		153				
	INSTALL SUPPORT			731		650		400		550
	REFURBISHMENT MATERIAL			750		700		400		750
	A-RCI SA KITS								2	15,157
	A-RCI TA RCI KITS	B	1	2,046			4	8,547		
	A-RCI SV KITS	B				1	342			
	A-RCI TA to SA UPGRADE KITS	B					1	5,391	2	11,019
SA102	<u>TOWED SYSTEMS</u>			\$8,040		\$9,646		\$16,394		\$16,297
	TOWED ARRAY REFURB AND UPGRADE			8,040		9,646		16,394		16,297
SA103	<u>AN/BSY-1 UPGRADES</u>			\$2,214		\$0		\$28,663		\$36,211
	IOSA CARDS							2,500		2,542
	A-RCI TA RCI KITS	B	1	2,214			10	23,126		
	A-RCI SA KITS	B							4	21,357
	A-RCI HF KITS	B								3,000
A-RCI TA to SA UPGRADE KITS	B					1	3,037	3	9,312	

P-1 SHOPPING LIST

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CLASSIFICATION:

EXHIBIT P-5

UNCLASSIFIED

UNCLASSIFIED

**WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5**

DATE:

February 1997

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT, NAVY/BA-2

P-1 ITEM NOMENCLATURE/SUBHEAD

SSN ACOUSTICS/82SA

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
SA201	<u>BLOCK CHANGES</u>			\$4,542		\$4,691		\$2,894		\$2,526
	AN/BQQ-5/AN/BSY-1			2,075		1,300		1,000		795
	DESK TOP CALCULATOR					200		200		200
	TB-16 TOWED ARRAYS			300		400		160		173
	TB-23 TOWED ARRAYS			600		600		653		600
	TB-29 TOWED ARRAYS			724		800				
	TOWED ARRAY HANDLING EQUIP			843		1,391		881		758
SA202	<u>PROD/ENG'G/LOGISTIC SUPPT</u>			\$5,747		\$4,296		\$1,465		\$4,364
	AN/BQQ-5/AN/BSY-1			3,066		1,535		465		1,480
	TOWED ARRAYS/HANDLING EQUIP			2,681		2,761		1,000		2,884
SA203	<u>UNIQUE TEST EQUIPMENT</u>			\$1,429		\$1,556		\$1,516		\$1,561
SA301	<u>MSRA/SME</u>			\$418		\$1,027		\$892		\$2,665
	MODULE SCREEN & REPAIR ACTIVITY			418		727		592		615
	SOFTWARE MAINTENANCE FACILITY					300		300		800
	CASS CONVERSION									1,250

UNCLASSIFIED

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**WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5**

**DATE:
February 1997**

**APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/BA-2**

**P-1 ITEM NOMENCLATURE/SUBHEAD
SSN ACOUSTICS/82SA**

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
SA302	<u>OP TRAINER UPGRADES</u>			\$850		\$1,500		\$1,200		\$1,680
	ENGINEERING CHANGES		850		1,500		1,200		1,680	
SA303	<u>ORGANIC REP DEPOT/DMSMS</u>			\$1,494		\$1,124		\$1,100		\$1,325
	ORGANIC REPAIR DEPOT		679		1,124		1,100		1,325	
	DMSMS		815							
SA401	<u>INITIAL TRAINING</u>			\$1,668		\$663		\$330		\$979
	AN/BQQ-5E		785		544		200		757	
	AN/BSY-1		498							
	TOWED ARRAY/HANDLING EQUIPMENT		385		119		130		222	
SA500	<u>AN/BQG-5 WAA</u>			\$0		\$0		\$1,023		\$3,697
	REFURB/PROCUREMENT						350		287	
	EOL PARTS								155	
	EC HARDWARE PROCUREMENT								450	
	WAA OUTBD SPARES								2,625	
	I&C REPLENISHMENT						673			
	TACTICAL SPARES									
	INTERIM SUPPORT								180	

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**WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5**

DATE:

February 1997

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT, NAVY/BA-2

P-1 ITEM NOMENCLATURE/SUBHEAD

SSN ACOUSTICS/82SA

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
SA501	<u>AN/BSY-2</u> EOL PARTS EC HARDWARE PROCUREMENT EMSP HW STIP			\$444		\$3,140		\$3,111		\$6,391
			1	444		511 2,629		565 2,546		621 5,770
SA51N	<u>EQUIPMENT INSTALLATION</u>			2,550		10,642		1,265		6,354
SADSA	<u>INSTALLATION DESIGN SERVICES</u>			0		0		205		1,554
SA900	<u>CONSULTING SERVICES</u>			3,957		4,056		3,157		3,230
	GRAND TOTAL			\$42,711		\$44,186		\$77,953		\$116,310

P-1 SHOPPING LIST

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CLASSIFICATION:

EXHIBIT P-5

UNCLASSIFIED

UNCLASSIFIED

**BUDGET PROCUREMENT HISTORY AND PLANNING
EXHIBIT P-5A
(\$000)**

**DATE:
February 1997**

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT, NAVY/BA-2

P-1 ITEM NOMENCLATURE/SUBHEAD

SSN ACOUSTICS/82SA

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
SA101	<u>ONBOARD TRAINER</u>										
	<u>FY96</u>	Lockheed Martin, VA	C/FP/Opt	NAVSEA	01/97	01/98	3	\$465	YES	NO	
	<u>A-RCI TA KITS</u>										
	<u>FY96</u>	Lockheed Martin, VA	SS/FP/Opt	NAVSEA	06/96	11/97	1	\$2,046	YES	NO	
	<u>FY98</u>	Lockheed Martin, VA	SS/FP/Opt	NAVSEA	12/97	12/98	4	\$2,137	YES	NO	
	<u>A-RCI SV KIT</u>										
	<u>FY97</u>	Lockheed Martin, VA	SS/FP/Opt	NAVSEA	03/97	06/98	1	\$342	YES	NO	

REMARKS:

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CLASSIFICATION:

UNCLASSIFIED

**BUDGET PROCUREMENT HISTORY AND PLANNING
EXHIBIT P-5A
(\$000)**

**DATE:
February 1997**

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT, NAVY/BA-2

P-1 ITEM NOMENCLATURE/SUBHEAD

SSN ACOUSTICS/82SA

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
SA103	<u>A-RCI TA TO SA UPGRADE</u>										
	<u>FY98</u>	Lockheed Martin, VA	SS/FP/Opt	NAVSEA	03/98	09/99	1	\$5,391	YES	NO	
	<u>FY99</u>	Lockheed Martin, VA	SS/FP/Opt	NAVSEA	03/99	03/00	2	\$5,509	YES	NO	
	<u>A-RCI SA KITS</u>										
	<u>FY99</u>	Lockheed Martin, VA	SS/FP/Opt	NAVSEA	03/99	02/00	2	\$7,579	YES	NO	
	<u>A-RCI TA KITS</u>										
<u>FY96</u>	Lockheed Martin, VA	SS/FP/Opt	NAVSEA	NAVSEA	08/96	08/97	1	\$2,214	YES	NO	
<u>FY98</u>	Lockheed Martin, VA	SS/FP/Opt	NAVSEA	NAVSEA	12/97	12/98	10	\$2,313	YES	NO	

REMARKS:

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CLASSIFICATION:

EXHIBIT P-5A

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**BUDGET PROCUREMENT HISTORY AND PLANNING
EXHIBIT P-5A
(\$000)**

**DATE:
February 1997**

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT, NAVY/BA-2

P-1 ITEM NOMENCLATURE/SUBHEAD

SSN ACOUSTICS/82SA

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
SA103	<u>A-RCI TA TO SA UPGRADE</u>										
	<u>FY98</u>	Lockheed Martin, VA	SS/FP/Opt	NAVSEA	03/98	03/00	1	\$3,037	YES	NO	
	<u>FY99</u>	Lockeed Martin, VA	SS/FP/Opt	NAVSEA	03/99	03/01	3	\$3,104	YES	NO	
SA501	<u>A-RCI SA KITS</u>										
	<u>FY99</u>	Lockeed Martin, VA	SS/FP/Opt	NAVSEA	03/99	03/01	4	\$5,339	YES	NO	
SA501	<u>AN/BSY-2 CSF</u>										
	<u>FY96</u>	Martin Marietta, Syracuse, NY	C/FPI/Opt	NAVSEA	02/96	07/96	1	\$444	NO	NO	

REMARKS:

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SSN ACOUSTICS/82SA
 MODIFICATION TITLE: SSN ACOUSTICS
 AN/BQQ-5 A-RCI TA/SV KITS
 MODELS OF SYSTEM AFFECTED: PROVIDES TB-29 CAPABILITY AND IMPROVED DETECTION
 DESCRIPTION/JUSTIFICATION:
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II 05/96

	FY96		FY97	FY98	FY99	FY00	FY01	FY02	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
	QTY	& PRIOR											

FINANCIAL PLAN (IN MILLIONS)

RD&E														TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST			
PROCUREMENT																				
QUANTITY	1	2,046	1	0,342	4	8,547	0	0,000	0	0,000	0	0,000	0	0,000	0	0,000	0	0,000	6	10,935
INSTALLATION KITS	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
INSTALLATION KITS NONRECURRING EQUIPMENT	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
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				

* FY 97 PROCUREMENT IS FOR 1 SPATIAL VERNIER KIT

INSTALLATION OF HARDWARE

FY96 EQUIPMENT AND PRIOR				1	0,396														1	0,396
FY97 EQUIPMENT						1	0,215												1	0,215
FY98 EQUIPMENT						4	1,620												4	1,620
FY99 EQUIPMENT																			0	0,000
FY00 EQUIPMENT																			0	0,000
FY01 EQUIPMENT																			0	0,000
FY02 EQUIPMENT																			0	0,000
TO COMPLETE																			0	0,000
TOTAL INSTALLATION COST				0,000	0,396	1,835	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	6	2,231
TOTAL PROCUREMENT COST	2,046		0,342	8,547	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000		10,935
TOTAL COST	2,046		0,342	8,943	1,835	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000		13,166

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME:
 CONTRACT DATE: PRIOR YEAR: 06/96 CURRENT YEAR: 03/97 BUDGET YEAR 1: 12/97 BUDGET YEAR 2:
 PRODUCTION DELIVER DATE: PRIOR YEAR: 11/97 CURRENT YEAR: 06/98 BUDGET YEAR 1: 12/98 BUDGET YEAR 2:

INSTALLATION SCHEDULE:										
INPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	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		
FY96 & PRIOR			1,0,0,0						1	
FY97				1,0,0,0					1	
FY98				1,1,1,1					4	
FY99										
FY00										
FY01										
FY02										
OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	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		
FY96 & PRIOR	0,0,0,0	0,0,0,0	0,0,0,1					0,0,0,22	1	
FY97					1,0,0,0				1	
FY98					2,1,1,0				4	
FY99										
FY00										
FY01										
FY02										

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MODIFICATION TITLE: SSN ACOUSTICS
 MODELS OF SYSTEM AFFECTED: AN/BQQ-5 TA TO SA KITS UPGRADE KITS
 DESCRIPTION/JUSTIFICATION: PROVIDES SPHERICAL ARRAY PROCESSING
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: M/S II 05/96

FINANCIAL PLAN (IN MILLIONS)	FY96		FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST	
	QTY	& PRIOR																		
RD&E																				
PROCUREMENT																				
QUANTITY	0	0.000	0	0.000	1	5.391	2	11.019	2	11.262	0	0.000	0	0.000	0	0.000	0	0.000	5	27.672
INSTALLATION KITS	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
INSTALLATION KITS NONRECURRING 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
INTERIM CONTRACTOR SUPPORT																			0	0.000
																			0	0.000

INSTALLATION OF HARDWARE

FY96 EQUIPMENT AND PRIOR																			0	0.000
FY97 EQUIPMENT																0	0.000		0	0.000
FY98 EQUIPMENT								1	1.087							0	0.000		1	1.087
FY99 EQUIPMENT								2	2.174							0	0.000		2	2.174
FY00 EQUIPMENT											2	2.260				0	0.000		2	2.260
FY01 EQUIPMENT																0	0.000		0	0.000
FY02 EQUIPMENT																0	0.000		0	0.000
TO COMPLETE																0	0.000		0	0.000
TOTAL INSTALLATION COST	0	0.000	0	0.000	0	0.000	0	0.000	3	3.261	2	2.260	0	0.000	0	0.000	0	0.000	5	5.521
TOTAL PROCUREMENT COST	0	0.000	0	0.000	0	5.391	0	11.019	0	11.262	0	0.000	0	0.000	0	0.000	0	0.000	0	27.672
TOTAL COST	0	0.000	0	0.000	0	5.391	0	11.019	0	14.523	0	2.260	0	0.000	0	0.000	0	0.000	0	33.193

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: 12 months PRODUCTION LEADTIME: 12 months, INITIAL ORDER 18 MOS.
 CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: 03/98 BUDGET YEAR 2: 01/99
 PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: 03/99 BUDGET YEAR 2: 01/00

INSTALLATION SCHEDULE:

INPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	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	
FY96 & PRIOR									
FY97									
FY98					1, 0, 0, 0				1
FY99					0, 1, 1, 0				2
FY00						0, 2, 0, 0			2
FY01									
FY02									
OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	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	
FY96 & PRIOR									
FY97									
FY98					0, 0, 0, 1				1
FY99						0, 2, 0, 0			2
FY00							0,0,0,2		2
FY01									
FY02									

P3A
 SSN ACOUSTICS/82SA
 MODIFICATION TITLE: SSN ACOUSTICS
 MODELS OF SYSTEM AFFECTED: AN/BQQ-5 A-RCI SA KITS
 DESCRIPTION/JUSTIFICATION: PROVIDES SPHERICAL ARRAY PROCESSING
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MSII 05/96

FINANCIAL PLAN (IN MILLIONS)	FY96		FY97	FY98	FY99	FY00	FY01	FY02	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST							
	QTY	& PRIOR																		
RD&E																				
PROCUREMENT																				
QUANTITY	0	0.000	0	0.000	2	15.157	5	38.727	5	39.579	3	24.270	0	0.000	0	0.000	15	117.733		
INSTALLATION KITS	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		
INSTALLATION KITS NONRECURRING EQUIPMENT																	0	0.000		
EQUIPMENT NONRECURRING																	0	0.000		
ENGINEERING CHANGE ORDERS																	0	0.000		
DATA																	0	0.000		
TRAINING EQUIPMENT											1	8.090					1	8.090		
SUPPORT EQUIPMENT																	0	0.000		
OTHER																	0	0.000		
INTERIM CONTRACTOR SUPPORT																	0	0.000		
INSTALLATION OF HARDWARE																				
FY97 EQUIPMENT AND PRIOR	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		
FY98 EQUIPMENT																		0.000		
FY99 EQUIPMENT							2	2.966									2	2.966		
FY00 EQUIPMENT									5	7.641							5	7.641		
FY01 EQUIPMENT											3	5.437	2	2.498			5	7.935		
FY02 EQUIPMENT													3	3.747			3	3.747		
FY03 EQUIPMENT																	0	0.000		
TO COMPLETE																	0	0.000		
* COMPETITIVE AWARD IN FY01 DELAYS ONE SHIPSET FOR FIRST ARTICLE TESTS																				
TOTAL INSTALLATION COST			0	0.000	0	0.000	0	0.000	2	2.966	5	7.641	3	5.437	5	6.245	0	0.000	15	22.289
TOTAL PROCUREMENT COST	0	0.000	0	0.000	0	0.000	0	15.157	0	38.727	0	39.579	0	32.360	0	0.000	0	0.000	0	125.823
TOTAL COST	0	0.000	0	0.000	0	0.000	0	15.157	0	41.693	0	47.220	0	37.797	0	6.245	0	0.000	0	148.112

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 18-24 MONTHS
 CONTRACT DATE: PRIOR YEAR: N/A CURRENT YEAR: N/A BUDGET YEAR 1: N/A BUDGET YEAR 2: 02/99
 PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2: 01/00

INSTALLATION SCHEDULE:	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
INPUT =====>	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	
FY96 & PRIOR									
FY97									
FY98									
FY99				0, 1, 1, 0					2
FY00					2, 2, 1, 0				5
FY01						1, 1, 1, 0	1, 1, 0, 0		5
FY02							1, 1, 1, 0	0, 0, 0, 0	3
FY02 * TC Quantity is a Maintenance Trainer/ No FMP \$ Provided									
OUTPUT =====>	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	
FY96 & PRIOR									
FY97									
FY98									
FY99				2, 0, 0, 0					2
FY00						2, 2, 1, 0			5
FY01						0, 0, 0, 3	0, 0, 0, 2		5
FY02							0, 0, 0, 3		3

P3A SSN ACOUSTICS/82SA INDIVIDUAL MODIFICATION DATE: February 1997
 MODIFICATION TITLE: SSN ACOUSTICS
 MODELS OF SYSTEM AFFECTED: AN/BSY-1 A-RCI TA KIT
 DESCRIPTION/JUSTIFICATION: PROVIDES TB-29 CAPABILITY AND IMPROVED DETECTION
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MSII 05/06

FINANCIAL PLAN (IN MILLIONS)	FY96															TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST		
	QTY	& PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY					FY03	
RD&E																					
PROCUREMENT																					
QUANTITY	1	2,214	0	0,000	10	23,126	0	0,000	0	0,000	0	0,000	0	0,000	0	0,000	0	0,000	11	25,340	
INSTALLATION KITS	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	
INSTALLATION KITS NONRECURRING EQUIPMENT	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		0,000	
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
INSTALLATION OF HARDWARE																					
FY96 EQUIPMENT AND PRIOR					1	0.426													1	0.426	
FY97 EQUIPMENT																				0	0.000
FY98 EQUIPMENT							10	4.380	0	0.000									10	4.380	
FY99 EQUIPMENT			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	
FY00 EQUIPMENT																			0	0.000	
FY01 EQUIPMENT																			0	0.000	
FY02 EQUIPMENT																			0	0.000	
TO COMPLETE																			0	0.000	
TOTAL INSTALLATION COST				0.000		0.426		4.380		0.000		0.000		0.000		0.000		0.000	11	4.806	
TOTAL PROCUREMENT COST		2,214		0,000		23,126		0,000		0,000		0,000		0,000		0,000		0,000		25,340	
TOTAL COST		2,214		0,000		23,552		4,380		0,000		0,000		0,000		0,000		0,000		30,146	

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME:
 CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:
 PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:

INSTALLATION SCHEDULE:										
INPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	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	1,2,3,4	
FY96 & PRIOR			1,0,0,0						1	
FY97									10	
FY98				2,3,3,2					10	
FY99										
FY00										
FY01										
FY03										
OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	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	1,2,3,4	
FY96 & PRIOR			0,0,0,1						1	
FY97									10	
FY98					1,1,2,2,	2,2,			10	
FY99										
FY00										
FY01										
FY02										

P3A
 SSN ACOUSTICS/82SA
 MODIFICATION TITLE: SSN ACOUSTICS
 MODELS OF SYSTEM AFFECTED: AN/BSY-1 A-RCI TA TO SA UPGRADE KITS
 DESCRIPTION/JUSTIFICATION: PROVIDES SPHERICAL ARRAY PROCESSING
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MSII 05/96

FINANCIAL PLAN (IN MILLIONS)	FY96															TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST			
	QTY	& PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY					FY03		
RD&E																						
PROCUREMENT																						
QUANTITY	0	0.000	0	0.000	1	3.037	3	9.312	3	9.517	2	6.484	2	6.627	0	0.000	0	0.000	11	34.977		
INSTALLATION KITS	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		
INSTALLATION KITS NONRECURRING EQUIPMENT	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		0.000		
EQUIPMENT NONRECURRING ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALLATION OF HARDWARE																						
FY97 EQUIPMENT AND PRIOR																				0	0.000	
FY98 EQUIPMENT									1	0.863										1	0.863	
FY99 EQUIPMENT											3	2.076								3	2.076	
FY00 EQUIPMENT	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	2.121						3	2.121	
FY01 EQUIPMENT													2	1.414						2	1.414	
FY02 EQUIPMENT															2	1.450				2	1.450	
FY03 EQUIPMENT																				0	0.000	
TO COMPLETE																				0	0.000	
SEOC MOD																				0	0.000	
TOTAL INSTALLATION COST				0.000		0.000		0.000		0.863		2.076		3.535		1.450		0.000		11	7.924	
TOTAL PROCUREMENT COST				0.000		3.037		9.312		9.517		6.484		6.627		0.000		0.000				34.977
TOTAL COST				0.000		3.037		9.312		10.380		8.560		10.162		1.450		0.000				42.901

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 12-18 MONTHS
 CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: 03/98 BUDGET YEAR 2: 03/99
 PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: 05/99 BUDGET YEAR 2: 05/00

INSTALLATION SCHEDULE:	INPUT =====>	FY97	FY98	FY99	FY00	FY01	FY02	FY03	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	
FY96 & PRIOR		0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	1,0,0,0	0,0,0,22	0
FY97										
FY98					0,1,0,0					1
FY99						0, 1, 1, 1				3
FY00							2,1,0,0			3
FY01							0,1,1,0			2
FY02								2, 0, 0, 0		2
OUTPUT =====>		FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
FY96 & 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	1,2,3,4	0
FY97		0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	
FY98						0, 0, 0, 1				1
FY99							0, 1, 1, 1			3
FY00								0, 0, 0, 3		3
FY01								0, 0, 0, 2		2
FY02									2, 0, 0, 0	2

P3A
 SSN ACOUSTICS/82SA
 MODIFICATION TITLE: SSN ACOUSTICS
 MODELS OF SYSTEM AFFECTED: AN/BSY-1 A-RCI SA KITS
 DESCRIPTION/JUSTIFICATION: PROVIDES SPHERICAL ARRAY PROCESSING
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS11 05/96

	FY96		FY97	FY98	FY99	FY00	FY01	FY02	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST					
	QTY	& PRIOR																
FINANCIAL PLAN (IN MILLIONS)																		
RDT&E																		
PROCUREMENT																		
QUANTITY	0	0.000	0	0.000	3	16.018	3	16.370	4	22.307	2	11.399	0	0.000	0	0.000	12	66.094
INSTALLATION KITS	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
INSTALLATION KITS NONRECURRING EQUIPMENT	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000		0.000
EQUIPMENT NONRECURRING																		
ENGINEERING CHANGE ORDERS																		
DATA																		
TRAINING EQUIPMENT					1	5.339											1	5.339
SUPPORT EQUIPMENT																		
OTHER																		
INTERIM CONTRACTOR SUPPORT																		
INSTALLATION OF HARDWARE																		
FY97 EQUIPMENT AND PRIOR																	0	0.000
FY98 EQUIPMENT																	0	0.000
FY99 EQUIPMENT								3	2.139								3	2.139
FY00 EQUIPMENT										3	2.916						3	2.916
FY01 EQUIPMENT												4	2.815				4	2.815
FY02 EQUIPMENT												2	1.408				2	1.408
FY03 EQUIPMENT																	0	0.000
TO COMPLETE																	0	0.000
TOTAL INSTALLATION COST			0.000	0.000	0.000	0.000	3	2.139	3	2.916	6	4.223		0.000			12	9.278
TOTAL PROCUREMENT COST			0.000	0.000	21.357	16.370	22.307	11.399	0.000	0.000								71.433
TOTAL COST			0.000	0.000	21.357	16.370	24.446	14.315	4.223	0.000								80.711

METHOD OF IMPLEMENTATION: SHIPYARD
 ADMINISTRATIVE LEADTIME:
 PRODUCTION LEADTIME:
 CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2: 03/99
 PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2: 05/00

INSTALLATION SCHEDULE:	FY97		FY98		FY99		FY00		FY01		FY02		FY03		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	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4				
INPUT =====>																
FY96 & PRIOR	0,0,0															
FY97																
FY98																
FY99									0, 1, 1, 1							3
FY00										1, 2, 0, 0						3
FY01											2, 2, 0, 0					4
FY02											0, 0, 1, 1					2
OUTPUT =====>																
FY96 & PRIOR	0,0,0															
FY97																
FY98																
FY99									0, 0, 0, 1	1, 1, 0, 0						3
FY00										0, 0, 0, 3						3
FY01												0, 0, 0, 4				4
FY02													0, 0, 0, 2			2

*Quantity includes 1 Maintenance Trainer- No FMP \$

P3A INDIVIDUAL MODIFICATION DATE: February 1997
 SSN ACOUSTICS/82SA
 MODIFICATION TITLE: SSN ACOUSTICS
 MODELS OF SYSTEM AFFECTED: AN/BQG-5 WIDE APERTURE ARRAY
 DESCRIPTION/JUSTIFICATION: Provides full search capability.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NONE

	FY96		FY97	FY98	FY99	FY00	FY01	FY02	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST							
	QTY	& PRIOR																		
FINANCIAL PLAN (IN MILLIONS)																				
RD&E																				
PROCUREMENT																				
QUANTITY	3	41.300	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	41.300		
INSTALLATION KITS	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		
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		
INTERIM CONTRACTOR SUPPORT																		0.000		
INSTALLATION OF HARDWARE																				
FY95 EQUIPMENT AND PRIOR	1	11.050	1	10.642	AP	0.443	AP	0.139	1	12.235	0	0.000	0	0.000	0	0.000	0	0.000	3	34.509
FY96 EQUIPMENT																				0.000
FY97 EQUIPMENT																			0	0.000
FY98 EQUIPMENT																			0	0.000
FY99 EQUIPMENT																			0	0.000
FY00 EQUIPMENT																			0	0.000
FY01 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000
TOTAL INSTALLATION COST	1	11.050	1	10.642		0.443		0.139		12.235		0.000		0.000		0.000		0.000	3	34.509
TOTAL PROCUREMENT COST		41.300		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		41.300
TOTAL COST		52.350		10.642		0.443		0.139		12.235		0.000		0.000		0.000		0.000		75.809

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME:
 CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:
 PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:

INSTALLATION SCHEDULE:	FY96	FY97	FY98	FY99	FY00	FY01	FY02	TC	TOTAL
INPUT =====>	<u>1,2,3,4</u>	<u>3</u>							
FY96 & PRIOR		1,0,0,0			0,1,0,0				
FY97									
FY98									
FY99									
FY00									
FY01									
FY02									
OUTPUT =====>	<u>1,2,3,4</u>	<u>3</u>							
FY96 & PRIOR		0,0,1,0			0,0,0,1				
FY97									
FY98									
FY99									
FY00									
FY01									
FY02									

P3A INDIVIDUAL MODIFICATION DATE: February 1997
 SSN ACOUSTICS/82SA
 MODIFICATION TITLE: SSN ACOUSTICS
 MODELS OF SYSTEM AFFECTED: EM SP REPLACEMENT
 DESCRIPTION/JUSTIFICATION: REPLACES OBSOLETE ENHANCED MODULAR SINGAL PROCESSOR ON AN/BSY-2 SUBMARINE COMBAT SYSTEMS
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NONE

FINANCIAL PLAN (IN MILLIONS)	FY96		FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST
	QTY	& PRIOR																	
RD&E					2.696		2.008												4.704
PROCUREMENT																			
QUANTITY	0.000		0.000	0	0.000	0	0.000	1	1.060	1	1.082	1	1.106	0	0.000	0	0.000	3	3.248
INSTALLATION KITS	0.000		0.000	0	0.000	0	0.000	0	0.000	0		0					0.000	0	0.000
INSTALLATION KITS NONRECURRING																			
EQUIPMENT	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		0.000
EQUIPMENT NONRECURRING																			
ENGINEERING CHANGE ORDERS																			
DATA																			
TRAINING EQUIPMENT																			
SUPPORT EQUIPMENT																			
OTHER																			
INTERIM CONTRACTOR SUPPORT																			
INSTALLATION OF HARDWARE																			
FY97 EQUIPMENT AND PRIOR																		0	0.000
FY98 EQUIPMENT																		0	0.000
FY99 EQUIPMENT																		0	0.000
FY00 EQUIPMENT										1	0.730							1	0.730
FY01 EQUIPMENT												1	0.743					1	0.743
FY02 EQUIPMENT												1	0.761					1	0.761
FY03 EQUIPMENT																		0	0.000
TO COMPLETE																		0	0.000
TOTAL INSTALLATION COST			0.000		0.000		0.000		0.000	1	0.730	2	1.504		0.000		0.000	3	2.234
TOTAL PROCUREMENT COST			0.000		0.000		0.000		1.060		1.082		1.106		0.000		0.000		3.248
TOTAL COST			0.000		0.000		0.000		1.060		1.812		2.610		0.000		0.000		5.482

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME:
 CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:
 PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:

INSTALLATION SCHEDULE:	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
INPUT =====>	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	3
FY96 & PRIOR									
FY97									
FY98									
FY99									
FY00					0,1,0,0				
FY01						1,0,0,0			
TO COMPLETE						0,0,1,0		2,0,0,0	
OUTPUT =====>	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	3
FY96 & PRIOR									
FY97									
FY98									
FY99									
FY00					0,0,1,0				
FY01						1,0,0,0			
TO COMPLETE						0,0,1,0		2,0,0,0	

P3A
 SSN ACOUSTICS/82SA
 MODIFICATION TITLE: SSN ACOUSTICS
 MODELS OF SYSTEM AFFECTED: AN/BSY-2 SUBMARINE TECHNOLOGY INSERTION PROGRAM (STIP)
 DESCRIPTION/JUSTIFICATION: REPLACES OBSOLETE EQUIPMENT AND WILL ACHIEVE COMMONALITY
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NONE

FINANCIAL PLAN (IN MILLIONS)	FY96		FY97	FY98	FY99	FY00	FY01	FY02	FY03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST			
	QTY	& PRIOR														
RD&E						2.070	2.707						4.777			
PROCUREMENT																
QUANTITY			0.000	0	0.000		1	1.250	1	1.277	1	1.305	0	0.000	3	3.832
INSTALLATION KITS			0.000	0	0.000											
INSTALLATION KITS NONRECURRING																
EQUIPMENT			0	0.000	0	0.000										
EQUIPMENT NONRECURRING																
ENGINEERING CHANGE ORDERS																
DATA																
TRAINING EQUIPMENT																
SUPPORT EQUIPMENT																
OTHER																
INTERIM CONTRACTOR SUPPORT																
INSTALLATION OF HARDWARE																
FY97 EQUIPMENT AND PRIOR															0	0.000
FY98 EQUIPMENT															0	0.000
FY99 EQUIPMENT															0	0.000
FY00 EQUIPMENT															0	0.000
FY01 EQUIPMENT									1	0.900					1	0.900
FY02 EQUIPMENT											1	0.900			1	0.900
FY03 EQUIPMENT												1	0.900		1	0.900
TO COMPLETE															0	0.000
TOTAL INSTALLATION COST			0.000	0.000	0.000	0.000	0.000	0.000	0.900	0.900	0.900	3	2.700			
TOTAL PROCUREMENT COST			0.000	0.000	0.000	0.000	1.250	1.277	1.305	0.000			3.832			
TOTAL COST			0.000	0.000	0.000	0.000	1.250	2.177	2.205	0.900			6.532			

METHOD OF IMPLEMENTATION: SHIPYARD ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME:
 CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:
 PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:

INSTALLATION SCHEDULE:	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
INPUT =====>	<u>1,2,3,4</u>	<u>TOTAL</u>							
FY97 & PRIOR									
FY98									
FY99									
FY00									
FY01						0,0,1,0			1
FY02							0,1,0,0		1
TO COMPLETE								1,0,0,0	1
OUTPUT =====>	<u>1,2,3,4</u>	<u>TOTAL</u>							
FY97 & PRIOR									
FY98									
FY99									
FY00									
FY01						0,0,0,1			1
FY02							0,0,1,0		1
TO COMPLETE								1,0,0,0	1

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET

P-40

FEBRUARY 1997

**APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY (OPN)
BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT - ASW**

**P-1 ITEM NOMENCLATURE
SURFACE SONAR WINDOWS AND DOMES
Subhead: 82VH
Budget Line Item: 217800**

	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$3.3	\$0.0	\$0.0	\$3.1	\$2.6	\$3.4	\$3.1	\$3.2

1. VH001: Sonar Dome Rubber Windows are installed in CG47, DDG51, DD963 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.
2. VH003: Provide emergency replacement Sonar Rubber Domes for FFG-7 Class AN/SQS-56 active/passive duct sonar systems.
3. VH006: AN/SQS-56 SRD Corrective Action Program (CAP), established in FY91 to determine the causes and develop solutions for increased failures, will be suspended for FY97 - FY98,
4. VH830: PRODUCTION ENGINEERING technical evaluation, failure analyses, implementation of the inwater one-side backscatter xray program, manufacturer GFE refurbishments, engineering and field service will be suspended in FY97 and FY98,

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

WEAPON SYSTEM COST ANALYSIS EXHIBIT P-5								DATE: FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT , NAVY (OPN) BA2 - COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD SURFACE SONAR WINDOWS AND DOMES [82VH]						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
VH001	SQS-26/53 SDRW	A							1	1,386
VH003	SQS-56 SRD	A							3	1,396
VH006	SQS-56 SRD CAP	A		3,257						0
VH830	PRODUCTION ENGINEERING	A								\$319
	TOTAL			\$3,257		\$0		\$0		\$3,101

UNCLASSIFIED

Exhibit P-20, Requirements Study			Approp (Treas) Code/CC/BA/BSA/Item Control No Other Procurement, Navy (OPN) BA-2; BLI 217800				Date FEBRUARY 1997		
P-1 Line Item Nomenclature (include DODIC for Ammunition Items) SQS-26/53 SDRW [SUBH: 82VH/PDLI: VH001]			Admin Leadtime (after Oct 1): 15 months				Prod Leadtime: 6 months		
	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003	
Buy Summary	0	0	0	1	1	2	1	1	
Unit Cost									
Total Cost	0	0	0	0	0	0	0	0	
Asset Dynamics									
Beginning Asset Position	20	17	14	11	9	7	6	4	
Deliveries from all prior year funding	0								
Deliveries from CY Funding		0							
Deliveries from BY1 funding			0						
Deliveries from BY2 funding				1	1				
Deliveries from subsequent years' funding						2	1	1	
Other Gains									
Combat Losses/Usage									
Training Losses/Usage									
Test Losses/Usage									
Other Losses/Usage	-3	-3	-3	-3	-3	-3	-3	-3	
Disposals/Retirements/Attritions/etc.									
End of Year Asset Position	17	14	11	9	7	6	4	2	
Inventory Objective or Current Authorized Allowance	17	15	12	10	8	7	5	3	
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:				
Assets Rqd for Combat Loads:	PY thru _____:	PY thru 12/96 3	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI:				
WRM Rqmt:	PY-1:	PY-1: 3	PY-1:	Vehicle Augment:	Attrition Res:				
Pipeline:	PY-2:	PY-2: 2	PY-2:		BAI:				
Other:	PY-3:	PY-3: 3	PY-3:		Inactive Inv:				
TOTAL:		11			Storage:				
REMARKS:									

Exhibit P-20, Requirements Study		Approp (Treas) Code/CC/BA/BSA/Item Control No Other Procurement, Navy (OPN) BA-2; BLI 217800				Date FEBRUARY 1997		
P-1 Line Item Nomenclature (include DODIC for Ammunition Items) SQS-56 SRD [SUBH: 82VH/PDLI VH003]		Admin Leadtime (after Oct 1): 15 months				Prod Leadtime: 6 months		
	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Buy Summary	0	0	0	1	1	2	1	1
Unit Cost								
Total Cost	0	0	0	0	0	0	0	0
Asset Dynamics								
Beginning Asset Position	29	23	18	13	11	10	7	6
Deliveries from all prior year funding	0							
Deliveries from CY Funding		0						
Deliveries from BY1 funding			0					
Deliveries from BY2 funding				3				
Deliveries from subsequent years' funding					3	1	3	3
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage	-6	-5	-5	-5	-4	-4	-4	-4
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	23	18	13	11	10	7	6	5
Inventory Objective or Current Authorized Allowance	23	18	13	11	12	8	7	5
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for BY1 Replacement:	Aircraft: TOAI:			
Assets Rqd for Combat Loads:	PY thru _____:	PY thru 12/96 6	PY thru _____:	Vehicles Eligible for BY2 Replacement:	PAA: TAI:			
WRM Rqmt:	PY-1:	PY-1: 4	PY-1:	Vehicle Augment:	Attrition Res:			
Pipeline:	PY-2:	PY-2: 6	PY-2:		BAI:			
Other:	PY-3:	PY-3: 4	PY-3:		Inactive Inv:			
TOTAL:		20			Storage:			
REMARKS:								

BUDGET ITEM JUSTIFICATION SHEET
EXHIBIT P-40

DATE:
February 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/BA-2
COMMUNICATIONS & ELECTRONICS EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
SONAR SUPPORT EQUIPMENT/82WK

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (In Millions)	\$26.6	\$16.9	\$5.4	\$5.8	\$10.0	\$9.9	\$4.2	\$4.2

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:

- 1) WK033 - Under the AN/BQR-22A EC-15, a Multibeam Enhancement capability is being procured to improve the detection and classification capability of the submarine.
- 2) WK034 - AN/BQS-15 EC-17 is being procured to provide improvements in the mine avoidance capability on non AN/BSY-1 SSN 688 Class Submarines. Procurement of this change commenced in 1992. The total objective is 29 systems. Twenty-One (21) have been procured in prior years and eight (8) were procured in FY 96. This completes the market buy.
- 3) WK036 - Procures planned improvements for the AN/BQS-15 EC-17 and ancillary sonars.

Funds for the Remote Ahead Profiling (RAP) improvement are phased from FY96 through FY98. RAP provides a major display improvement for under-ice and mine avoidance operations. The total objective is 29 kits. One kit was procured in FY 96; fourteen (14) are planned for FY 97 and six (6) are planned for FY 98. Eight will be procured in later years.

Procurement of a Mission Mapping Upgrade is planned to start in FY00. This assists the ship in making decisions on how to safely exit the minefield. Kit procurement is planned for FY00 and subsequent years.

Procurements of nineteen AN/UQN-9 and 40 IDAR tape recorder systems for all FAST ATTACK Submarines are planned for FY98 and FY99. These will be a COTS modified system.

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BUDGET ITEM JUSTIFICATION SHEET
EXHIBIT P-40

DATE:
February 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/BA-2
COMMUNICATIONS & ELECTRONICS EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
SONAR SUPPORT EQUIPMENT/82WK

Procurement of twenty-four (24) COTS Replacement kits for the AN/BQN-17, which is the primary depth sounder on SSN 688 Class Submarines, is planned for FY 00 and FY 01.

SUBMARINE NAVY STANDARD DESKTOP COMPUTER SYSTEM (NSTDC)

WK040 - This line procures the Submarine Desktop Computer Systems (TAC-3/4's) for SSN 688, SSN 688I, SSBN 726 Class Submarines and Trainers. The total inventory objective is 188. FY 96 completed procurement of these items.

WK042 - Provides engineering upgrades for the Automatic Data Acquisition Processor (ADAP) Interface Units. Upgrades incorporate combat system updates and new functionality.

WK5IN - Funds actual hardware installation during shipyard availabilities. The budget reflects the transfer of design services into the appropriate equipment P-1 item beginning in FY 1998.

WKDSA - Funds Installation Design Services. Budget reflects the transfer of design services into the appropriate P-1 line item beginning in FY 1998.

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WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5

DATE:
February 1997

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT, NAVY/BA-2
COMMUNICATIONS & ELECTRONICS EQUIPMENT**

P-1 ITEM NOMENCLATURE/SUBHEAD

SONAR SUPPORT EQUIPMENT/82WK

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
<u>C2WK</u>										
WK040	TACTICAL ADVANCED COMPUTERS	A	31	1,609		0		0	0	0
WK042	ADAP ENGINEERING UPGRADES	A	55	1,011	29	607	33	698	33	690
<u>82WK</u>										
WK033	AN/BQR-20 SERIES ECs	A		606		610		629		522
WK034	AN/BQS-15 EC-17	A	8	10,616						
WK036	AN/BQS-15 EC-17 AND ANCILLARY <u>SONARS IMPROVEMENTS</u>	A		287		3,549		2,532		2,080
	AN/BQS-15 RAP		1	287	14	3,549	6	1,544		
	AN/UQN-9						19	988		
	IDARS- SSN 688								40	2,080
WK830	PRODUCTION ENGINEERING	A		5,861		3,834		577		1,705
WK900	CONSULTING SERVICES	A		325		317		272		262
WKDSA	INSTALLATION DESIGN SERVICES			0		0		145		104
WK5IN	FMP INSTALLATION OF EQUIPMENT	A		6,278		8,004		577		417
	GRAND TOTAL			\$26,593		\$16,921		\$5,430		\$5,780

UNCLASSIFIED

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A (\$000)	DATE: February 1997
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APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2 COMMUNICATIONS & ELECTRONICS EQUIPMENT	P-1 ITEM NOMENCLATURE/SUBHEAD SONAR SUPPORT EQUIPMENT/82WK
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COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
WK036	AN/BOS-15 EC-17 IMPROVEMENTS(CONT'D)										
	FY98 AN/UQN-9	APL: UWA	SS	SPAWAR	02/98	05/98	19	\$52.0	YES	NO	
	FY99 (IDARS- SSN 688)	NUWC	SS	SPAWAR	02/99	04/99	40	\$52.0	YES	NO	
WK040	TACTICAL ADVANCED COMPUTERS										
	FY96	HP,CA	C/FP	NISMIC	01/96	06/96	31	\$51.9	YES	NO	

REMARKS:

P-1 SHOPPING LIST	
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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A (\$000)	DATE: February 1997
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APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2 COMMUNICATIONS & ELECTRONICS EQUIPMENT	P-1 ITEM NOMENCLATURE/SUBHEAD SONAR SUPPORT EQUIPMENT/82WK
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COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
WK042	ADAP ENGINEERING UPGRADES										
	<u>FY96</u>	NUWC, Newport, RI	C/FP	NAVSEA	05/96	06/96	55	\$18.4	YES	NO	
	<u>FY97</u>	NUWC, Newport, RI	C/FP	NAVSEA	05/97	06/97	29	\$20.4	YES	NO	
	<u>FY98</u>	NUWC, Newport, RI	C/FP	NAVSEA	05/98	06/98	33	\$21.1	YES	NO	
	<u>FY99</u>	NUWC, Newport, RI	C/FP	NAVSEA	05/99	06/99	33	\$21.0	YES	NO	

REMARKS:

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P3A
 SONAR SUPPORT EQUIPMENT/82WK
 MODIFICATION TITLE: AN/BQR-22A EC-15
 MODELS OF SYSTEM AFFECTED: AN/BQR-22A
 DESCRIPTION/JUSTIFICATION: Enhances capability of the AN/BQR-22A.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY96													TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST	
	QTY	& PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY					FY02
RDT&E																	0	0.000
PROCUREMENT																	0	0.000
QUANTITY	63	30.550	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	63	30.550
INSTALLATION KITS	63	30.550	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	63	30.550
INSTALLATION KITS NONRECURRING 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
INTERIM CONTRACTOR SUPPORT																	0	0.000
INSTALLATION OF HARDWARE																		
FY96 EQUIPMENT AND PRIOR	40	6.869	22	2.539	-	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1	0.119	63	9.527
FY97 EQUIPMENT																	0	0.000
FY98 EQUIPMENT																	0	0.000
FY99 EQUIPMENT																	0	0.000
FY00 EQUIPMENT																	0	0.000
FY01 EQUIPMENT																	0	0.000
FY02 EQUIPMENT																	0	0.000
TO COMPLETE																	0	0.000
TOTAL INSTALLATION COST	40	6.869	22	2.539	-	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1	0.119	63	9.527
TOTAL PROCUREMENT COST		30.550		0.000		0.000		0.000		0.000		0.000		0.000		0.000	63	30.550
TOTAL COST		37.419		2.539		0.000		0.119	63	40.077								

METHOD OF IMPLEMENTATION: AIT
 CONTRACT DATE: PRIOR YEAR: N/A CURRENT YEAR: N/A BUDGET YEAR 1: N/A BUDGET YEAR 2: N/A
 PRODUCTION DELIVER DATE: PRIOR YEAR: N/A CURRENT YEAR: N/A BUDGET YEAR 1: N/A BUDGET YEAR 2: N/A

INSTALLATION SCHEDULE:		ADMINISTRATIVE LEADTIME: 3											PRODUCTION LEADTIME: 12			
INPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	TC			TOTAL				
FY96 & PRIOR	40	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			63				
FY97			6,6,5,5	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,1							
FY98																
FY99																
FY00																
FY01																
FY02																
OUTPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	TC			TOTAL				
FY96 & PRIOR	40	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			63				
FY97			6,6,5,5	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,1							
FY98																
FY99																
FY00																
FY01																
FY02																

P3A
 SONAR SUPPORT EQUIPMENT/82WK
 MODIFICATION TITLE: AN/BQS-15 EC-17, WK034
 MODELS OF SYSTEM AFFECTED: AN/BQS-15
 DESCRIPTION/JUSTIFICATION: Provides mine detection capability for SSN 688 class submarines.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY96												TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST			
	QTY	& PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01					QTY	FY02	
RDT&E																			
PROCUREMENT	29	39.866	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	29	39.866	
QUANTITY	29	39.866	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	29	39.866	
INSTALLATION KITS																	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	
INTERIM CONTRACTOR SUPPORT																	0	0.000	
INSTALLATION OF HARDWARE																			
FY96 EQUIPMENT AND PRIOR	13	4.849	10	5.465	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	6	3.402	29	13.716	
FY97 EQUIPMENT	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	
FY98 EQUIPMENT																	0	0.000	
FY99 EQUIPMENT																	0	0.000	
FY00 EQUIPMENT																	0	0.000	
FY01 EQUIPMENT																	0	0.000	
FY02 EQUIPMENT																	0	0.000	
TO COMPLETE																	0	0.000	
TOTAL INSTALLATION COST	13	4.849	10	5.465	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	6	3.402	29	13.716	
TOTAL PROCUREMENT COST		39.866		0.000		0.000		0.000		0.000		0.000		0.000		0.000		39.866	
TOTAL COST		44.715		5.465		0.000		0.000		0.000		0.000		0.000		3.402		53.582	
METHOD OF IMPLEMENTATION:	AIT		ADMINISTRATIVE LEADTIME:				1		PRODUCTION LEADTIME:				12						
CONTRACT DATE:	01/95		PRIOR YEAR:		CURRENT YEAR:		01/95		BUDGET YEAR 1:		01/96		BUDGET YEAR 2:						
PRODUCTION DELIVER D/	04/96		PRIOR YEAR:		CURRENT YEAR:		04/96		BUDGET YEAR 1:		01/97		BUDGET YEAR 2:						
INSTALLATION SCHEDULE:				FY96 & PRIOR		FY97		FY98		FY99		FY00		FY01		FY02		TC	
INPUT =====>				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	
FY96 & PRIOR	29			0,5,4,4		4,4,2,0												6	
FY97	0																		
FY98	0																		
FY99	0																		
FY00	0																		
FY01	0																		
FY02	0																		
OUTPUT =====>				FY96 & PRIOR		FY97		FY98		FY99		FY00		FY01		FY02		TC	
FY96 & PRIOR	29			0,5,4,4		4,4,2,0		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4	
FY97	0																		
FY98	0																		
FY99	0																		
FY00	0																		
FY01	0																		
FY02	0																		

NOTE: The FY96 installation quantity includes the Depot Test Model and CCM which do not require installation funding.

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P3A INDIVIDUAL MODIFICATION DATE: February 1997
 SONAR SUPPORT EQUIPMENT/82WVK
 MODIFICATION TITLE: MISSION MAPPING; WKU36
 MODELS OF SYSTEM AFFECTED: AN/BQS-15
 DESCRIPTION/JUSTIFICATION: Provides ship capability to map littoral areas.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY96															TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST	
	QTY & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03					
FINANCIAL PLAN (IN MILLIONS)																				
RD&E																				
PROCUREMENT	0	0.000	0	0.000	0	0.000	0	0.000	1	0.588	3	1.751	4	2.336	5	2.919	9	5.255	22	12.849
QUANTITY	0	0.000	0	0.000	0	0.000	0	0.000	1	0.588	3	1.751	4	2.336	5	2.919	9	5.255	22	12.849
INSTALLATION KITS																			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
INTERIM CONTRACTOR SUPPORT																			0	0.000

INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT AND PRIOR																		0	0.000	
FY97 EQUIPMENT																		0	0.000	
FY98 EQUIPMENT																		0	0.000	
FY99 EQUIPMENT	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
FY00 EQUIPMENT	1	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1	0.104	0	0.000	0	0.000	0	0.000	1	0.104
FY01 EQUIPMENT	3	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	0.416	0	0.000	0	0.000	3	0.416
FY02 EQUIPMENT	4	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	4	0.496	0	0.000	4	0.496
TO COMPLETE	14	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	14	1.400	14	1.400
TOTAL INSTALLATION COST			0	0.000	0	0.000	0	0.000	0	0.000	1	0.104	3	0.416	4	0.496	14	1.400	22	2.416

TOTAL PROCUREMENT COST			0.000	0.000	0.000	0.588	1.751	2.336	2.919	5.255	12.849
TOTAL COST			0.000	0.000	0.000	0.588	1.855	2.752	3.415	6.655	15.265

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 1 PRODUCTION LEADTIME: 11
 CONTRACT DATE: 01/98 PRIOR YEAR: N/A CURRENT YEAR: N/A BUDGET YEAR 1: N/A BUDGET YEAR 2: 01/98
 PRODUCTION DELIVER DATE: 01/00 PRIOR YEAR: N/A CURRENT YEAR: N/A BUDGET YEAR 1: N/A BUDGET YEAR 2: 07/98

INSTALLATION SCHEDULE:											
INPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	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	1,2,3,4	1,2,3,4	1,2,3,4
FY97											
FY98											
FY99											
FY00	1					0,0,0,1					1
FY01	3						0,1,1,1				3
FY02	4							1,1,1,1			4
FY03	5								5		5
TO COMPLETE	9								9		9
OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	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	1,2,3,4	1,2,3,4	1,2,3,4
FY97											
FY98											
FY99											
FY00	1					0,0,0,1					1
FY01	3						0,1,1,1				3
FY02	4							1,1,1,1			4
FY03	5								5		5
TO COMPLETE	9								9		9

UNCLASSIFIED

**REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES
EXHIBIT P-23B**

**DATE:
February 1997**

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT, NAVY/BA-2
COMMUNICATIONS & ELECTRONICS EQUIPMENT**

P-1 ITEM NOMENCLATURE

SONAR SUPPORT EQUIPMENT/82WK

COST CODE	ITEM	TOTAL INVENTORY OBJECTIVE / REQUIREMENT	QUANTITY ON HAND AND NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY97 PROGRAM FUNDS	QUANTITY DUE IN WITH FY98 PROGRAM FUNDS	QUANTITY DUE IN WITH FY99 PROGRAM FUNDS	BALANCE	PHASING RATIONALE
WK040	TACTICAL ADVANCED COMPUTER	188	35	122	31	0	0	0	0	FY 96 COMPLETES PROCUREMENT OF WK040
WK042	ADAP UPGRADES	268	0	42	55	29	33	33	76	UPGRADES FOR COMBAT SYSTEM UPDATES AND NEW FUNCTIONALITY
WK036	IDARS - SSN 688I	19	0	0	0	0	19	0	0	ONE TIME MODIFIED COTS BUY QUANTITY ON EXISTING SPAWAR CONTRACT
	IDARS - SSN 688	40	0	0	0	0	0	40	0	
	AN/BQN-17	70	0	0	0	0	0	0	70	PROCUREMENT PLANNED IN OO/01

MEMO ENTRIES

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CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40					DATE : February 1997			
APPROPRIATIONS/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2: COMMUNICATIONS & ELECTRONICS EQUIPMENT					P-1 ITEM NOMENCLATURE/SUBHEAD SONAR SWITCHES AND TRANSDUCERS/ 82PU			
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (In Millions)	\$ 8.7	\$ 10.4	\$ 11.6	\$ 13.7	\$ 12.3	\$ 13.7	\$ 11.8	\$ 17.8
<p>This program provides hydrophones, transducers, cables, and acoustic windows for In Service UnderSea Warfare Sonars on 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>Included in the line are transducers, hydrophones, windows and domes for the following UnderSea Warfare Sonars: BSY-1, BSY-2, BQQ-5, BQQ-6, BQS-15, BQS-14A, WLR-9/12, BQN-17, BQA-8, BQH-1, and BQR-7. The TR-339, TR-340 and DT-633, for AN/BSY-1 and AN/BSY-2 High Frequency Obstacle Avoidance Sonar systems, and the TR-353A, for AN/BSY-2 primary sonar, are major new responsibilities.</p> <p>This program provides hydrophones, transducers, cables, and acoustic windows for In Service UnderSea Warfare Sonars on 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>Included in the line are transducers, hydrophones, windows and domes for the following UnderSea Warfare Sonars: BSY-1, BSY-2, BQQ-5, BQQ-6, BQS-15, BQS-14A, WLR-9/12, BQN-17, BQA-8, BQH-1, and BQR-7. The TR-339, TR-340 and DT-633, for AN/BSY-1 and AN/BSY-2 High Frequency Obstacle Avoidance Sonar systems, and the TR-353A, for AN/BSY-2 primary sonar, are major new responsibilities.</p> <p>The TR-353A, the main SSN-21 active array of 555 each boat, is being procured in FY98 and FY99 to support the SSN-21 and SSN-22 when in operation. Current stocks to support this item are zero.</p> <p>The SSN-21, a new major user (2296 per boat) in addition to the SSBN 726 Class, of the DT-574 and the FY98/FY99 procurements reflect this major support requirement.</p> <p>The DT-513 (FY98 and FY99) and TR-302B (FY98 and FY99) (All Submarines) as well as the TR-339 and TR-340 (AN/BSY-1/2) procurements are to replace nearly zero or zero, respectively, stocks required to support in use losses in an expanding market.</p> <p>The FY98 and FY99 GRE connector procurements are to sustain the replacement of cables during attrition with one (GRE) which eliminates the number one cause of cable failure (connector delamination and subsequent cable flooding) for all connectorized transducers (the majority).</p> <p>The DT-511B (FY98 and FY99) are for all submarines. The buy is to replace in use losses as well as provide coverage for the TRIDENT and SSN 688 backfits.</p> <p>The DT-592 (FY98 and FY99) is for all submarines to replace losses by attrition as well provide coverage for the TRIDENT and SSN 688 AN/WLR-9 backfits.</p> <p>The TR-321C (FY99) procurement is to renew stocks of this high usage item.</p>								

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CLASSIFICATION:

EXHIBIT P-40

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS							DATE : February 1997			
EXHIBIT P-5										
APPROPRIATIONS/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE/SUBHEAD			
OTHER PROCUREMENT, NAVY/BA-2:							SONAR SWITCHES AND TRANSDUCERS/			
COMMUNICATIONS & ELECTRONICS EQUIPMENT							82PU			
COST CODE		IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
PU100	TR-353A	A			0	\$ -	90	\$ 1,463	555	\$ 2,447
	DT-574	A			0	0	1000	273	1000	279
	DT-511B	A			90	2,732	50	1,279	50	1,307
	DT-513B(150)	A			0	0	0	0	123	348
	DT-513B(250)	A			66	71	60	67	30	37
	DT-592	A			52	2,899	30	1,306	30	1,334
	TR-302	A			0	0	25	961	20	436
	TR-302(WINDOW)	A			0	0	10	6	10	6
	TR-321C	A			0	0	0	0	103	1,296
	TR-338	A			47	1,162	30	510	30	521
	TR-339	A			0	0	18	663	15	234
	TR-340	A			0	0	18	663	15	234
	GRE CONNECTORS	A			0	0	413	252	902	563
	TOTAL PU100	A	4545	4877		6,863		7,443		9,041
PU200	ENGINEERING CHANGES	A		584		500		500		500
PU300	PROGRAM SUPPORT	A		3224		3,042		3,631		4,153
	GRAND TOTAL			\$ 8,685	255	\$ 10,405	1744	\$ 11,574	2883	\$ 13,694

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CLASSIFICATION:

EXHIBIT P-5

UNCLASSIFIED

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING										DATE : February 1997	
EXHIBIT P-5A											
\$000											
APPROPRIATIONS/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE/SUBHEAD				
OTHER PROCUREMENT, NAVY/BA-2:							SONAR SWITCHES AND TRANSDUCERS/				
COMMUNICATIONS & ELECTRONICS EQUIPMENT							82PU				
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
PU100	TR-353A (AN/BSY-2)										
	<u>FY98*</u>	UNKNOWN	C/FP	NUWC	4/98	4/99	90	16,258	YES	NO	
	<u>FY99</u>	UNKNOWN	OPTION	NUWC	4/99	4/00	555	4,409	YES	NO	
PU100	DT-574 (AN/BQQ-6;BSY-2)										
	<u>FY98</u>	ITC	OPTION	NUWC	12/97	12/98	1000	273	YES	NO	
	<u>FY99</u>	ITC	OPTION	NUWC	12/98	12/99	1000	279	YES	NO	
PU100	DT-511B (AN/WLR-9)										
	<u>FY97*</u>	UNKNOWN	C/FP	NUWC	2/97	8/98	90	30,354	YES	NO	
	<u>FY98</u>	UNKNOWN	OPTION	NUWC	2/98	2/99	50	25,585	YES	NO	
	<u>FY99</u>	UNKNOWN	OPTION	NUWC	2/99	2/00	50	26,137	YES	NO	
PU100	DT-513B (150' CABLE) (AN/BQA-8)										
	<u>FY99*</u>	UNKNOWN	C/FP	NUWC	3/99	10/99	123	2,829	YES	NO	

REMARKS:

* INCLUDES FIRST ARTICLE COSTS

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CLASSIFICATION:

UNCLASSIFIED

EXHIBIT P-40

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A \$000							DATE : February 1997				
APPROPRIATIONS/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2: COMMUNICATIONS & ELECTRONICS EQUIPMENT						P-1 ITEM NOMENCLATURE/SUBHEAD SONAR SWITCHES AND TRANSDUCERS/ 82PU					
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABL NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
PU100	DT-513B (250' CABLE) (AN/BQA-8)										
	<u>FY97</u>	HARRIS	OPTION	NUWC	2/97	11/97	66	1,076	YES	NO	
	<u>FY98</u>	HARRIS	OPTION	NUWC	3/98	10/98	60	1,119	YES	NO	
	<u>FY99*</u>	UNKNOWN	C/FP	NUWC	3/99	10/99	30	1,234	YES	NO	
PU100	DT-592 (AN/WLR-9)										
	<u>FY97*</u>	UNKNOWN	C/FP	NUWC	3/97	5/98	52	55,748	YES	NO	
	<u>FY98</u>	UNKNOWN	OPTION	NUWC	3/98	3/99	30	43,532	YES	NO	
	<u>FY99</u>	UNKNOWN	OPTION	NUWC	3/99	3/00	30	44,471	YES	NO	
PU100	TR-302B CABLE (AN/BQN-17)										
	<u>FY98*</u>	UNKNOWN	C/FP	NUWC	5/98	5/99	25	38,427	YES	NO	
	<u>FY99</u>	UNKNOWN	OPTION	NUWC	5/99	5/00	20	21,784	YES	NO	
REMARKS: * INCLUDES FIRST ARTICLE COSTS											

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CLASSIFICATION:

UNCLASSIFIED

EXHIBIT P-40

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A \$000							DATE : February 1997				
APPROPRIATIONS/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2: COMMUNICATIONS & ELECTRONICS EQUIPMENT							P-1 ITEM NOMENCLATURE/SUBHEAD SONAR SWITCHES AND TRANSDUCERS/ 82PU				
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABL NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
PU100	TR-302 WINDOW (AN/BQN-17)	NUWC NUWC	WX WX	NUWC NUWC	3/98 3/99	3/99 3/00	10 10	547 559	YES	NO	
	YES								NO		
PU100	TR-321C (AN/BQH-1C)	UNKNOWN	C/FP	NUWC	1/99	1/00	103	12,580	YES	NO	
	YES								NO		
PU100	TR-338A (AN/BSY-1;2)	UNKNOWN UNKNOWN UNKNOWN	C/FP OPTION OPTION	NUWC NUWC NUWC	1/97 1/98 1/99	1/98 1/99 1/00	47 30 30	24,715 16,992 17,366	YES	NO	
	YES								NO		
	YES								NO		

REMARKS:
* INCLUDES FIRST ARTICLE COSTS

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P-1 SHOPPING LIST	
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CLASSIFICATION:

UNCLASSIFIED

EXHIBIT P-40

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A \$000										DATE : February 1997	
APPROPRIATIONS/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2: COMMUNICATIONS & ELECTRONICS EQUIPMENT							P-1 ITEM NOMENCLATURE/SUBHEAD SONAR SWITCHES AND TRANSDUCERS/ 82PU				
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABL NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
PU100	TR-339 (AN/BSY-1;2)	UNKNOWN UNKNOWN	C/FP OPTION	NUWC NUWC	4/98	4/99	18	36,847	YES	NO	
	<u>FY98*</u> <u>FY99</u>				4/99	4/00	15	15,617	YES	NO	
PU100	TR-340 (AN/BSY-1;2)	UNKNOWN UNKNOWN	C/FP OPTION	NUWC NUWC	4/98	4/99	18	36,847	YES	NO	
	<u>FY98*</u> <u>FY99</u>				4/99	4/00	15	15,617	YES	NO	
PU100	GRE CONNECTORS All con. cables	UNKNOWN UNKNOWN	OPTION OPTION	NUWC NUWC	4/98	4/99	413	611	YES	NO	
	<u>FY98</u> <u>FY99</u>				4/99	4/00	902	624	YES	NO	

REMARKS:
* INCLUDES FIRST ARTICLE COSTS

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CLASSIFICATION:

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EXHIBIT P-40

APPROPRIATION: OTHER PROCUREMENT, NAVY						(DOD EXHIBIT P-40)	DATE February 1997																									
BUDGET ITEM JUSTIFICATION SHEET																																
BUDGET ACTIVITY BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT				P-1 ITEM NOMENCLATURE SUBMARINE ACOUSTIC WARFARE SYSTEM (SAWS) BLI: 221000/221005				SUBHEAD NO. C2WM																								
	FY 96	FY 97	FY 98	FY 99	FY 00	FY01	FY02	FY03																								
QUANTITY																																
COST (in millions)	\$8.1	\$6.5	\$4.3	\$8.5	\$8.4	\$10.5	\$13.3	\$19.7																								
<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 the next generation of countermeasure launcher systems and associated countermeasure devices.</p> <p>The FY 1996 funds were used to procure the ADC MK 3 (and associated launch tubes), CSA MK 2 MOD 1 and associated production support.</p> <p>The FY 1997 funds are required to procure the ADC MK 3 (and associated launch tubes), ADC MK 4 Engineering Changes, Six Inch Launch Tube Engineering Changes, AN/WLR-9 Engineering Changes, GG MK 77, and associated production support.</p> <p>The FY 1998 funds are required for AN/WLR-9 Engineering Changes, a Gas Generator MK 77 Engineering Change and associated production support.</p> <p>The FY 1999 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 budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p> <p>CSA MK 2 Installations:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Installing Agent</u></th> <th style="text-align: left;"><u>Date</u></th> <th style="text-align: left;"><u>End Item</u></th> <th style="text-align: left;"><u>Funding</u></th> </tr> </thead> <tbody> <tr> <td>Pearl Harbor</td> <td>1Q/FY96</td> <td>SSN752</td> <td>\$2,387,296</td> </tr> <tr> <td>Electric Boat</td> <td>2Q/FY96</td> <td>SSN760</td> <td>\$1,012,704</td> </tr> <tr> <td>Pearl Harbor</td> <td>4Q/FY97</td> <td>SSN754</td> <td>\$500,000</td> </tr> <tr> <td>Norfolk</td> <td>1Q/FY99</td> <td>SSN756</td> <td>\$714,000 (1)</td> </tr> <tr> <td>Norfolk</td> <td>1Q/FY99</td> <td>SSN756</td> <td>\$1,034,000</td> </tr> </tbody> </table> <p>Note: (1) SSN 756 will be installed 1Q/FY99, Funding identified in FY98 is Advanced Planning.</p>									<u>Installing Agent</u>	<u>Date</u>	<u>End Item</u>	<u>Funding</u>	Pearl Harbor	1Q/FY96	SSN752	\$2,387,296	Electric Boat	2Q/FY96	SSN760	\$1,012,704	Pearl Harbor	4Q/FY97	SSN754	\$500,000	Norfolk	1Q/FY99	SSN756	\$714,000 (1)	Norfolk	1Q/FY99	SSN756	\$1,034,000
<u>Installing Agent</u>	<u>Date</u>	<u>End Item</u>	<u>Funding</u>																													
Pearl Harbor	1Q/FY96	SSN752	\$2,387,296																													
Electric Boat	2Q/FY96	SSN760	\$1,012,704																													
Pearl Harbor	4Q/FY97	SSN754	\$500,000																													
Norfolk	1Q/FY99	SSN756	\$714,000 (1)																													
Norfolk	1Q/FY99	SSN756	\$1,034,000																													

DERIVED FROM MULTIPLE SOURCES
DECLASSIFY ON: X3, X4

P-1 SHOPPING LIST ITEM NO. 49	PAGE NO. 1
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WEAPONS SYSTEM COST ANALYSIS			A. Appropriation/Budget Activity Title/No.		B. P-1 ITEM NOMENCLATURE			DATE			
EXHIBIT (P-5)			OPN/Comm. and Electronics Equip BA-2		Submarine Acoustic Warfare System (SAWS) C2WM			February 1997			
COST CODE	ELEMENT OF COST	IDENT CODE	(TOTAL COST IN THOUSANDS OF DOLLARS)								
			FY96		FY97		FY98		FY99		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
WM014	ADC MK 3 MOD 0	A	130	\$2,131	150	\$2,513			120	\$2,165	
WM014	LAUNCH TUBES	A	130	\$228	150	\$434			120	\$363	
WM014	SHIPPING CONTAINERS	A									
WM015	ADC MK 2 MOD 1	A							175	\$756	
WM015	ENG. CHANGES										
WM017	AN/WLR-9 ENGINEERING CHANGE	A			8	\$1,040		11	\$1,461	12	\$1,629
WM019	CSA MK 2 MOD 1 (SSN 688 CLASS)	A	1	\$233							
WM019	ENG. CHANGES			\$287							
WM020	ADC MK 4										
WM020	LAUNCH TUBES					\$199					
WM020	SHIPPING CONTAINERS										
WM020	ENG. CHANGES					\$323					
WM022	GAS GENERATOR MK 77	A			115	\$327			120	\$356	
WM022	GAS GENERATOR MK 77 ECP							\$300		\$400	
WM830	PRODUCTION ENGINEERING	A		\$1,075		\$921		\$1,084		\$1,067	
WM900	CONSULTING SERVICES			\$700		\$700		\$700		\$700	
WM5IN	INSTALLATION			\$3,400		(\$500) *		\$693		\$782	
WM5IN	DSA TRANSFER							\$21		\$254	
	TOTAL			\$8,054		\$6,457		\$4,259		\$8,472	

REMARKS
 * BELOW THRESHOLD REPROGRAMMING IN PROCESS TO PROVIDE INSTALLATION FUNDS FOR CSA MK 2 MOD 1 ON SSN 754.

P-1 SHOPPING LIST ITEM NO. 49	PAGE NO. 2
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BUDGET PROCUREMENT HISTORY & PLANNING EXHIBIT (P-5A)

DATE

February 1997

APPROPRIATION/BUDGET ACTIVITY BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT-ASW	OTHER PROCUREMENT, NAVY	P-1 ITEM NOMENCLATURE SUBMARINE ACOUSTIC WARFARE SYSTEMS (SA C2WM)
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LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW?	SPECS REVISIONS REQUIRED?	IF YES, WHEN AVAILABLE
<u>ADC MK 3 MOD 0 - WM014</u>										
FY96	ALLIED SIGNAL, SYLMAR, CA	OPTION	NAVSEA	4/96	4/97	130	16,391	YES	NO	N/A
FY97		OPTION	NAVSEA	5/97	5/98	150	16,752	YES	NO	N/A
FY99		CM4/FFP	NAVSEA	1/99	1/00	120	18,048 (2)	YES	NO	N/A
<u>LAUNCH TUBES- WM014</u>										
FY96	NRAD, SAN DIEGO, CA	PO	NSWC	1/96	7/96	130	1,754	YES	NO	N/A
FY97		PO	NSWC	1/97	7/97	150	2,893 (1)	YES	NO	N/A
FY99		PO	NSWC	1/99	7/99	120	3,029	YES	NO	N/A
<u>ADC MK 2 MOD 1 - WM015</u>										
FY99	UNKNOWN	CM4/FFP	NAVSEA	1/99	1/00	175	4,320	YES	NO	N/A
<u>AN/WLR-9(B) ENGINEERING CHANGE - WM017</u>										
FY97	NORDEN, MELVILLE, NY	OPTION	NAVSEA	1/97	1/98	8	130,000	YES	NO	N/A
FY98		OPTION	NAVSEA	1/98	1/99	11	132,860	YES	NO	N/A
FY99		OPTION	NAVSEA	1/99	1/00	12	135,750	YES	NO	N/A
<u>CSA MK 2 MOD 1 - WM019</u>										
FY96	LIBRASCOPE, GLENDALE, CA	OPTION	NAVSEA	4/96	4/97	1	233,000	YES	NO	N/A
<u>GAS GENERATOR MK 77 - WM022</u>										
FY97	UNKNOWN	PO	NSWC	3/97	3/98	115	2,840	YES	NO	N/A
FY99	UNKNOWN	PO	NSWC	1/99	1/00	120	2,968	YES	NO	N/A

1. Increase in unit cost above normal escalation factors for Launch Tubes is due to procurement of Stainless Steel Launch Tubes vice Steel Tubes.
2. FY99 ADC MK 3 Unit price includes non-recurring and first article costs.

P-1 SHOPPING LIST ITEM NO.	PAGE NO.
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TIME PHASED REQUIREMENTS SCHEDULE	A. APPROPRIATION/BUDGET ACT. OTHER PROCUREMENT NAVY/ BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT-ASW												B. P-1 ITEM NOMENCLATURE SUBMARINE ACOUSTIC WARFARE SYSTEM (SAWS) CSA MK 2 MOD 1								C. DATE February 1997				LTR YRS				
	FY 96				FY 97				FY 98				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					
ACTIVE FORCE INVENTORY CSA MK 2 MOD 1 (WM019) *SCHOOLS/OTHER TRAINING (P) *OTHER (P)	1	1					1										1												
TOTAL PHASED REQ (C)	1	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4					
ASSETS ON HAND (BP)	1																												
DELIVERY FY & PRIOR		1					1						1																
FY96 (OPN)																													
FY97 (OPN)																													
FY98 (OPN)																													
FY99 (OPN)																													
FY00 (OPN)																													
FY01 (OPN)																													
FY02 (OPN)																													
TOTAL ASSETS (C)	1	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	0				
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
D. REMARKS OTHER: (1) 3 LANDBASE MK 421 LCPs, NO INSTALLATION REQUIRED. (2) HARDWARE AND INSTALLATION REQ. IS UNFUNDED, PR-99 ISSUE	E. RQMT (QTY)							TOTAL RQMT	INSTALLED	ON HAND	FY96 PRIOR UNDELIVERED											UNFUNDED							
	1. APPN OPN							24	18	4 (1)	1											1 (2)							
	2. APPN																												
	3. PRCRMT LEADTIME							12 MTH	ADMIN	NIT ORDER												REORDER							

TIME PHASED REQUIREMENTS SCHEDULE												DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY/ BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT-ASW								P-1 ITEM NOMENCLATURE SUBMARINE ACOUSTIC WARFARE SYSTEM (SAWS) CSA MK 2 MOD 1							
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 _____ 96								FY _____ 97							
SSN 752	1	SSN 760	1											SSN754	1
FY _____ 98								FY _____ 99							
								SSN756	1						

BUDGET ITEM JUSTIFICATION SHEET							(DOD EXHIBIT P-40)		DATE
APPROPRIATION / BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE			SUBHEAD NO.		
OTHER PROCUREMENT, NAVY / BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT-ASW				SURFACE SHIP TORPEDO DEFENSE (S			C2WL		
	FY 96	FY 97	FY 98	FY 99	FY00	FY01	FY02	FY03	
QUANTITY									
COST (in millions)	\$13.3	\$10.8	\$0.3	\$0.9	\$0.3	\$0.0	\$0.0	\$0.0	
<p><u>Surface Ship Torpedo Defense</u></p> <p>The Surface Ship Torpedo Defense (SSTD) System consists of the AN/SLQ-25A towed torpedo countermeasure, AN/SLQ-25B torpedo countermeasure set, and Launched Expendable Acoustic Devices (LEAD). The SSTD system enhances ship survival capability against advanced acoustic and non-acoustic homing torpedoes.</p> <p><u>LEAD</u></p> <p>The Launched Expendable Acoustic Device (LEAD) Program provides the capability for launching acoustic countermeasures from surface ships. LEAD is currently a Code B item and was developed under RDT&E PE 0603506N Surface Ship Torpedo Defense. The LEAD initial Development Test and Evaluation occurred in October 1995, Initial Operational Test and Evaluation occurred in October 1996. Estimated date of approval for production is July 1997. As a cost avoidance measure, initial procurement of LEAD components was approved 31 Oct 1996.</p>									

P-1 SHOPPING LIST ITEM NO. 50	PAGE NO. 1
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UNCLASSIFIED

CLASSIFICATION

WEAPONS SYSTEM COST ANALYSIS		A. Appropriation/Budget		B. P-1 NOMENCLATURE		DATE				
EXHIBIT (P-5)		Activity Title/No.		SURFACE SHIP TORPEDO DEFENSE		February 1997				
Weapon System Cost Element		IDENT CODE	(TOTAL COST IN THOUSANDS OF DOLLARS)							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COS	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
WL003	LAUNCHED EXPENDABLE ACOUSTIC DEVICE (LEAD)	B	310	\$2,691	300	\$4,800				
WL830	PRODUCTION ENGINEERING			\$740		\$234				
WL900	CONSULTING SERVICES			\$980		\$156				
WL5IN	INSTALLATION OF EQUIPMENT			\$8,908		\$5,582		\$344		\$858
	TOTAL			\$13,319		\$10,772		\$344		\$858
			P-1 SHOP PAGE NO. LIST ITEM NO.							
			50		2					

UNCLASSIFIED

CLASSIFICATION

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET					DATE:			
P-40					February 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY								
BA: 2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					ACOUSTIC COMMUNICATIONS 82WN			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$0.2	\$0.2	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4
<p>ITEM DESCRIPTION/JUSTIFICATION:</p> <p>Acoustic Communications provides two-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-10, a stand alone emergency voice and signal beacon for submarines, and (4) technical improvement (engineering changes) to acoustic communication equipment.</p> <p>FY 96 - FY 99 funding will finance the procurement of both Probe Alert (AN/WQC-6) improvements and AN/WQC-2A engineering changes, plus associated production engineering support and consulting services. FY 98 and outyears will procure replacements for obsolete equipment. SSB 637, SSN 688, SSBN 726, DDG 51, CG 47, MHC 51, MCM 1, CVN 65, ARS 50, FFG 7, and CVN 68 class ships and submarines.</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET					DATE				
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE 2225				
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					FIXED SURVEILLANCE SYSTEM (FSS)			52WQ	
QUANTITY	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
COST (in millions)	\$19.2	\$33.9	\$15.2	\$11.4	\$7.8	\$10.9	\$11.2	\$17.4	
<p>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:</p> <ul style="list-style-type: none"> a. To reduce the cost of operating and maintaining the system by replacing the current shore processing with improved NDI electronics via the Shore Signal and Information Processing System (SSIPS) at all active sites. b. To retain the capability to both maintain and install undersea surveillance systems. c. To improve the ability to track and report contacts through installation of the Surveillance Direction System (SDS) which will improve contact reporting time and enhance coordination between sites. d. To improve tactical communications with the Fleet. Improved communications using standard Navy equipment will decrease reporting time and reduce the maintenance requirements. <p>The program includes the following major elements:</p> <ul style="list-style-type: none"> a. Ship Improvement: Procurement of mission equipment to improve operational readiness for IUSS cable ship. b. Cable Replacement/Engineering: Continued procurement of replacement fiber optic cable and associated engineering and loading to maintain current 									

P-1 SHOPPING LIST

Exhibit P-40

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52 1

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE Feb-97
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE 2225 FIXED SURVEILLANCE SYSTEM (FSS)	52WQ
c. Shore Electronics: Procurement of improved NDI electronics to reduce maintenance costs and provide upgraded capabilities. d. SDS/Shore Processing: Procurement and deployment of FDS-D processing equipment. Procurement of improved shore processing equipment.		
<p>The FY96 through FY99 program continues the procurement for Ship Improvement and Cable Replacement/Engineering programs and shore electronics hardware for the replacement of aging units/assemblies. The FSS program has cooperative agreements with foreign countries. The detail of these special projects agreements are of a higher classification. FSS is continuing an aggressive effort to standardize the overall system architecture to permit arrays and electronics to be maintained and powered at minimum operating cost. FY96 reflects restructuring of the FSS program to procure SDS systems and Shore Electronics hardware prior to the end of production of the Navy Standard Desktop Tactical Computer, version II (DTS-II). This allows for procurement of all the systems without incurring substantial software costs or logistics costs due to different hardware. FY98 completes the FDS-D expansion and deployment effort.</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>NSTALLING AGENTS: Lucent Technologies Inc., Greensboro, NC; ARL/UT, Austin, TX; Lockheed/Martin, Manassas,VA; NAWC-AD, St. Inigoes, MD; NISE East, Charleston,SC and MSC, Washington, D.C.</p>		

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ITEM NO. PAGE NO.
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Exhibit P-40

BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE Feb-97			
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE 2225						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT			FIXED SURVEILLANCE SYSTEM (FSS)				52WQ		
MODIFICATION SUMMARY									
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:									
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	
Ship Equipment/Cable Replacement	0	0.8	4.3	0.0	2.4	4.1	4.2	4.3	
Shore Electronics	0.0	0.0	0.0	1.6	1.5	1.5	1.5	1.7	
Special Projects	1.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	
Surveillance Direction System	1.5	8.3	0.0	0.0	0.0	0.0	0.0	0.0	

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS							DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE FIXED SURVEILLANCE SYSTEM (FSS) 52WQ					
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
						0		0		0
WQ002	SHIP EQUIPMENT/CABLE REPLACEMENT	A	VAR	3,423	VAR	11,496	VAR	8,121	VAR	6,564
WQ004	SHORE ELECTRONICS	A	VAR	2,954	VAR	1,726	VAR	1,504	1	896
WQ006	SPECIAL PROJECTS	A	VAR	4,818	VAR	5,457	VAR	1,709	VAR	0
WQ009	SURVEILLANCE DIRECTION SYSTEM	A	VAR	4,658	VAR	4,110	VAR	2,000	VAR	3,304
WQ776	INSTALLATION OF EQUIPMENT (NON-FMP)	N/A		3,332		11,064		1,841		680
	TOTAL PROGRAM			19,185		33,853		15,175 0		11,444

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Exhibit P-5
UNCLASSIFIED
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MODIFICATION TITLE: SHIP EQUIPMENT/CABLE REPLACEMENT

MODELS OF SYSTEMS AFFECTED: FSS

DESCRIPTION/JUSTIFICATION: MISSION EQUIPMENT CONSISTS OF CABLE MACHINERY, ACOUSTIC SOURCE ELECTRONICS, BATHYMETRIC SYSTEM, TRANSMISSIONS TEST SETS, SLICING EQUIPMENT TO IMPROVE OPERATIONAL READINESS FOR THE IUSS PROJECT SHIP TO CONTINUE CABLE REPLACEMENT TO MAINTAIN CURRENT SYSTEMS IN AN OPERATIONAL STATUS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	6	10.6			1	2.5			1	2.1	1	3.4	1	3.5	1	3.5			11	25.6
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
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Equip	5	1.3	1	0.8															6	2.1
FY97 Equip																			0	0.0
FY98 Equip					1	1.8													1	1.8
FY99 Equip																			0	0.0
FY00 Equip								1	0.3										1	0.3
FY01 Equip										1	0.7								1	0.7
FY02 Equip												1	0.7						1	0.7
FY03 Equip														1	0.8				1	0.8
FY TC Equip																			0	0.0
Total Installation Cost	5	1.3	1	0.8	1	1.8	0	0.0	1	0.3	1	0.7	1	0.7	1	0.8	0	0.0	11	6.4
Total Procurement Cost		11.9		0.8		4.3		0.0		2.4		4.1		4.2		4.3		0.0	0	32.0

METHOD OF IMPLEMENTATION: Contractors/Depot Field Teams ADMINISTRATIVE LEADTIME: 4 Months PROCUREMENT LEADTIME: 3 Months

CONTRACT DATES: FY 1997 N/A FY 1998 10/97 FY 1999 N/A

DELIVERY DATE: FY 1997 N/A FY 1998 01/98 FY 1999 N/A

	PY	FY 97				FY 98				FY 99				FY 00							
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INSTALLATION SCHEDULE:																					
INPUT	5	1				1														1	
OUTPUT	5		1				1														1
INSTALLATION SCHEDULE:																					
INPUT																					Total
OUTPUT																					11
OUTPUT																					11

MODIFICATION TITLE: SHORE ELECTRONICS
 MODELS OF SYSTEMS AFFECTED: FSS
 DESCRIPTION/JUSTIFICATION: PROCUREMENT OF NDI ELECTRONICS TO REPLACE PAPER GRAMS, REDUCE COSTS AND CONSOLIDATE NAVAL FACILITIES.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	7	9.6					1	0.9	1	1.0	1	1.0	1	1.0	1	1.2			12	14.7
Equipment Nonrecurring																			0	0.0
Engineering Change Orders																			0	0.0
Data																			0	0.0
Training Equipment																			0	0.0
Support Equipment																			0	0.0
Other																			0	0.0
Interim Contractor Support																			0	0.0
*Installation of Hardware																			0	0.0
(PY) Equip	7	2.5																	7	2.5
FY97 Equip																			0	0.0
FY98 Equip																			0	0.0
FY99 Equip							1	0.7											1	0.7
FY00 Equip									1	0.5									1	0.5
FY01 Equip											1	0.5							1	0.5
FY02 Equip													1	0.5					1	0.5
FY03 Equip															1	0.5			1	0.5
FY TC Equip																			0	0.0
Total Installation Cost	7	2.5	0	0.0		0.0	1	0.7	1	0.5	1	0.5	1	0.5	1	0.5	0	0.0	12	5.2
Total Procurement Cost		12.1		0.0		0.0		1.6		1.5		1.5		1.5		1.7		0.0	0	19.9

METHOD OF IMPLEMENTATION: Contractors/Depot Field Teams ADMINISTRATIVE LEADTIME: 1 Months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1997 N/A FY 1998 N/A FY 1999 11/98

DELIVERY DATE: FY 1997 N/A FY 1998 N/A FY 1999 02/99

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00							
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT	7											1									1

OUTPUT	7																			1	1
--------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	---

INSTALLATION SCHEDULE:	FY 01				FY 02				FY 03				Total	
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT				1				1				1		12

OUTPUT				1				1				1		12
--------	--	--	--	---	--	--	--	---	--	--	--	---	--	----

MODIFICATION TITLE: SPECIAL PROJECTS
 MODELS OF SYSTEMS AFFECTED: FSS
 DESCRIPTION/JUSTIFICATION: INVOLVES INTERNATIONAL AGREEMENTS OF A HIGHER CLASSIFICATION.

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

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	3	38.1	**	0.4															3	38.5
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
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Equip	2	11.6	1	0.5															3	12.1
FY97 Equip			*	1.4																1.4
FY98 Equip																			0	0.0
FY99 Equip																			0	0.0
FY00 Equip																			0	0.0
FY01 Equip																			0	0.0
FY02 Equip																			0	0.0
FY03 Equip																			0	0.0
FY TC Equip																			0	0.0
Total Installation Cost	2	11.6	1	1.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	13.5
Total Procurement Cost		49.7		2.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	0	52.0

METHOD OF IMPLEMENTATION: Contractors/Depot Field Teams ADMINISTRATIVE LEADTIME: 1 Month PROCUREMENT LEADTIME: 6 Months

CONTRACT DATES: FY 1996 5/96 FY 1998 N/A FY 1999 N/A

DELIVERY DATE: FY 1997 11/96 FY 1998 N/A FY 1999 N/A

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	2	1															

INSTALLATION SCHEDULE:	OUTPUT	FY 01				FY 02				FY 03				Total
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	2													3

OUTPUT 3

* COMPLETES INSTALLATION AT SITE 7900 OF EQUIPMENT PROCURED IN FY96 & FY97.

** FY97 FUNDING IS FOR A DISPLAY UPGRADE TO EQUIPMENT PROCURED IN FY96.

MODIFICATION TITLE: SURVEILLANCE DIRECTION SYSTEM
 MODELS OF SYSTEMS AFFECTED: FSS
 DESCRIPTION/JUSTIFICATION: PROCUREMENT OF LOW RISK, COMPETITIVELY-AWARDED NDI ELECTRONICS TO IMPROVE THE TRACKING AND TIMELY REPORTING TO TACTICAL USERS.

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		TC		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	52	38.3																	52	38.3
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
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Equip	49	10.2	3	8.3															52	18.5
FY97 Equip																			0	0.0
FY98 Equip																			0	0.0
FY99 Equip																			0	0.0
FY00 Equip																			0	0.0
FY01 Equip																			0	0.0
FY02 Equip																			0	0.0
FY03 Equip																			0	0.0
FY TC Equip																			0	0.0
Total Installation Cost	49	10.2	3	8.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	52	18.5
Total Procurement Cost		48.5		8.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		56.8

METHOD OF IMPLEMENTATION: Contractors/Depot Field Teams ADMINISTRATIVE LEADTIME: 10 Months PROCUREMENT LEADTIME: 11 Months

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

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	49	1	1	1													

OUTPUT 49 1 1 1

INSTALLATION SCHEDULE:	PY	FY 01				FY 02				FY 03				Total
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT		1	2	3	4	1	2	3	4	1	2	3	4	52

OUTPUT 52

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET						DATE Feb-97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SURVEILLANCE TOWED ARRAY SENSOR (SURTASS) 2237 52VG				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$18.0	\$10.4	\$7.1	\$16.4	\$13.2	\$8.2	\$20.4	\$24.0
<p>PROGRAM COVERAGE: The Surveillance Towed Array Sensor (SURTASS) is a mobile, tactical arm of the Navy's undersea surveillance capability that provides long range detection and cueing for tactical weapons platforms against both diesel and nuclear submarines. Dedicated T-AGOS ships towing long acoustic SURTASS arrays relay acoustic data via satellite to shore facilities for processing. There are three basic configurations of T-AGOS ships, with differing capabilities. T-AGOS monohull ships, funded FY79 through FY87, are currently equipped with passive acoustic arrays. Of the original eighteen monohulls, three will remain in active service. Four "small" T-AGOS Small Waterplane Area Twin Hull (SWATH) ships were funded FY 87 through FY89. This class ship incorporates the improved detection and classification capabilities and onboard analysis developed by the SURTASS Block Upgrade R&D program, including the Reduced Diameter Array (RDA). The RDA is not only a vast improvement in passive capability, it also allows 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 the standard Integrated Undersea Surveillance System (IUSS) Desktop Tactical Computer (DTC II) processing and display configuration. The three monohulls being retained will be upgraded with DTC II. All ships will be equipped with either the RDA or the A180 array. A180 is an RDA analogue which incorporates RDA telemetry electronics in production arrays providing RDA performance at an affordable cost. All small SWATH's will be outfitted with bi-static active and tactical communications. The first "large" SWATH ships, T-AGOS 23, was funded in FY90. It includes the Block Upgrade architecture with RDA and is the first T-AGOS ship equipped with LFA. This active capability will provide greatly improved detection against diesel submarines as well as the quiet nuclear threat.</p> <p>OPN funded procurements include: any changes resulting from major R&D funded improvements (VG006); in-service improvements, equipment replacements and corrections of minor deficiencies emerging during operations (VG007); upgrade of T-AGOS monohulls and Japanese Auxiliary Ocean Surveillance Ship (JAOS) SWATH ships to Block Upgrade configuration (VG006); upgrade T-AGOS platforms with Ocean Surveillance Sensors (VG006), the procurement of an A180 back-up array (VG009); and upgrade of ship and shore processing equipment and array improvements.</p>								

P-1 SHOPPING LIST
ITEM NO. 53 PAGE NO.1

Exhibit P-40

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	2237
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SURVEILLANCE TOWED ARRAY SENSOR (SURTASS)	52VG
FY96: Funds are required for the following: VG006 Tactical Communications Upgrade provides for communication connectivity between T-AGOS and Battle Groups and Joint Commanders. Block Upgrade/DTC-II provides for the upgrade of T-AGOS ships with DTC-II hardware for Block Upgrade capability. Ocean Surveillance Upgrade (U/G) provides sensors for surface surveillance in support of littoral warfare. VG007 Field Changes/Modifications provides for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupportable shipboard equipment. VG009 Backup Array provides for replacement of array lost at sea or subjected to catastrophic failure/damage. VG776 Installation of equipment.		
FY97: Funds are required for the following: VG006 Block Upgrade (JAOS) provides for upgrade of JAOS shore mission equipment to Block Upgrade configuration. DTC II Backfit provides for the upgrade of monohulls with DTC-II hardware for Block Upgrade capability. VG007 Field Changes/Modifications provides for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupportable shipboard equipment. VG776 Installation of equipment		
FY98: Funds are required for the following: VG006 Block Upgrade (JAOS) provides for upgrade of JAOS ship mission equipment to Block Upgrade configuration. VG007 Field Changes/Modifications provides for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupportable shipboard equipment. VG776 Installation of equipment.		

UNCLASSIFIED
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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	2237 Feb-97
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SURVEILLANCE TOWED ARRAY SENSOR (SURTASS)	52VG
<p>FY 99: Funds are required for the following: VG006 Block Upgrade (JAOS) provides for upgrade of JAOS ship mission equipment to Block Upgrade configuration. Twin Line arrays provide for array receiver improvements. VG007 Field Changes/Modifications provides for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupportable shipboard equipment. VG776 Installation of equipment.</p> <p>JUSTIFICATION OF BUDGET YEAR: Replacement of display, processing and outdated communications equipment to the baseline SURTASS program is being procured and installed on TAGOS SWATH-P and monohull ships. Procurement of a RDA/A180 back-up array for replacement of an array lost at sea or incurring catastrophic damage. Additionally, upgrade T-AGOS platform with surface surveillance sensor to support Regional and Joint Commanders.</p> <p>INSTALLATION AGENTS: NISEEAST, Charleston, SC; NCCOSC, San Diego, CA; HAC, Fullerton, CA.</p>		

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE		
						Feb-97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				2237				
				SURVEILLANCE TOWED ARRAY SENSOR (SURTASS)			52VG	
MODIFICATION SUMMARY								
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:								
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>
Tactical Communication:	5.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00
Block Upgrade (JAOS)	0.00	4.05	6.02	6.82	0.00	0.00	0.00	0.00
Block Upgrade/DTC-II	4.16	4.19	0.00	0.00	0.00	0.00	0.00	0.00
Ocean Surveillance								
	0.83	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Field Changes/ Modifications	1.57	1.96	1.10	0.95	1.60	1.63	1.64	1.74
Twin-Line Array	0.00	0.00	0.00	8.66	8.73	4.46	0.00	0.00
Upgrade								

WEAPON SYSTEM COST ANALYSIS				Feb-97					
B. APPROPRIATION/BUDGET ACTIVITY OPN-BA2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT			C. P-1 ITEM NOMENCLATURE SURVEILLANCE TOWED ARRAY SENSOR (SURTASS) (52VG)						
ELEMENT OF COST (1)	IDENT CODE (2)	QTY (3)	FY 96		FY 97		FY 98		FY99
			TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
VG006 UPGRADE PROCUREMENT									
Tactical Communications	A	4	4,615						
Block Upgrade (JAOS)	A			1	4,052	1	5,158	1	6,504
Block Upgrade/DTC II	A	1	3,711	1	3,897				
Ocean Surveillance Upgrade	A	1	832						
Twin-Line Arrays	A							2	8,510
VG007 FIELD CHANGES/MODIFICATIONS	A		1,526		1,764		983		803
VG009 BACKUP ARRAY (RDA)	A	1	6,100						
VG776 INSTALLATION OF EQUIPMENT (NON-FMP)			1,200		639		967		614
TOTAL			17,984		10,352		7,108		16,431

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING											A. DATE Feb-97
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					2237 SURVEILLANCE TOWED ARRAY SENSOR (SURPASS) 52VG						
COST CODE	ELEMENT OF COST FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
VG006	UPGRADE PROCUREMENT										
	Tactical Communications FY96	Hughes, Fullerton, CA	SS/CPFF	SPAWAR	Apr-96	Sep-96	4	\$1,153,750	Yes	No	
	Block Upgrade (JAOS) FY97	Hughes, Fullerton, CA	SS/CPFF	SPAWAR	May-97	Mar-98	1	\$4,052,000	Yes	No	
	Block Upgrade (JAOS) FY98	Hughes, Fullerton, CA	SS/CPFF/OP	SPAWAR	Oct-97	Aug-98	1	\$5,158,000	Yes	No	
	Block Upgrade (JAOS) FY99	Hughes, Fullerton, CA	SS/CPFF/OP	SPAWAR	Oct-98	Aug-99	1	\$6,504,000	Yes	No	
	Block Upgrade/DTC-II FY96	Hughes, Fullerton, CA	SS/CPFF	SPAWAR	Apr-96	Sep-96	1	\$3,711,000	Yes	No	
	Block Upgrade/DTC-II FY97	Hughes, Fullerton, CA	SS/CPFF/OP	SPAWAR	Oct-96	Aug-97	1	\$3,897,000	Yes	No	
	Ocean Surveillance U/G FY96	Hughes, Fullerton, CA	SS/CPFF	SPAWAR	Jun-96	Dec-96	1	\$832,000	Yes	No	
	Twin-Line Array FY99	Hughes, Fullerton, CA/ IOSC, Little Creek, VA	SS/CPFF	SPAWAR	Nov-98	Sep-99	2	See Remarks	Yes	No	
VG009	Backup Array Reduced Diameter Array FY96	APL/JHU, Laurel, MD	SS/FFP	SPAWAR	Mar-96	May-97	1	\$6,100,000	Yes	No	
D. REMARKS Block Upgrade (JAOS) cost explanation: FY97 is shore upgrades; FY98 is upgrade to one ship and array; and FY99 is upgrade to one ship, an array and twinline. FY99 twinline includes procurement of twinline array and twinline array processing hardware (\$6,500K) and twinline array processing hardware (\$2,010K) for T-AGOS for twinline "cross decking" to meet mission requirements.											

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

TACTICAL COMMUNICATIONS
 SURTASS T-AGOS Ships and Shore Facilities
 FY 96 funds hardware for tactical communications between T-AGOS, battlegroups, and Joint Commanders;

Feb 1997

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

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	4	20.3																	4	20.3
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
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Equip	2	0.9	2	0.06															4	1.0
FY97 Equip																			0	0.0
FY98 Equip																			0	0.0
FY99 Equip																			0	0.0
FY00 Equip																			0	0.0
FY01 Equip																			0	0.0
FY02 Equip																			0	0.0
FY03 Equip																			0	0.0
FY TC Equip																			0	0.0
Total Installation Cost	2	0.9	2	0.06	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	1.0
Total Procurement Cost	21.2		0.06		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0	21.3

METHOD OF IMPLEMENTATION:

Contractor/Depot Field Teams ADMINISTRATIVE LEADTIME: 12 months PROCUREMENT LEADTIME: 12 months

CONTRACT DATES:

FY 1997: N/A FY 1998: N/A FY 1999: N/A

DELIVERY DATE:

FY 1997: 10/96 FY 1998: N/A FY 1999: N/A

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	4															
OUTPUT	2	2														

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				Total
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT													4
OUTPUT													4

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

BI-STATIC UPGRADE (JAOS)
 SURTASS T-AGOS Ships and Shore Facilities
 Provides DTC II hardware to upgrade JAOS systems to Block Upgrade capability.

FEB 1997

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

	P Y	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	T C	Tot al
	QTY \$									
RDT&E										
PROCUREMENT										
Kit Quantity										
Installation Kits										
Installation Kit Nonrecurring										
Equipment		1 4.05	1 5.15	1 6.5						3 15.7
Equipment Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
Installation of Hardware										
(PY) Equip										
FY97 Equip			1 0.36							1 0.4
FY98 Equip			1 0.51							1 0.5
FY99 Equip				1 0.32						1 0.3
FY00 Equip										
FY01 Equip										
FY02 Equip										
FY03 Equip										
FY TC Equip										
Total Installation Cost			2 0.87	1 0.32						3 1.2
Total Procurement Cost		4.05	6.02	6.82						16.9

METHOD OF IMPLEMENTATION: Contractor/Depot Field Team: ADMIN LEADTIME: 12 months PROCUREMENT LEADTIME: 10 months

CONTRACT DATES: FY 1997: MAY 1997 FY 1998: OCT 1997 FY 1999: OCT 1998

DELIVERY DATE: FY 1997: MAR 1998 FY 1998: AUG 1998 FY 1999: AUG 1999

PY FY 97 FY 98 FY 99 FY 00
 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

INSTALLATION SCHEDULE:
 INPUT 1 1 1
 OUTPUT 2 1

INSTALLATION SCHEDULE:
 INPUT 1 2 3 4 1 2 3 4 1 2 3 4 Total
 OUTPUT 3

INSTALLATION SCHEDULE:
 INPUT 3
 OUTPUT 3

MODIFICATION TITLE: BLOCK UPGRADE/DTC-II
 MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships and Shore Facilities
 DESCRIPTION/JUSTIFICATION: Upgrade of monohulls with DTC-II hardware for Block Upgrade capability

Feb 97

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

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	2	7.60	1	3.90															3	11.5
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
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Equip	2	0.90																	2	0.9
FY97 Equip			1	0.29															1	0.3
FY98 Equip																			0	0.0
FY99 Equip																			0	0.0
FY00 Equip																			0	0.0
FY01 Equip																			0	0.0
FY02 Equip																			0	0.0
FY03 Equip																			0	0.0
FY TC Equip																			0	0.0
Total Installation Cost	2	0.90	1	0.29	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	1.2
Total Procurement Cost	8.50		4.19		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0	12.7

METHOD OF IMPLEMENTATION: Contractor/Depot Field Teams ADMINISTRATIVE LEADTIME: 12 months PROCUREMENT LEADTIME: 10 months

CONTRACT DATES: FY 1997: 10/96 FY 1998: FY 1999:

DELIVERY DATE: FY 1997: 8/97 FY 1998: FY 1999:

	PY	FY 97				FY 98				FY 99				FY 00				Total		
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INSTALLATION SCHEDULE:																				
INPUT	2				1															3
OUTPUT	2				1															3
INSTALLATION SCHEDULE:																				
INPUT																				3
OUTPUT																				3

MODIFICATION TITLE: OCEAN SURVEILLANCE UPGRADE
 MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships and Shore Facilities
 DESCRIPTION/JUSTIFICATION: Provide sensors for surface surveillance in support of littoral warfare

Feb 1997

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

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
RDT&E																				0	0.0	
PROCUREMENT																					0	0.00
Kit Quantity																					0	0.00
Installation Kits																					0	0.00
Installation Kit Nonrecurring																					0	0.00
Equipment	1	0.83																			1	0.83
Equipment Nonrecurring																					0	0.00
Engineering Change Orders																					0	0.00
Data																					0	0.00
Training Equipment																					0	0.00
Support Equipment																					0	0.00
Other																					0	0.00
Interim Contractor Support																					0	0.00
Installation of Hardware																					0	0.00
(PY) Equip			1	0.09																	1	0.09
FY97 Equip																					0	0.00
FY98 Equip																					0	0.00
FY99 Equip																					0	0.00
FY00 Equip																					0	0.00
FY01 Equip																					0	0.00
FY02 Equip																					0	0.00
FY03 Equip																					0	0.00
FY TC Equip																					0	0.00
Total Installation Cost	0	0.0	1	0.1	0	0.0	0	0.00	0	0.00	0	0.00	0	0.0	0	0.0	0	0.0	0	0.0	1	0.09
Total Procurement Cost	0.8		0.1		0.0		0.00		0.00		0.00		0.0		0.0		0.0		0.0		0	0.92

METHOD OF IMPLEMENTATION: Contractor/Depot Field Teams ADMINISTRATIVE LEADTIME: 12 months PROCUREMENT LEADTIME: 6 months

CONTRACT DATES: FY 1997: NA FY 1998: FY 1999:

DELIVERY DATE: FY 1997: DEC 1996 FY 1998: FY 1999:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INSTALLATION SCHEDULE:

INPUT 1 2

OUTPUT 1 2

	FY 01				FY 02				FY 03				Total
	1	2	3	4	1	2	3	4	1	2	3	4	

INSTALLATION SCHEDULE:

INPUT 1

OUTPUT 1

MODIFICATION TITLE:

FIELD MODIFICATIONS

MODELS OF SYSTEMS AFFECTED:

SURTASS T-AGOS Ships and Shore Facilities

Feb 97

DESCRIPTION/JUSTIFICATION:

Field changes/modifications provides for correction of deficiencies identified by Fleet use, remote port equipment, communication equipment, replacement of aging/unsupportable shipboard equipment

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	24	7.1	2	1.76	2	1.00	2	0.80	2	1.51	2	1.58	2	1.59	2	1.68			38	17.0
Equipment Nonrecurring																			0	0.0
Engineering Change Orders																			0	0.0
Data																			0	0.0
Training Equipment																			0	0.0
Support Equipment																			0	0.0
Other																			0	0.0
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Equip	24	1.7																	24	1.7
FY97 Equip			2	0.20															2	0.2
FY98 Equip					2	0.10													2	0.1
FY99 Equip							2	0.15											2	0.2
FY00 Equip									2	0.09									2	0.1
FY01 Equip										2	0.05								2	0.1
FY02 Equip											2	0.05							2	0.1
FY03 Equip													2	0.06					2	0.1
FY TC Equip																			0	0.0
Total Installation Cost	24	1.7	2	0.20	2	0.10	2	0.15	2	0.09	2	0.05	2	0.05	2	0.06	0	0.0	38	2.4
Total Procurement Cost		8.8		1.96		1.10		0.95		1.60		1.63		1.64		1.74		0.0	0	19.4

METHOD OF IMPLEMENTATION:

Contractor/Depot Field Teams ADMINISTRATIVE LEADTIME: 3 months PROCUREMENT LEADTIME: 10 months

CONTRACT DATES:

FY 1997: 10/96 FY 1998: 10/97 FY 1999: 10/98

DELIVERY DATE:

FY 1997: 7/97 FY 1998: 7/98 FY 1999: 7/99

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INSTALLATION SCHEDULE:

INPUT 24 2 2 2 1 1

OUTPUT 24 2 2 2 1 1

PY	FY 01				FY 02				FY 03				Total
	1	2	3	4	1	2	3	4	1	2	3	4	

INSTALLATION SCHEDULE:

INPUT 2 2 2 38

OUTPUT 2 2 2 38

MODIFICATION TITLE: TWIN-LINE ARRAY

MODELS OF SYSTEMS AFFECTED: SURTASS T-AGOS Ships

Feb 1997

DESCRIPTION/JUSTIFICATION: Twin-Line is a shallow water variant of the long line SURTASS array. The array consists of two short array lengths and is designed for increased surveillance in high surface clutter, shallow water environments. Funds provide for upgrade of Twin Line prototype (FY99) and additional twin line arrays for TAGOS ships (FY00-01).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C	Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.00
Kit Quantity																			0	0.00
Installation Kits																			0	0.00
Installation Kit Nonrecurring																			0	0.00
Equipment							2	8.51	2	8.40	1	4.37							5	21.28
Equipment Nonrecurring																			0	0.00
Engineering Change Orders																			0	0.00
Data																			0	0.00
Training Equipment																			0	0.00
Support Equipment																			0	0.00
Other																			0	0.00
Interim Contractor Support																			0	0.00
Installation of Hardware																			0	0.00
(PY) Equip																			0	0.00
FY97 Equip																			0	0.00
FY98 Equip																			0	0.00
FY99 Equip							2	0.15											2	0.15
FY00 Equip								2	0.33										2	0.33
FY01 Equip										1	0.09								1	0.09
FY02 Equip																			0	0.00
FY03 Equip																			0	0.00
FY TC Equip																			0	0.00
Total Installation Cost	0	0.0	0	0.0	0	0.0	2	0.15	2	0.33	1	0.09	0	0.0	0	0.0	0	0.0	5	0.57
Total Procurement Cost	0.0		0.0		0.0		8.66		8.73		4.46		0.0		0.0		0.0		0	21.85

METHOD OF IMPLEMENTATION: Contractor/Depot Field Teams ADMINISTRATIVE LEADTIME: 6 months PROCUREMENT LEADTIME: 12 months

CONTRACT DATES: FY 1997: N/A FY 1998: N/A FY 1999: 11/98

DELIVERY DATE: FY 1997: N/A FY 1998: N/A FY 1999: 9/99

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00									
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT																					2	2	
OUTPUT																						2	2

INSTALLATION SCHEDULE:	PY	FY 01				FY 02				FY 03				Total										
		1	2	3	4	1	2	3	4	1	2	3	4											
INPUT																						1	5	
OUTPUT																							1	5

UNCLASSIFIED
CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE SURVEILLANCE TOWED ARRAY SENSOR (SURTASS) 52VG						
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DU N WITH FY 97 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE	
VG006 Tactical Communications	4		4						Complete	
VG006 Block Upgrade (JAOS)	3				1	1	1		Complete	
VG006 Block Upgrade/DTC-II	4		3		1				Complete	
VG006 Ocean Surveillance	1		1						Complete	
VG006 Twin Line	5						2	3	Outyear Funding	
MEMO ENTERED										
ITEM #1 VG006 Tactical Communications				ITEM #2 VG006 Block Upgrade (JAOS)				ITEM #3 VG006 Block Upgrade/DTC-II		
hull/location qty hull/location qty				hull/location qty hull/location qty				hull/location qty hull/location qty		
T-AGOS 19-22 4 19-22				JAOS-1 2 JASWC 1				T-AGOS 8,9,12 4		
TOTAL I/O 4				TOTAL I/O 3				TOTAL I/O 4		
ITEM #4 VG006 Ocean Surveillance				ITEM #5 VG006 Twinline				ITEM #6		
hull/location qty hull/location qty				hull/location qty hull/location qty				hull/location qty hull/location qty		
T-AGOS 19 1				IOSC, Norfolk 5						
TOTAL I/O 1				TOTAL I/O 5				TOTAL I/O		

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE				
							Feb-97				
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SURVEILLANCE TOWED ARRAY SENSOR (SURTASS) 52VG							
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUPLICATED WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE		
VG009 Backup Array (RDA)	1			1					Complete		
MEMO ENTERED											
ITEM #1	VG009	Back-up Array (RDA)									
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty		
IOSC, Norfolk	1										
TOTAL I/O			<u>1</u>	TOTAL I/O			<u> </u>	TOTAL I/O			<u> </u>
ITEM #4											
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty		
TOTAL I/O			<u> </u>	TOTAL I/O			<u> </u>	TOTAL I/O			<u> </u>

REQUIREMENTS STUDY

(EXHIBIT P-20)

Date: Feb 1997

APPROPRIATION/BUDGET ACTIVITY:	OPN/BA2	P-1 ITEM NOMENCLATURE: SURTASS
1. ASSETS ON HAND AS OF 5/31/96	4	INVENTORY OBJECTIVES
2. DUE-IN WITH ALL PRIOR YEAR FUNDS	1	Number of Combat Loads
3. DUE-IN WITH CY FUNDS	0	Assist Required for Combat Loads
TOTAL ASSETS	5	Combat Expenditures
USAGE (Planned & Projected thus FY1 FDP)		War Reserve Requirement
CY since as of date:		Annual Training
BY1:		Annual Testing
BY2:		Maintenance Pipeline
BY2+1		Other Relacement (East/West Coast) 1
BY2+2		Other Operational Ships 5
TOTAL USAGE (___MONTHS)		TOTAL REQUIREMENT
NET ASSETS:	5	APPROVED ACQUISITION OBJECTIVE
ACTUAL TRAINING EXPENDITURE		PROCUREMENT REQUIREMENT
ACTUAL OTHER THAN TRAINING EXPENDITURE		Total BY1 Requirement
		Less Net Assets
		Required BY1 Procurement
		Total BY2 Requirement
		Less Net Assets
		Less BY1 Planned Procurement
		Required BY2 Procurement
		Planned BY2 Procurement

REMARKS: Replacement Reduced Diameter Arrays (RDA) are required in the event a shipboard array is lost or irreparable damaged. Since SURTASS IOC, three arrays have been lost at sea and three arrays severed and partially lost.. With SURTASS RDA operating in shallow water regions in support of regional commanders, the risk of loss is increased over previous deep ocean surveillance.

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BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE Tactical Support Centers (formerly ASW Op Center) LI #2246				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$8.1	\$9.9	\$5.3	\$7.7	\$8.4	\$8.6	\$8.8	\$9.0
<p>PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS: The Tactical Support Centers (TSC) are nodes of the Navy Command and Control System, which provides the Sector Surveillance 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 TSC-like 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, meet documented fleet operational requirements.</p> <p>The FY96 budget request procures: analysis interface equipment and enhancements; facilities equipment; initial training; production support; and installations. The FY97 budget request procures: analysis interface equipment and enhancements; facilities equipment; initial training; production support; and installations. The FY98 budget request procures: analysis interface equipment and enhancements; facilities equipment; initial training; production support; and installations. The FY99 budget request procures: analysis interface equipment and enhancements; facilities equipment; initial training; production support; and installations.</p> <p>INSTALLATION DATA: A total of 24 systems (23 after FY98) : 16 TSC systems (15 beginning FY 98) at 14 operational sites (13 beginning FY 98) (located at Keflavik, Iceland; Brunswick, ME; 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 98); 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 at NISE EAST DET St Inigoes, MD; 8 MOCCs (Homeported at Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Barbers Point/Kaneohe, HI; Misawa, Japan; Kadena, Japan; Willow Grove, VA; Moffett Field, CA; FCTC, Dam Neck, VA and the C2 Engineering Development Software Support Facility (NISE EAST Det St. Inigoes, MD). In FY 97, NISE EAST Det St. Inigoes relocates to Charleston, SC.</p>								

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Exhibit P-40

UNCLASSIFIED
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BUDGET ITEM JUSTIFICATION SHEET (Continuation)					DATE February 1997				
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT			Tactical Support Centers (formerly ASW Op Center) LI #2246					52WH	
MODIFICATION SUMMARY (\$M)									
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:									
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	
WH046	\$4.6	\$8.2	\$5.0	\$7.1	\$7.8	\$7.7	\$7.5	\$7.9	
WH050	\$2.8	\$1.0	\$0.0	\$0.0	\$0.0	\$0.8	\$0.6	\$0.5	

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ITEM NO. **PAGE NO.**
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Exhibit P-40

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**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM COST ANALYSIS							DATE: February 1997				
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				Tactical Support Centers (formerly ASW Op Center) LI #2246 52WH							
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 96		FY 97		FY 98		FY 99		
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)	
WH046	ANALYSIS INTERFACE EQUIPMEN	A	VAR	3,582		6,696		2,959		5,567	
WH050	FACILITIES EQUIPMENT	A	VAR	2,797				33		33	
WH666	INITIAL TRAINING	A		638		647		230		584	
WH776	NON-FMP INSTALL	A		1,092		2,555		2,033		1,533	
TOTAL PROGRAM				8,109		9,898		5,255		7,717	

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Exhibit P-5
**UNCLASSIFIED
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MODIFICATION TITLE: TACTICAL SUPPORT CENTERS (TSC) (FORMERLY ASW OP CENTERS) SUBHEAD/COST CODE: 52WH/WH046

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, power projection, anti-submarine warfare, 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.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: (Evolutionary Acquisition of COTS equipment; milestones refer to associated software) OT IIA Q3 FY95; M/SIIIA, Q4 FY95;

DT IIB Q2 FY96; OT IIB Q4 FY96; M/S IIIB Q1 FY98; DT IIC Q1 FY98; OT IIC Q2 FY98; M/S IIIC Q3 FY 98; DTIID Q1 FY99; OTIID Q2 FY99; M/S IIID Q3 FY99

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E*																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment**	VAR	20.9	VAR	6.3	VAR	2.1	VAR	4.5	VAR	4.4	VAR	4.3	VAR	5.2	VAR	5.5	VAR	TBD	VAR		53.2
Equipment Nonrecurring																					
Engineering Change Orders	VAR	7.6	VAR	0.3	VAR	0.9	VAR	1.1	VAR	1.4	VAR	1.4	VAR	0.5	VAR	0.3	VAR	TBD	VAR		13.5
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware**																					
(PY) Eqpt	44	7.4	24	1.6																68	9.0
FY97 Eqpt					23	2.0														23	2.0
FY98 Eqpt							23	1.5												23	1.5
FY99 Eqpt									23	2.0										23	2.0
FY00 Eqpt											23	2.0								23	2.0
FY01 Eqpt													23	1.8						23	1.8
FY02 Eqpt															23	2.1	VAR	TBD		23	2.1
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost	44	7.4	24	1.6	23	2.0	23	1.5	23	2.0	23	2.0	23	1.8	23	2.1				206	20.5
Total Procurement Cost		35.9		8.2		5.0		7.1		7.8		7.7		7.5		7.9					87.2

METHOD OF IMPLEMENTATION: Fld Activ/Contractors

ADMINISTRATIVE LEADTIME: 3 Mos

PROCUREMENT LEADTIME: 3 Mos

CONTRACT DATES: FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

DELIVERY DATE: FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

INSTALLATION SCHEDULE:

	FY 97				FY 98				FY 99				FY 00				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	44	24				19	4			2	11	10			15	6	2
OUTPUT	44			24				16	7		3	12	8			15	8

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total	
	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT		6	17			6	17			5	18			TBD	TBD
OUTPUT			6	17			6	17			5	18			

* All RDT&E is for hardware integration and software development.

** P-5 contains VAR quantities of equipment procured; P-3A contains "Shore Sites Installed" as measures of quantity.

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BUDGET ITEM JUSTIFICATION SHEET

FEBRURY 1997

Budget Activity 2:	OTHER PROCUREMENT, NAVY COMMUNICATIONS AND ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE CARRIER ASW MODULE (82SB) 224706			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (Mil)	\$0.2	\$0.1	*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

Item Description/Justification: The CV-ASW Module of the Carrier Combat Direction System (CDS) is the focal point of support for force ASW functions. The system provides preflight, inflight and postflight support to embarked ASW airborne weapon systems (S-3B and ASW Helicopters) and provides real time and post mission analysis of relayed or taped acoustic signals. The system consists of digital computers, displays, mass memories, plotters, acoustic analysis equipments and interface devices. The CV-ASWM furnishes timely evaluated ASW information to the Officer in Tactical Command as inputs to the decision making process.

Procurement of Model 4.2 baseline systems is complete with the exception of CVN-75 which is funded under the SCN appropriation. Procurement of non-developmental engineering changes to maintain interoperability with ASW aircraft, acoustic sensors, and shipboard interfaces has been completed. 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, Naval Air Warfare Center (NAWC) Aircraft Division Warminster, the CV-ASWM training site at Fleet Combat Training Center Atlantic (FCTCL) Dam Neck, and on board CV-62 through CVN-75.

FY 1996 provides installation of production equipment - \$165K.

FY 1997 continues installation of production equipment - \$142K.

FY 1998 continues installation of production equipment - \$16K.

* Less than \$100K

EXHIBIT P-40 BUDGET ITEM JUSTIFICATION SHEET

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OPN/2-COMMUNICATIONS AND ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE AN/SLQ-32(V) - 12TC (231200)			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$17.7	\$6.2	\$2.1	\$1.5	\$2.0	\$0.0	\$0.0	\$0.0
<p>JUSTIFICATION: 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 their 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>FY96 : ECP's - Procurement of software in support of Engineering Changes (ECPs) retrofit kit material, DECM Decoy Integration (DDI), and engineering support.</p> <p>FY97: Software Production - Provides for production software compatible with ALPHA UPGRADES, SSDS and other engineering changes.</p> <p>FY96 thru FY97: ILS/Production/Test Support - Provides for logistics, production engineering, documentation and testing for AN/SLQ-32(V) systems/upgrades and engineering changes during production.</p> <p>FY96 thru FY97: Consulting Services provides production engineering and technical support for Electronic Warfare (EW) systems.</p> <p>FY96 thru FY97: FMP - Installation of equipment for the Fleet Modernization Program (FMP).</p> <p>FY96 thru FY97: Non FMP - Installation of equipment training and other shore facilities/activities.</p> <p>FY98 thru FY00: The budget reflects the transfer of design services into the appropriate P-1 line item beginning in FY 1998.</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

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WEAPON SYSTEM COST ANALYSIS								DATE:		
EXHIBIT P-5								February 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD						
OPN/2 - COMMUNICATIONS AND ELECTRONIC EQUIPMENT				AN/SLQ-32(V)/12TC (231200)						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	<u>AN/SLQ-32(V)</u>									
TC055	ENGINEERING CHANGE PROPOSAL			1,000						
TC074	SOFTWARE PRODUCTION					1,962				
TC800	ILS/TEST/PRODUCTION SUPPORT			909		3,114		45		12
TC900	CONSULTING SERVICES			825		367				
TC5IN	FMP INSTALLATION			14,537		422		1,716		1,389
TCDSA	DESIGN AGENT							326		79
TC6IN	NON-FMP INSTALLATION			472		321		32		
	TOTAL			17,743		6,186		2,119		1,480

P3A INDIVIDUAL MODIFICATION														TO TO			
MODIFICATION TITLE: AN/SLQ-32(V)3 SYSTEMS/TC003														COMP COMP			
MODELS OF SYSTEM AFFECTED: AN/SLQ-32(V)														TOTAL TOTAL			
DESCRIPTION/JUSTIFICATION: PROVIDES THE CAPABILITIES OF THE PASSIVE PLUS AN INTEGRATED ACTIVE ELECTRONIC COUNTERMEASURE RESPONSE FOR ALL SIGNALS CLASS														QTY COST			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:														QTY COST			
FY96&														QTY COST			
QTY PRIOR QTY FY 97 QTY FY 98 QTY FY 99 QTY FY 00 QTY FY 01 QTY FY 02 QTY FY 03														QTY COST			
FINANCIAL PLAN (IN MILLIONS)																	
RDT&E																	
PROCUREMENT	92	250.00														92	250.00
QUANTITY																	
INSTALLATION KITS																	
INSTALLATION KITS NONRECURRING																	
EQUIPMENT																	
EQUIPMENT NONRECURRING																	
ENGINEERING CHANGE ORDERS																	
DATA																	
TRAINING EQUIPMENT																	
SUPPORT EQUIPMENT																	
OTHER																	
INTERIM CONTRACTOR SUPPORT																	
INSTALLATION OF HARDWARE																	
FY96 & PRIOR EQUIPMENT	87	443.20		1**	3**	1**										92	443.20
FY97 EQUIPMENT																	
FY98 EQUIPMENT																	
FY99 EQUIPMENT																	
FY00 EQUIPMENT																	
FY01 EQUIPMENT																	
FY02 EQUIPMENT																	
FY03 EQUIPMENT																	
TO COMPLETE																	
TOTAL INSTALLATION COST	87	443.20	0.00	1**	0.00	3**	0.00	1**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	92	443.20
TOTAL PROCUREMENT COST		250.00	0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00		250.00
TOTAL COST		693.20	0.00		0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00		693.20
METHOD OF IMPLEMENTATION: S/A																	
CONTRACT DATE: PRIOR YEAR: 12/93 ADMINISTRATIVE LEADTIME: 12 MONTHS PRODUCTION LEADTIME: 30 MONTHS																	
PRODUCTION DELIVER DATE: PRIOR YEAR: 6/96 CURRENT YEAR: BUDGET YEAR: BUDGET YEAR 2:																	
INSTALLATION SCHEDULE:																	
INPUT =====>		FY96	FY97	FY98**	FY99**	FY00**	FY01	FY02	FY03								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	1, 2, 3, 4							92
FY96 & PRIOR		86, 0, 1, 0	0, 0, 0, 1	0, 0, 1, 0	1, 1, 1, 1	0, 1, 0, 0	0, 0, 0, 0	0, 0, 0, 0	0, 0, 0, 0								
FY97																	
FY98																	
FY99																	
FY00																	
FY01																	
FY02																	
FY03																	
OUTPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03								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	1, 2, 3, 4							92
FY96 & PRIOR		86, 0, 0, 1	0, 0, 0, 0	0, 0, 0, 1	0, 1, 1, 1	0, 0, 1, 0	0, 0, 0, 0	0, 0, 0, 0	0, 0, 0, 0								
FY97																	
FY98																	
FY99																	
FY00																	
FY01																	
FY02																	
FY03																	

The inventory objective for this item is

** 5 WILL BE USED FOR SCN REQTS IN FY98, FY99, AND FY00

P3A INDIVIDUAL MODIFICATION													TO TO		
MODIFICATION TITLE: ENGINEERING CHANGE PROPOSAL/TC055													COMPTOTAL TOTAL		
MODELS OF SYSTEM AFFECTED: AN/SLQ-32(V)															
DESCRIPTION/JUSTIFICATION: PROVIDES FOR PROCUREMENT AND SUPPORT OF ECP RETROFIT KITS															
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:															
FY96 &															
FINANCIAL PLAN (IN MILLIONS)															
RDT&E															
PROCUREMENT													VAR 21.50		
QUANTITY															
INSTALLATION KITS															
INSTALLATION KITS NONRECURRING															
EQUIPMENT															
EQUIPMENT NONRECURRING															
ENGINEERING CHANGE ORDERS															
DATA															
TRAINING EQUIPMENT															
SUPPORT EQUIPMENT															
OTHER															
INTERIM CONTRACTOR SUPPORT															
INSTALLATION OF HARDWARE															
FY96 & PRIOR EQUIPMENT													VAR 14.60 VAR 0.22 VAR 1.86 VAR 0.90 VAR 2.00 VAR VAR VAR 0.00 VAR 19.58		
FY97 EQUIPMENT															
FY98 EQUIPMENT															
FY99 EQUIPMENT															
FY00 EQUIPMENT															
FY01 EQUIPMENT															
FY02 EQUIPMENT															
FY03 EQUIPMENT															
TO COMPLETE															
NON-FMP													1.00 0.32 0.03 1.35		
TOTAL INSTALLATION COST													VAR 15.60 VAR 0.54 VAR 1.89 VAR 0.90 VAR 2.00 VAR 0.00 VAR VAR 0.00 VAR 20.93		
TOTAL PROCUREMENT COST													21.50 0.00 0.00 0.00 0.00 0.00 0.00 0.00 21.50		
TOTAL COST													37.10 0.54 1.89 0.90 2.00 0.00 0.00 0.00 42.43		
													The inventory objective for this item		
METHOD OF IMPLEMENTATION: AIT/TIGER TEAM													ADMINISTRATIVE LEADTIME: VARIOUS		
CONTRACT DATA: VARIOUS													PRODUCTION LEADTIME: VARIOUS		
PRODUCTION DELIVER D: VARIOUS													BUDGET YEAR: VARIOUS		
													BUDGET YEAR 2: VARIOUS		
													BUDGET YEAR 2: VARIOUS		
INSTALLATION SCHEDULE:															
INPUT =====>															
													FY96 FY97 FY98 FY99 FY00 FY01 FY02 FY03		
													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		
FY96 & PRIOR													TOTAL		
FY97															
FY98															
FY99															
FY00															
FY01															
FY02															
FY03															
OUTPUT =====>															
													FY96 FY97 FY98 FY99 FY00 FY01 FY02 FY02		
													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		
FY96 & PRIOR													TOTAL		
FY97															
FY98															
FY99															
FY00															
FY01															
FY02															
FY03															

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		AN/SLQ-32(V)4/TC062																			
MODELS OF SYSTEM AFFECTED:		AN/SLQ-32(V)																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILEST																					
		FY96&												TO TO							
		QTY	PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	COST	QTY	COST
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																					
PROCUREMENT		11	73.60																	11	73.60
QUANTITY																					
INSTALLATION KITS																					
INSTALLATION KITS NONRECURRING																					
EQUIPMENT																					
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
INSTALLATION OF HARDWARE																					
FY96 & PRIOR EQUIPMENT		10	36.80	*	0.20	1	0.10													11	37.10
FY97 EQUIPMENT																					
FY98 EQUIPMENT																					
FY99 EQUIPMENT																					
FY00 EQUIPMENT																					
FY01 EQUIPMENT																					
FY02 EQUIPMENT																					
FY03 EQUIPMENT																					
TO COMPLETE																					
TOTAL INSTALLATION COST		10	36.80	*	0.20	1	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11	37.10	
TOTAL PROCUREMENT COST		73.60		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		73.60	
TOTAL COST		110.40		0.20		0.10		0.00		0.00		0.00		0.00		0.00		0.00		####	
The inventory objective for this item																					
METHOD OF IMPLEMENTATION:		S/A				ADMINISTRATIVE LEADTIME: 12 MONTHS				PRODUCTION LEADTIME: 33 MONTHS											
CONTRACT DATE:		PRIOR YEAR: 10/90				CURRENT YEAR:				BUDGET YEAR:											
PRODUCTION DELIVER DATE:		PRIOR YEAR: 7/93				CURRENT YEAR:				BUDGET YEAR:											
INSTALLATION SCHEDULE:																					
INPUT =====>		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		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		11			
FY96 & PRIOR		9, 0, 0, 0		0, 0, 0, 0		0, 0, 1, 0		0, 0, 0, 1		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0					
FY97																					
FY98																					
FY99																					
FY00																					
FY01																					
FY02																					
FY03																					
OUTPUT =====>		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		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		11			
FY96 & PRIOR		9, 0, 0, 0		0, 1, 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					
FY97																					
FY98																					
FY99																					
FY00																					
FY01																					
FY02																					
FY03																					

* ADVANCED PLANNING

UNCLASSIFIED

**BUDGET ITEM JUSTIFICATION SHEET
EXHIBIT P-40**

DATE:

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATIONS & ELECTRONIC EQUIPMENT**

P-1 ITEM NOMENCLATURE/SUBHEAD

AN/WLR-1H/82LA-2320

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (In Millions)	\$2.9	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

SUBMARINES WARFARE: (LA013/LA015) AN/WLR-1H(V) 6 High Probability of Intercept Field Change (F/C) Kits. The receiver modification increases the AN/WLR-1H(V) 6 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-1H(V) 6 as a viable ESM system beyond FY2003.

AN/WLR-1H(V) 6 Extremely High Frequency Field Exchange Kits extend the receiver frequency range of the AN/WLR-1H(V) 6. This improvement upgrades the tactical threat warning capability to intercept the threat radar signals operating the EHF frequency band.

No FY 1998/1999 funds are requested.

FMP - INSTALLATION OF EQUIPMENT FOR CV/CVN FLEET MODERNIZATION PROGRAM.

P-1 SHOPPING LIST	
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UNCLASSIFIED

UNCLASSIFIED

**WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5**

DATE:

February 1997

APPROPRIATION/BUDGET ACTIVITY
**OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATIONS AND ELECTRONIC EQUIPMENT**

P-1 ITEM NOMENCLATURE/SUBHEAD
AN/WLR-1H(V)/82LA-2320

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS										
			FY96		FY97		FY98		FY 99				
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST			
	<u>AN/WLR-1H(V)</u>												
	SURFACE SHIPS (N86)												
LA5IN	INSTALLATION OF EQUIPMENT			267		170							
	<u>SUBMARINES WARFARE (N87)</u>												
LA013	HPI FCK	A	4	1,723									
LA015	EHF EXTENSION FCK	A	4	920									
	GRAND TOTAL			\$2,910		\$170		\$0				\$0	

UNCLASSIFIED

UNCLASSIFIED

**BUDGET PROCUREMENT HISTORY AND PLANNING
EXHIBIT P-5A
(\$000)**

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATIONS AND ELECTRONIC EQUIPMENT**

P-1 ITEM NOMENCLATURE/SUBHEAD

AN/WLR-1H(V)/82LA/23200/05

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
<u>LA013</u>	<u>HPI-FCK</u> <u>FY-96</u>	<u>S T RESEARCH</u> <u>NEWINGTON, VIRGINIA</u>	<u>WX</u>	<u>NRAD</u>	<u>06/96</u>	<u>9/97</u>	<u>4</u>	<u>\$430.8</u>	<u>YES</u>	<u>NO</u>	
<u>LA015</u>	<u>EHF EXT FCK</u> <u>FY-96</u>	<u>S T RESEARCH</u> <u>NEWINGTON, VIRGINIA</u>	<u>WX</u>	<u>NRAD</u>	<u>06/96</u>	<u>10/97</u>	<u>4</u>	<u>\$230.0</u>	<u>YES</u>	<u>NO</u>	

REMARKS:

UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																		TO	TO	TOTAL	TOTAL															
AN/WLR-1H/82LA-2320																				COMP	COMP	QTY	COST															
MODIFICATION TITLE:		AN/WLR-1H(V)5 (MOD KITS)/LA012																																				
MODELS OF SYSTEM AFFECTED:		AN/WLR-1H																																				
DESCRIPTION/JUSTIFICATION:		Countermeasure receivers; a primary Electronic Warfare Support Measures (ESM) equipment developed for upgrading the AN/WLR-1G.																																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		The system has been approved.																																				
		FY96																																				
		QTY	& PRIOR	QTY	FY96	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03																			
FINANCIAL PLAN (IN MILLIONS)																																						
RDT&E																																						
PROCUREMENT		23	4.000																			0	0.000															
QUANTITY																						23	4.000															
INSTALLATION KITS																						0	0.000															
INSTALLATION KITS NONRECURRING																						0	0.000															
EQUIPMENT		23	4.000																			23	4.000															
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															
INTERIM CONTRACTOR SUPPORT																						0	0.000															
INSTALLATION OF HARDWARE																																						
FY96 EQUIPMENT AND PRIOR		21	0.447	2	0.170																23	0.617																
FY97 EQUIPMENT																						0	0.000															
FY98 EQUIPMENT																						0	0.000															
FY99 EQUIPMENT																						0	0.000															
FY00 EQUIPMENT																						0	0.000															
FY01 EQUIPMENT																						0	0.000															
FY02 EQUIPMENT																						0	0.000															
FY03 EQUIPMENT																						0	0.000															
TO COMPLETE																						0	0.000															
TOTAL INSTALLATION COST		21	0.447	2	0.170	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	23	0.617															
TOTAL PROCUREMENT COST																						4.000	0.000															
TOTAL COST																						4.447	0.170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.000	4.617
METHOD OF IMPLEMENTATION:		S/A																		ADMINISTRATIVE LEADTIME:		12 MONTHS		PRODUCTION LEADTIME:		12 MONTHS												
CONTRACT DATE:		PRIOR YEAR:		12/94		CURRENT YEAR:		12 MONTHS		BUDGET YEAR 1:		BUDGET YEAR 2:		12 MONTHS		BUDGET YEAR 1:		BUDGET YEAR 2:																				
PRODUCTION DELIVER DATE:		PRIOR YEAR:		12/95		CURRENT YEAR:		12 MONTHS		BUDGET YEAR 1:		BUDGET YEAR 2:		12 MONTHS		BUDGET YEAR 1:		BUDGET YEAR 2:																				
INSTALLATION SCHEDULE:																																						
INPUT =====>		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC																				
		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		1, 2, 3, 4		TOTAL																		
FY96 & PRIOR		14, 3, 3, 1		1, 1, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		23																		
FY97																																						
FY98																																						
FY99																																						
FY00																																						
FY01																																						
FY02																																						
FY03																																						
OUTPUT =====>		FY95		FY96		FY97		FY98		FY99		FY00		FY01		FY03		TC																				
		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		1, 2, 3, 4		TOTAL																		
FY96 & PRIOR		14, 3, 3, 1		1, 1, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		0, 0, 0, 0		23																		
FY97																																						
FY98																																						
FY99																																						
FY00																																						
FY01																																						
FY02																																						
FY03																																						

NOTE: UNITS PROCURED BY THE COAST GUARD IN PRIOR YEARS WERE/ARE BEING INSTALLED BY THE COAST GUARD. THE REMAINDER ARE THE OPN INSTALLS REFLECTED ABOVE.

P-1 SHOPPING LIST	
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CLASSIFICATION: UNCLASSIFIED

EXHIBIT P-3A

UNCLASSIFIED

**REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES
EXHIBIT P-23B**

DATE:

February 1997

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATIONS & ELECTRONIC EQUIPMENT**

P-1 ITEM NOMENCLATURE

AN/WLR-1H/82LA-2320/05

COST CODE	ITEM	TOTAL INVENTORY OBJECTIVE / REQUIREMENT	QUANTITY ON HAND AND NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY97 PROGRAM FUNDS	PLANNED BUDGET YEAR PROC		BALANCE	PHASING RATIONALE
							98	99		
LA013	HPI FCK	7	0	0	7	0	0	0	0	
LA015	EHF EXTEN FCK	7	0	0	7	0	0	0	0	

MEMO ENTRIES

COST CODE:			
LA013		LA015	
SHIP-INSTALLS	6	SHIP-INSTALLS	6
SUBSCOL	1	SUBSCOL NLON	1
TOTAL I.O.	7	TOTAL I.O.	7

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET						DATE		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE INFORMATION WARFARE SYSTEMS 52LG 234000		
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$1.8	\$4.6	\$3.8	\$4.4	\$5.5	\$6.7	\$7.1	\$7.2
<p>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).</p> <p>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.</p> <p>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.</p> <p>Specific capabilities and equipment to be procured by this line include:</p> <ul style="list-style-type: none"> - AN/ULQ-13 Mod Kit - procure one IFF tracker. - FIWC equipment which will provide significant capability to support IW tactical and training requirements worldwide. - IMPACTS (Information Warfare Mission Planning, Analysis and C2 Targeting System) - Provide seamless integration of existing, emergent IW/C2W situation assessment, mission planning tools, and tactical decision aids into the afloat command, control, and cryptologic systems. JMCIS/GCCS/DII COE-based IMPACTS software tools directly support the performance of IW Exploit, Protect, and Attack functions in consonance with the Commander's overall tactical assessment. IMPACTS provides a migration route from stand-alone systems developed in various environments into the integrated C4I systems afloat. - C2 protect equipment will support the naval computer incident response function. - I/W attack equipment provides operational commanders the tools they need to deny or interfere with an adversary's information system. - Psychological Operations (PSYOPS) equipment - In a littoral environment and by virtue of being forward deployed, Naval assets are uniquely poised to conduct PSYOPS. - Acoustic Deception devices provide a shipborne acoustic deception capability. This carry-on capability interfaces with the SLQ-25 (NIXIE) system. - ICAD P3I Upgrades - Upgrade HF radios on ULQ-13 vans. 								
MODIFICATION SUMMARY (\$M)								
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:								
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>
FIWC HARDWARE	\$1.4	\$1.6						

**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM COST ANALYSIS								DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE INFORMATION WARFARE SYSTEMS 52LG 234000						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 96		FY 97		FY 98		FY 99		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
LG023	FIWC HARDWARE	A	VAR	1,300	VAR	1,296	VAR		VAR		
LG050	IMPACTS	A	VAR	445	VAR	600	VAR	500	VAR	500	
LG051	C2 PROTECT EQUIPMENT	A			VAR	978					
LG052	IW ATTACK EQUIPMENT	A			VAR	1,314	VAR	1,887	VAR	1,872	
LG053	ICAD P3I UPGRADES	A					VAR	321	VAR	865	
LG018	PRODUCTION SUPPORT	A				229		283		422	
LG057	PSYOP EQUIPMENT	A					VAR	790	VAR	450	
LG058	ACOUSTIC DECEPTION DEVICE	A							VAR	325	
LG776	INSTALLATION NON-FMP	A		91		150					
	TOTAL PROGRAM			1,836		4,567		3,781		4,434	

MODIFICATION TITLE: FIWC HARDWARE (LG023/LG776) - SHORE
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

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

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	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																							
FY 96 EQUIP																							
FY 97 EQUIP																							
FY 98 EQUIP																							
FY 99 EQUIP																							
FY 00 EQUIP																							
FY 01 EQUIP																							
FY 02 EQUIP																							
FY 03 EQUIP																							
FY TC EQUIP																							
TOTAL INSTALLATION COST*				0.1		0.2																	0.3
TOTAL PROCUREMENT COST				1.4		1.6																	3.0

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE I

PROCUREMENT LEADTIME:

CONTRACT DATES: FY 1996: Various FY 1997: Various FY 1998: FY 1999:

DELIVERY DATES: FY 1996: Various FY 1997: Various FY 1998: FY 1999:

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 96 1 2 3 4 FY 97 1 2 3 4 FY 98 1 2 3 4 FY 99 1 2 3 4

INPUT

OUTPUT

INSTALLATION SCHEDULE: 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 TOTAL

INPUT

OUTPUT

**UNCLASSIFIED
CLASSIFICATION**

BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2				P-1 ITEM NOMENCLATURE ELECTRONIC WARFARE SUPPORT EQUIPMENT (52LD) 234300				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$7.9	\$7.8	\$4.2	\$10.7	\$11.5	\$11.6	\$12.1	\$12.4
<p>NARRATIVE DESCRIPTION/JUSTIFICATION: THE EQUIPMENT, DEVICES AND SUBSYSTEMS WITHIN THIS LINE WILL PROVIDE 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>(a) (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>(b) (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, AND ANCILLARY HARDWARE.</p> <p>(c) (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; AND ONE NAVAL SECURITY GROUP SIGNAL PROCESSOR. FY 95 FUNDING SUPPORTED THE ENGINEERING CHANGE PROPOSALS TO UPGRADE/REPLACE OUTDATED EQUIPMENT THAT IS NO LONGER IN THE SUPPLY SYSTEM OR TOO COSTLY TO REPAIR. FYs 96-99 FUNDING WILL CONTINUE THE ONGOING PRODUCTION OF SSEE PHASE 2 HARDWARE.</p>								

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE						
		February 1997						
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE							
OTHER PROCUREMENT, NAVY BA-2	ELECTRONIC WARFARE SUPPORT EQUIPMENT (52LD) 234300							
<p>(d) (U) THE ULQ-16 UPGRADE PROVIDES THE ULQ-16 WITH SPECIFIC EMITTER IDENTIFICATION (SEI) CAPABILITY. SEI PROVIDES TACTIAL 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) INSTALLATION DATA: SSEE PHASE 2 CANDIDATE PLATFORMS INCLUDE L-CLASS SHIPS, CG/CGN, DD/DDG, AND VARIOUS SHORE SITES. INSTALLATIONS PERFORMED BY FIELD ACTIVITY AND CONTRACTOR PERSONNEL.</p>								
<p>MODIFICATION SUMMARY</p> <p>Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgete</p>								
EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
SSEE PHASE 2	5.9	5.8	3.5	9.1	9.9	10.0	10.5	10.7

P-1 SHOPPING LIST
ITEM NO. **PAGE NO.**
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Exhibit P-40
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WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2					C. P-1 ITEM NOMENCLATURE ELECTRONIC WARFARE SUPPORT EQUIPMENT (52LD) 234300					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
LD030	EW REPROGRAMMABLE LIBRARY EWRL (TAC-3 WORKSTATIONS WITH PERIPHERALS), EW SUPPORT SYSTEM EQUIP UPGRADES	A	VAR	512	VAR	200	VAR	185	VAR	304
LD041	VASS	A	VAR	863	VAR	391	VAR	369	VAR	607
LD043	PERMANENTLY INSTALLED AND MANNED SHIPS SIGNAL EXPLOITATION EQUIP (SSEE) PHASE 2	A	VAR	3,587	VAR	3,781	VAR	2,122	VAR	7,128
LD044	PRODUCTION SUPPORT	A		663		369		175	VAR	626
LD045	ULQ-16 UPGRADE	A			VAR	972				
LD776	INSTALLATION - NON FMP	A		82		28				
LD777	INSTALLATION - FMP	A		2,208		2,031		1,365		2,011
	TOTAL PROGRAM			7,915		7,772		4,216		10,676

MODIFICATION TITLE: ELECTRONIC WARFARE SUPPORT EQUIPMENT (52LD) LD043, LD777 - SHIP

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: 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 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	VAR	4.3	VAR	3.1	VAR	3.7	VAR	2.1	VAR	7.1	VAR	7.9	VAR	8.4	VAR	8.4	VAR	9.5	TBD	TBD	TBD	TBD
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware*	13	2.7	14	2.2	11	2	6	1.4	14	2	13	1.4	12	1.6	16	0.8	16	0.6	TBD	TBD	TBD	TBD
PRIOR YR EQUIP	13	2.7	6	1.4																	19	4.1
FY 96 EQUIP			8	0.8	2	0.6															10	1.4
FY 97 EQUIP					9	1.4	1	0.1													10	1.5
FY 98 EQUIP							5	1.3													5	1.3
FY 99 EQUIP									14	2											14	2.0
FY 00 EQUIP											13	1.4									13	1.4
FY 01 EQUIP													12	1.6	1	0.2					13	1.8
FY 02 EQUIP															15	0.6					15	0.6
FY 03 EQUIP																	16	0.6			16	0.6
FY TC EQUIP																			TBD	TBD	TBD	TBD
TOTAL INSTALLATION COST*		2.7		2.2		2		1.4		2		1.4		1.6		1		0.6	TBD	TBD	TBD	TBD
TOTAL PROCUREMENT COST		7		5.3		5.7		3.5		9.1		9.3		10		9.2		10.1	TBD	TBD	TBD	TBD

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2

PROCUREMENT LEADTIME: 1

CONTRACT DATES: FY 1996: Various FY 1997: Various FY 1998: Various FY 1999:

DELIVERY DATES: FY 1996: Various FY 1997: Various FY 1998: Various FY 1999:

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99				TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	13	4	4	3	3	3	3	3	2	1	2	1	2	4	4	3	3	
OUTPUT	13	4	4	3	3	3	3	3	2	1	2	1	2	4	4	3	3	
INSTALLATION SCHEDULE:		FY 00				FY 01				FY 02				FY 03				TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT		3	3	4	3	3	3	3	3	4	4	4	4	4	4	4	4	115
OUTPUT		3	3	4	3	3	3	3	3	4	4	4	4	4	4	4	4	115

MODIFICATION TITLE: ELECTRONIC WARFARE SUPPORT EQUIPMENT (52LD) LD043, LD776 - SHORE

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: 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 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	VAR	1.1	VAR	0.5	VAR	0.1					VAR	0.6			VAR	1.2	VAR	0.6			VAR	4.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	3	0.08	3	0.08	1	0.03					1	0.02			2	0.05	1	0.02				11 0.28
PRIOR YR EQUIP	3	0.08																				3 0.08
FY 96 EQUIP			3	0.08																		3 0.08
FY 97 EQUIP					1	0.03																1 0.03
FY 98 EQUIP																						
FY 99 EQUIP																						
FY 00 EQUIP											1	0.02										1 0.02
FY 01 EQUIP																						
FY 02 EQUIP															2	0.05						2 0.05
FY 03 EQUIP																	1	0.02				1 0.02
FY TC EQUIP																						
TOTAL INSTALLATION COST*		0.08		0.08		0.03						0.02				0.05		0.02				0.28
TOTAL PROCUREMENT COST		1.18		0.58		0.13						0.62				1.25		0.62				5.00

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2

PROCUREMENT LEADTIME: 1

CONTRACT DATES: FY 1996: Various FY 1997: Various FY 1998: Various FY 1999: Various

DELIVERY DATES: FY 1996: Various FY 1997: Various FY 1998: Various FY 1999: Various

INSTALLATION SCHEDULE: PY 1 2 3 4 FY 96 1 2 3 4 FY 97 1 2 3 4 FY 98 1 2 3 4 FY 99 1 2 3 4

INPUT 3 3 1

OUTPUT 3 3 1

INSTALLATION SCHEDULE: 1 2 3 4 FY 00 1 2 3 4 FY 01 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 TOTAL

INPUT 1 2 1 11

OUTPUT 1 2 1 11

CLASSIFICATION: **UNCLASSIFIED**

OTHER PROCUREMENT, NAVY BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE 234600			
OPN/2 - COMMUNICATIONS AND ELECTRONIC EQUIPMENT					C3 COUNTERMEASURES / 121K			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$22.9	\$0.5	\$6.9	\$0.0	\$9.2	\$10.4	\$11.4	\$11.3
<p>JUSTIFICATION: This line contains 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 following projects delineate devices, equipment, and/or systems that exploit the vulnerability of the enemy C3 network and reduce the vulnerability of the U.S. Navy C3 network. They are:</p> <p>1K009 AN/SLQ-49 (Rubber Duck). An expendable rapid response shipboard inflatable decoy system that causes radar returns with cross sections representative of surface combatants. The AN/SLQ-49 consists of a pair of self-inflating corner reflectors.</p> <p>1K010 OUTLAW BANDIT. Passive Countermeasures installation on US Navy combatants. Full production granted 9/93. The total objective for installed systems is 59 shipsets at an estimated total cost of \$249.8 million. Thirty-three units have been procured in prior years, and eight are being procured in this budget leaving 18 shipsets to be procured in subsequent years.</p> <p>1K830 PRODUCTION ENGINEERING. Funds in this line provide engineering support for the production of the AN/SLQ-49 Inflatable Decoy.</p> <p>1K860 ACCEPTANCE TEST and EVALUATION. Funds in this line procure Production Lot Acceptance Test services for the AN/SLQ-49 Inflatable Decoy.</p> <p>1K900 CONSULTING SERVICES. Contractor technical engineering support is required for assistance during the installation drawing development, check-out, and post-installation test evaluation of the Outlaw Bandit system. This system represents new technology, and the level of experience and expertise provided by this support. Funding supports installation in the year procured.</p> <p>This budget reflects the transfer of design into the appropriate equipment P-1 line item..</p>								

WEAPONS SYSTEM COST ANALYSIS EXHIBIT (P-5)							DATE: February 1997						
APPROPRIATION/BUDGET ACTIVITY OPN / 2 - COMMUNICATIONS AND ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD C3 COUNTERMEASURES / 121K									
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS										
			FY 1996		FY 1997		FY 1998		FY 1999				
			QTY	TOTAL COST	QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COST			
1K009	AN/SLQ-49	A	29	751									
1K010	OUTLAW BANDIT	A	8	4,542									
1K830	PRODUCTION ENGINEERING			163									
1K860	ACCEPTANCE TEST and EVALUATION			80									
1KINS	INSTALLATION OF EQUIPMENT			16,124		84		5,544					
1KDSA	DESIGN AGENT							929					
1K900	CONSULTING SERVICES (Technical Eng.)			1,267		380		418					
TOTAL					22,927		464		6,891				0

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING (P-5A)										DATE February 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OPN/2- COMMUNICATIONS AND ELECTRONIC EQUIPMENT					C-3 COUNTERMEASURES				121K		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
1K009	AN/SLQ-49										
	FY 1996	Irvin GB	(Option)	NAVSEA	1/96	12/96	29	25.9	YES	NO	
1K010	OUTLAW BANDIT										
	FY 1996	VARIOUS*	(Option)	NAVSEA	06/96	07/96	2	567.8	YES	NO	
		VARIOUS*	C/FP	NAVSEA	09/96	01/97	6	567.8	YES	NO	
REMAR 1K010 Second FY 96 contract applies Congressional increase in Outlaw Bandit funding. Not included in unit cost two items to be procured.											
* This system is comprised of different components from: GEC Marconi, San Diego, CA SFS, Santa Fe, CA Millimeter Wave Tech., Marietta, GA Cumming, Avon, MA Rubatex Inc., Bethford, VA ARC Technologies, Amesbury, MA											

P3A		INDIVIDUAL MODIFICATION																		
MODIFICATION TITLE:		OUTLAW BANDIT																		
MODELS OF SYSTEM AFFECTED:		None. These are original installations.																		
DESCRIPTION/JUSTIFICATION:		Passive countermeasures installation on Navy surface combatants. Quantities indicate shipsets installed 1 per hull.																		
		Unit Cost varies between classes and ships. Indicated cost reflects average for the procurement year.																		
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		AFRP granted by ASN 09/93. OPEVAL completed 3/93.																		
		FY 96															TO TO			
		QTY & Prior QTY FY 97 QTY FY 98 QTY FY 99 QTY FY 00 QTY FY 01 QTY FY 02 QTY FY 03															COMP COMPTOTAL			
																	QTY COST QTY COST			
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
UNIT COST	33	50	0	0	0	0	0	0	7	9	0	0	2	2	2	2	15	25.0	59	86.7
QUANTITY	33	50.0							7	8.5			2	1.6	2	1.6	15	25.0	59	86.7
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT																			0	0.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
INSTALLATION OF HARDWARE																				
FY96 EQUIPMENT & PRIOR (33 Kits)	30	67.6		0.1	3	6.5													33	74.2
FY97 EQUIPMENT (0 Kits)																			0	0.0
FY98 EQUIPMENT (0 Kits)																			0	0.0
FY99 EQUIPMENT (0 Kits)																			0	0.0
FY00 EQUIPMENT (7 Kits)								0.4	6	9.5	2	9.2							8	19.1
FY01 EQUIPMENT (0 Kits)																			0	0.0
FY02 EQUIPMENT (2 Kits)													2	5.6					2	5.6
FY03 EQUIPMENT (2 Kits)													2	3.4					2	3.4
TO COMPLETE																0.1	14	52.9	14	53.0
TOTAL INSTALLATION COST		67.6		0.1		6.5			0.0	0.4		9.5		9.2		9.1		52.9	59	155.3
TOTAL PROCUREMENT COST		50.0		0.0		0.0		0.0		8.5		0.0		1.6		1.6		25.0		86.7
TOTAL COST		117.6		0.1		6.5		0.0		8.9		9.5		10.8		10.7		77.9		242.0
METHOD OF IMPLEMENTATION:		AIT/SHIPALT															ADMINISTRATIVE LEADTIM 6 MONTHS			
CONTRACT DATE:		PRIOR YEAR Jun-96															CURRENT YEAR: N/A			
PRODUCTION DELIVER DATE:		PRIOR YEAR Oct-96															CURRENT YEAR: N/A			
																	BUDGET YEAR: N/A			
																	BUDGET YEAR 2: N/A			
																	BUDGET YEAR 2: N/A			
INSTALLATION SCHEDULE:																				
INPUT =====>																				
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	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	1, 2, 3, 4										
	FY 96 & Prior	20,01,01,06	00,01,01,00	01,02,00,00													33			
	FY 97																0			
	FY 98																0			
	FY 99																0			
	FY 00					00,02,02,02	01,00,00,00										7			
	FY 01																0			
	FY 02							00,00,00,01	01,00,00,00								2			
	FY 03								01,01,00,00								2			
	TC										03,04,04,04					15				
	TOTAL	20,01,01,06	00,01,01,00	01,02,00,00			00,02,02,02	01,00,00,01	02,01,00,00	03,04,04,04					59					
OUTPUT =====>																				
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	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	1, 2, 3, 4										
	FY 96 & Prior	20,00,00,00	03,05,01,00	01,01,00,00	00,02,00,00												33			
	FY 97																0			
	FY 98																0			
	FY 99																0			
	FY 00					00,00,03,01	00,00,01,01	00,00,01,00									7			
	FY 01																0			
	FY 02								00,00,01,01								2			
	FY 03								00,00,00,01	01,00,00,00							2			
	TC										03,04,04,04					15				
	TOTAL	20,00,00,00	03,05,01,00	01,01,00,00	00,02,00,00		00,00,03,01	00,00,01,01	00,00,02,02	04,04,04,04					59					

BUDGET ITEM JUSTIFICATION SHEET						DATE																				
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE																				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						COMBAT DIRECTION FINDING																				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																		
QUANTITY																										
COST (in millions)	\$3.1	\$10.3	\$10.5	\$16.1	\$18.7	\$1.7	\$1.7	\$1.7																		
<p>NARRATIVE DESCRIPTION /JUSTIFICATION: (U) THIS LINE ITEM PROVIDES ELECTRONIC WARFARE SIGNALS ACQUISITION AND DIRECTION FINDING 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 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.</p> <p>FY 96 PROCURED ONE ADAS AND PRODUCTION SUPPORT. FY 97 PROCURES THREE ADAS AND PRODUCTION SUPPORT. FY 98 PROCURES THREE ADAS, PRODUCTION SUPPORT, AND INSTALLATION. FY 99 PROCURES FOUR ADAS, RELIABILITY MOD KITS TO REPLACE ANTIQUATED COMBAT DIRECTION FINDING BLOCK O HARDWARE, PRODUCTION SUPPORT, AND INSTALLATION.</p> <p>Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p> <p style="text-align: center;">MODIFICATION SUMMARY</p> <p>Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:</p> <table border="1"> <thead> <tr> <th>EQUIPMENT</th> <th>FY96</th> <th>FY97</th> <th>FY98</th> <th>FY99</th> <th>FY00</th> <th>FY01</th> <th>FY02</th> <th>FY03</th> </tr> </thead> <tbody> <tr> <td>ADAS</td> <td>\$2.8</td> <td>\$9.8</td> <td>\$10.0</td> <td>\$14.0</td> <td>\$14.4</td> <td>\$1.3</td> <td>\$1.3</td> <td>\$0.0</td> </tr> </tbody> </table>									EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	ADAS	\$2.8	\$9.8	\$10.0	\$14.0	\$14.4	\$1.3	\$1.3	\$0.0
EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03																		
ADAS	\$2.8	\$9.8	\$10.0	\$14.0	\$14.4	\$1.3	\$1.3	\$0.0																		

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**UNCLASSIFIED
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WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE COMBAT DIRECTION FINDING 521N 241900					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
1N005	PRODUCTION SUPPORT	A		246		551		417		689
1N006	ADAS	A	1	2,807	3	9,759	3	9,678	4	13,200
1N010	RELIABILITY MOD KITS	A								1,265
1N776	INSTALLATION NON-FMP	A								474
1N777	INSTALLATION FMP	A						378		428
	INSTALL							335		343
	DESIGN SERVICE AGENT							43		85
	TOTAL PROGRAM			3,053		10,310		10,473		16,056

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					COMBAT DIRECTION FINDING #REF!						
COST CODE	ELEMENT OF COST FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
1N006	ADAS										
	FY 96	SANDERS/NH	SS	NMSO	Oct-95	Nov-97	1	\$2,807,408	YES	NO	N/A
	FY 97	SANDERS/NH	SS	NMSO	Jan-97	Feb-99	3	\$3,253,000	YES	NO	N/A
	FY 98	SANDERS/NH	OPTION	NMSO	Jan-98	Feb-00	3	\$3,226,000	YES	NO	N/A
	FY 99	SANDERS/NH	OPTION	NMSO	Jan-99	Feb-01	4	\$3,300,000	YES	NO	N/A
D. REMARKS											
FY 96 pricing predicated on a total procurement of 8 backfit kits (1 OPN and 7 SCN). FY 97 pricing predicated on a total procurement of 3 backfit kits (OPN).											

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

COMBAT DIRECTION FINDING (521N) 1N006, 1N777 - SHIP

This program will provide electronic warfare signal acquisition and direction finding systems with the capability to detect, locate, and identify hostile targets at long range and input this data into the ships tactical data system.

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

	FY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		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	2.8	1	3.3	2	6.5	3	9.9	3	10.1									10	32.6	
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware							1	0.3	1	0.3	2	0.7	3	1.1	3	1.1					10	3.5	
PRIOR YR EQUIP																							
FY 96 EQUIP							1	0.3														1	0.3
FY 97 EQUIP									1	0.3												1	0.3
FY 98 EQUIP											2	0.7										2	0.7
FY 99 EQUIP													3	1.1								3	1.1
FY 00 EQUIP															3	1.1						3	1.1
FY 01 EQUIP																							
FY 02 EQUIP																							
FY 03 EQUIP																							
FY TC EQUIP																							
TOTAL INSTALLATION COST								0.3		0.3		0.7		1.1		1.1							3.5
TOTAL PROCUREMENT COST				2.8		3.3		6.8		10.2		10.8		1.1		1.1							36.1

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3

PROCUREMENT LEADTIME: 24

CONTRACT DATES:

FY 1996: OCT 95

FY 1997: JAN 97

FY 1998: JAN 98

FY 1999: JAN 99

DELIVERY DATES:

FY 1996: VAR

FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT																
OUTPUT																

INSTALLATION SCHEDULE:

	FY 00				FY 01				FY 02				FY 03				TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT			2				3				3						10
OUTPUT			2				3				3						10

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

COMBAT DIRECTION FINDING (521N) 1N006, 1N776 - SHORE

This program will provide electronic warfare signal acquisition and direction finding systems with the capability to detect, locate, and identify hostile targets at long range and input this data into the ships tactical data system.

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

	FY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring Equipment					2	6.5	1	3.2	1	3.3	1	3.4									5	16.4
Equipment Nonrecurring Engineering Change Orders Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware									2	0.5	1	0.2	1	0.2	1	0.2					5	1.1
PRIOR YR EQUIP																						
FY 96 EQUIP									2	0.5											2	0.5
FY 97 EQUIP											1	0.2									1	0.2
FY 98 EQUIP													1	0.2							1	0.2
FY 99 EQUIP															1	0.2					1	0.2
FY 00 EQUIP																	1	0.2			1	0.2
FY 01 EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST										0.5		0.2		0.2		0.2						1.1
TOTAL PROCUREMENT COST						6.5		3.2		3.8		3.6		0.2		0.2						17.5

ADMINISTRATIVE LEADTIME: 3

PROCUREMENT LEADTIME: 24

CONTRACT DATES:

FY 1996: OCT 95

FY 1997: JAN 97

FY 1998: JAN 98

FY 1999: JAN 99

DELIVERY DATES:

FY 1996: VAR

FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT																
OUTPUT																

INSTALLATION SCHEDULE:

	FY 00				FY 01				FY 02				FY 03				TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT		1				1				1							5
OUTPUT		1				1				1							5

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BUDGET ITEM JUSTIFICATION SHEET						DATE																													
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE																													
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						OUTBOARD MODERNIZATION (52LH) 243000																													
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																											
QUANTITY																																			
COST	\$1.5	\$0.3	\$11.7	\$22.7	\$24.6	\$32.9	\$34.1	\$34.9																											
<p>NARRATIVE DESCRIPTION/JUSTIFICATION: (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).</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 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 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 DFCEP. PHASE 1 FOCUSES ON A TOTAL UPDATE OF FRONT-END SENSORS.</p> <ul style="list-style-type: none"> - (U) FY 96 FUNDS INSTALLED THE HARDWARE WHICH WAS PROCURED IN FY 95. - (U) FY 97 FUNDS WILL PROCURE PRODUCTION SUPPORT REQUIRED TO PREPARE THE CONTRACT DOCUMENTATION NECESSARY TO PROCURE THE HARDWARE REQUIRED IN FY 98. - (U) FY 98 FUNDS WILL PROCURE THREE DIRECTION FINDING KITS WITH UNIT COST INCREASING DUE TO STOP IN PRODUCTION IN FY 96 AND FY 97. 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. - (U) FY 99 FUNDS WILL PROCURE THREE COBLU PHASE 1 SYSTEMS AND PRODUCTION SUPPORT. INSTALL THREE DF ECP KITS PROCURED IN FY 98. <p>INVENTORY OBJECTIVE: (U) 24 OUTBOARD - 18 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)</p> <p>INSTALLATION AGENT(S): INSTALLATIONS ARE ACCOMPLISHED BY FORMAL SHIPALT BY ALTERATION INSTALLATION TEAM (AIT) DURING SHIP PIERSIDE AVAILABILITY.</p> <p>Note: Budget reflects transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p> <p style="text-align: center;">MODIFICATION SUMMARY</p> <p>Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:</p> <table border="1"> <thead> <tr> <th>EQUIPMENT</th> <th>FY96</th> <th>FY97</th> <th>FY98</th> <th>FY99</th> <th>FY00</th> <th>FY01</th> <th>FY02</th> <th>FY03</th> </tr> </thead> <tbody> <tr> <td>DF Kits</td> <td>\$1.5</td> <td></td> <td>\$4.9</td> <td>\$0.9</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>COBLU PH I</td> <td></td> <td></td> <td></td> <td>\$19.1</td> <td>\$20.4</td> <td>\$27.2</td> <td>\$28.5</td> <td>\$29.0</td> </tr> </tbody> </table>									EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	DF Kits	\$1.5		\$4.9	\$0.9					COBLU PH I				\$19.1	\$20.4	\$27.2	\$28.5	\$29.0
EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03																											
DF Kits	\$1.5		\$4.9	\$0.9																															
COBLU PH I				\$19.1	\$20.4	\$27.2	\$28.5	\$29.0																											

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WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE OUTBOARD MODERNIZATION (52LH) 243000					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
LH023	OUTBOARD DF KITS	A					3	4,944		
LH024	PRODUCTION SUPPORT	A				290		648		2,513
LH027	COBLU PHASE 1 SYSTEM	B						6,000	3	19,134
LH776	INSTALLATION NON-FMP	A								300
LH777	INSTALLATION FMP	A		1,465				82		782
	INSTALL DESIGN SERVICE AGENT							82		632 150
	TOTAL PROGRAM			1,465		290		11,674		22,729

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					OUTBOARD MODERNIZATION (52LH) 243000						
COST CODE	ELEMENT OF COST FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
LH023	OUTBOARD DF KITS	LOCKHEED SANDERS NASHUA, NH	TBD	OSP	Jan-98	Dec-98	3	\$1,648,000	YES	NO	N/A
LH027	COBLU PHASE 1 SYSTEM	LOCKHEED SANDERS NASHUA, NH	TBD TBD	OSP OSP	Nov-97 Nov-98	N/A Nov-99	N/A 3	\$6,000,000* \$6,378,000	YES YES	YES YES	N/A N/A
D. REMARKS											
*Reflects U.S. share of the non-recurring engineering as stated in the COBLU Memorandum of Agreement											

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

OUTBOARD (52LH) LH023, LH777 - SHIP

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)

	FY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	14	12.0					1	1.6											1	1.7	16	15.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware*	9	2.5	5	1.5					1	0.6									1	0.6	16	5.2
PRIOR YR EQUIP	9	2.5	5	1.5																	14	4.0
FY 96 EQUIP																						
FY 97 EQUIP																						
FY 98 EQUIP									1	0.6											1	0.6
FY 99 EQUIP																						
FY 00 EQUIP																						
FY 01 EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY TC EQUIP																			1	0.6	1	0.6
TOTAL INSTALLATION COST*		2.5		1.5						0.6										0.6		5.2
TOTAL PROCUREMENT COST		14.5		1.5				1.6		0.6										2.3		20.5

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MONTHS

PROCUREMENT LEADTIME: 12 MONTHS

CONTRACT DATES:

FY 1996:

FY 1997:

FY 1998: Jan-98

FY 1999:

DELIVERY DATES:

FY 1996:

FY 1997:

FY 1998: VAR

FY 1999:

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99									
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT	9			2	3																	
OUTPUT	9			2	3																	

INSTALLATION SCHEDULE:

PY	FY 00				FY 01				FY 02				FY 03				TC	TOTAL					
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4							
INPUT																					1	16	
OUTPUT																						1	16

* Quantities Shown Reflect Ships

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

COBLU (52LH) LH027, LH777 - SHIP
 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)

	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment							2	12.8	2	12.5	3	19.1	3	19.6	3	20.0	5	34.5	18	118.5	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware*									2	1.1	2	1.1	3	1.8	3	1.8	8	4.8	18	10.6	
PRIOR YR EQUIP																					
FY 96 EQUIP																					
FY 97 EQUIP																					
FY 98 EQUIP																					
FY 99 EQUIP								2	1.1											2	1.1
FY 00 EQUIP										2	1.1									2	1.1
FY 01 EQUIP													3	1.8						3	1.8
FY 02 EQUIP															3	1.8				3	1.8
FY 03 EQUIP																	3	1.9		3	1.9
FY TC EQUIP																	5	2.9		5	2.9
TOTAL INSTALLATION COST*										1.1	1.1		1.8		1.8				4.8		10.6
TOTAL PROCUREMENT COST								12.8		13.6		20.2		21.4		21.8			39.3		129.1

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MONTHS PROCUREMENT LEADTIME: 12 MONTHS

CONTRACT DATES: FY 1996: FY 1997: FY 1998: FY 1999: Nov-98

DELIVERY DATES: FY 1996: FY 1997: FY 1998: FY 1999: Various

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:	FY 00				FY 01				FY 02				FY 03				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		1	1			1	1			2	1			1	2		8	18
OUTPUT		1	1			1	1			2	1			1	2		8	18

* Quantities Shown Reflect Ships

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

COBLU (52LH) LH027, LH776 - SHORE
 The COBLU Phase 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)

	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment								1	6.4	1	6.3	1	6.4	1	6.5	1	6.6	1	6.7	6	38.9
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware*									1	0.6	1	0.6	1	0.6	1	0.6	2	1.4	6	3.8	
PRIOR YR EQUIP																					
FY 96 EQUIP																					
FY 97 EQUIP																					
FY 98 EQUIP																					
FY 99 EQUIP								1	0.6											1	0.6
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					2	1.4
FY TC EQUIP																				2	1.4
TOTAL INSTALLATION COST*										0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.4	1.4			3.8
TOTAL PROCUREMENT COST								6.1	6.9	7.0	7.1	7.2	8.1								42.7

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MONTHS PROCUREMENT LEADTIME: 8 MONTHS

CONTRACT DATES: FY 1996: FY 1997: FY 1998: FY 1999: Nov-98

DELIVERY DATES: FY 1996: FY 1997: FY 1998: FY 1999: Various

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:	FY 00				FY 01				FY 02				FY 03				TC	TOTAL			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT		1				1					1					1				2	6
OUTPUT		1				1					1					1				2	6

* Quantities Shown Reflect Ships

BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997																													
APPROPRIATION/BUDGET ACTIVITY OP,N-BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE Battle Group Passive Horizon Extension System 52XU																															
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																											
QUANTITY																																			
COST (in millions)		\$38.1	\$50.2	\$76.1	\$78.4	\$51.1	\$35.8	\$34.1																											
<p>NARRATIVE DESCRIPTION/JUSTIFICATION: (U) The Battle Group Passive Horizon Extension System (BGPHEs AN/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 (BGPHEs-ST). The primary sensor carrying aircraft is the ES-3A; additionally, BGPHEs will be interoperable with USAF Direction Finding/Communication Intelligence (DF/COMINT), and can be expanded to provide Electronic Intelligence (ELINT) coverage.</p> <p>(U) 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>(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 and tactical reconnaissance programs. It is designed to communicate with the BGPHEs, the Joint Services Imagery Processing System-Navy (JSIPS-N), and their associated airboard sensor systems. 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.</p> <p>(U) FY 1997-99 procures 14 BGPHEs-ST systems, 13 CHBDL-ST systems, 2 CHBDL EDM upgrades and associated production support and production engineering required to integrate BGPHEs on LCC/AGF class ships.</p> <p>(U) Installation Agent(s): Installations are accomplished by formal shipalt by alteration installation team (AIT).</p> <p>Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p> <p style="text-align: center;">MODIFICATION SUMMARY</p> <p>Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:</p> <table border="1"> <thead> <tr> <th><u>EQUIPMENT</u></th> <th><u>FY96</u></th> <th><u>FY97</u></th> <th><u>FY98</u></th> <th><u>FY99</u></th> <th><u>FY00</u></th> <th><u>FY01</u></th> <th><u>FY02</u></th> <th><u>FY03</u></th> </tr> </thead> <tbody> <tr> <td>BGPHEs-ST</td> <td></td> <td>\$4.3</td> <td>\$9.4</td> <td>\$9.7</td> <td>\$11.3</td> <td>\$9.7</td> <td>\$5.8</td> <td>\$4.3</td> </tr> <tr> <td>CHBDL</td> <td></td> <td>\$25.5</td> <td>\$33.7</td> <td>\$56.9</td> <td>\$59.2</td> <td>\$31.7</td> <td>\$21.5</td> <td>\$11.0</td> </tr> </tbody> </table>									<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	BGPHEs-ST		\$4.3	\$9.4	\$9.7	\$11.3	\$9.7	\$5.8	\$4.3	CHBDL		\$25.5	\$33.7	\$56.9	\$59.2	\$31.7	\$21.5	\$11.0
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>																											
BGPHEs-ST		\$4.3	\$9.4	\$9.7	\$11.3	\$9.7	\$5.8	\$4.3																											
CHBDL		\$25.5	\$33.7	\$56.9	\$59.2	\$31.7	\$21.5	\$11.0																											

**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE Battle Group Passive Horizon Extension System 52XU 243400					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
XU001	BGPHERS-ST	A			3	4,300	6	7,344	5	6,242
XU003	CHBDL-ST	B			3	25,500	4	30,000	6	45,900
XU004	EDM UPGRADE CHBDL-ST	B			2	3,714				
XU005	PRODUCTION SUPPORT	A				2,658		4,288		4,741
XU006	PRODUCTION ENGINEERING	A								2,500
XU007	ECP UPGRADES	A								1,244
XU008	TEST EQUIPMENT	A			VAR	1,903	VAR	1,935		
XU009	DUAL BAND BACKFIT KITS	B							2	6,000
XU776	INSTALLATION NON-FMP	A								572
XU777	INSTALLATION FMP	A						6,654		8,918
	INSTALL Design Service Agent							5,814 840		7,907 1,011
	TOTAL PROGRAM					38,075		50,221		76,117

#REF!
CLASSIFICATION

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE		
										February 1997		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
#REF!						Battle Group Passive Horizon Extension System 52XU						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
XU001	BGPHE-S-ST	97	VARIOUS*	VARIOUS*	NISE EAST/ NMSO	Dec-96	Dec-97	3	\$1,433,333**	YES	NO	N/A
		98	VARIOUS*	VARIOUS*	NISE EAST/ NMSO	Dec-97	Dec-98	6	\$1,224,000	YES	NO	N/A
		99	VARIOUS*	VARIOUS*	NISE EAST/ NMSO	Dec-98	Dec-99	5	\$1,248,400	YES	NO	N/A
XU003	CHBDL-ST	97	LORAL	OPTION	SPAWAR	Jan-97	Feb-98	3	\$8,500,000**	YES	NO	N/A
		98	LORAL	OPTION	SPAWAR	Nov-97	Feb-99	4	\$7,500,000	YES	NO	N/A
		99	TBD	COMP	SPAWAR	Nov-98	Feb-00	6	\$7,650,000	YES	NO	N/A
XU007	DUAL BAND BACKFIT KIT	99	LORAL	OPTION	SPAWAR	Nov-98	Oct-99	2	\$3,000,000	YES	NO	N/A

D. REMARKS

* Hardware to be procured from various contract sources through NISE EAST.

**Unit cost include non-recurring engineering.

MODIFICATION TITLE: Battle Group Passive Horizon Extension System Surface Terminal (BGPHEs-ST) (XU001/XU776) - Shore

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION:

The BGPHEs-ST program 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 TACINTEL or directly to the host ship's C4I network.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	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													2	2.4
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware*									2	0.6											2	0.6
PRIOR YR EQUIP																						
FY 96 EQUIP																						
FY 97 EQUIP																						
FY 98 EQUIP									2	0.6											2	0.6
FY 99 EQUIP																						
FY 00 EQUIP																						
FY 01 EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST*										0.6												0.6
TOTAL PROCUREMENT COST							2.4		0.6													3.0

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2

PROCUREMENT LEADTIME: 12

CONTRACT DATES:

FY 1996:

FY 1997:

FY 1998:

Dec-97

FY 1999:

DELIVERY DATES:

FY 1996:

FY 1997:

FY 1998:

Various

FY 1999:

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99									
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT																						
OUTPUT																					1	1

INSTALLATION SCHEDULE:

PY	FY 00				FY 01				FY 02				FY 03				TOTAL					
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT																						2
OUTPUT																						2

* Quantities Shown Reflect Ships

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

Common High Bandwith Data Link (Surface Terminal) (CHBDL-ST) (XU003/XU777) - Ship
 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 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment *					3	25.5	4	30.0	6	45.9	6	46.8	3	23.9	2	16.2	1	8.3			25	196.6
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*							3	3.7	4	5.0	5	6.4	6	7.8	4	5.3	2	2.7	1	1.4	25	32.3
PRIOR YR EQUIP																						
FY 96 EQUIP							3	3.7													3	3.7
FY 97 EQUIP									4	5.0											4	5.0
FY 98 EQUIP										5	6.4										6	7.7
FY 99 EQUIP											5	6.4	1	1.3							6	7.8
FY 00 EQUIP												5	6.5		1	1.3					3	4.0
FY 01 EQUIP															3	4.0					2	2.7
FY 02 EQUIP																	2	2.7			1	1.4
FY 03 EQUIP																			1	1.4	1	1.4
FY TC EQUIP																						
TOTAL INSTALLATION COST*							3.7		5.0		6.4		7.8		5.3		2.7		1.4			32.3
TOTAL PROCUREMENT COST							25.5		33.7		50.9		53.2		31.7		21.5		11.0		1.4	228.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 15

CONTRACT DATES: FY 1996: FY 1997: Jan-97 FY 1998: Nov-97 FY 1999: Nov-98

DELIVERY DATES: FY 1996: FY 1997: Feb-98 FY 1998: Feb-99 FY 1999: Feb-00

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT													1	2		
OUTPUT													1	2		

INSTALLATION SCHEDULE:

	FY 00				FY 01				FY 02				FY 03				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		2	1	2	1	2	1	2	1	1	1	1		1	1		1	25
OUTPUT		2	1	2	1	2	1	2	1	1	1	1		1	1		1	25

* Quantities Shown Reflect Ships

MODIFICATION TITLE: Dual Band Backfit (XU006/XU777)
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

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

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment *									2	6.0		1	3.0								3	9.0
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*												3	3.0								3	3.0
PRIOR YR EQUIP																						
FY 96 EQUIP																						
FY 97 EQUIP																						
FY 98 EQUIP																						
FY 99 EQUIP											2	2.0									2	2.0
FY 00 EQUIP											1	1.0									1	1.0
FY 01 EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST*												3.0										3.0
TOTAL PROCUREMENT COST										6.0		6.0										12.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 11

CONTRACT DATES: FY 1996: FY 1997: FY 1998: FY 1999: Nov-98

DELIVERY DATES: FY 1996: FY 1997: FY 1998: FY 1999: Oct-99

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99								
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT																						
OUTPUT																						

INSTALLATION SCHEDULE:	FY 00				FY 01				FY 02				FY 03				TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	1	1		1													3
OUTPUT	1	1		1													3

* Quantities Shown Reflect Ships

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES	A. DATE February 1997
--	--------------------------

B. APPROPRIATION/BUDGET ACTIVITY OP,N BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	C. P-1 ITEM NOMENCLATURE BATTLE GROUP PASSIVE HORIZON EXTENSION SYSTEMS
--	---

ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 97 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE
XU001 BGPHEs-ST	28			3	6	5	14	Outyear Funded
XU003 CHBDL-ST	25			3	4	6	12	Outyear Funded
XU004 EDM UPGRADE-CHBDL	2			2				
XU006 DUAL BAND BACKFIT	3					2	1	Outyear Funded

MEMO ENTERED

ITEM #1	XU001	BGPHEs-ST	hull/location	qty	ITEM #2	XU003/004	CHBDL-ST	hull/location	qty	ITEM #3	XU006	DUAL BAND BACKFIT	hull/location	qty
SHIP		SHORE			SHIP		SHORE			SHIP				
CV/CVN CLAS	11	SSA (E-Syst.)		1	CV/CVN CLAS	11*	SSA (Loral)		1*	CV/CVN CLAS	2			
LHA CLASS	5	ISEA NISE-E		1	LHA CLASS	5				LHA CLASS	1			
LHD CLASS	6				LHD CLASS	6								
AGF CLASS	2				AGF CLASS	2								
LCC CLASS	2				LCC CLASS	2								
TOTAL I/O					*Each includes 1 EDM upgrad					TOTAL I/O				
28					27					3				

ITEM #4	hull/location	qty	hull/location	qty	ITEM #5	hull/location	qty	hull/location	qty	ITEM #6	hull/location	qty	hull/location	qty
TOTAL I/O					TOTAL I/O					TOTAL I/O				

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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40	DATE: FEBRUARY 1997
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APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY/BA-2: COMMUNICATION & ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE/SUBHEAD AN/WLQ-4 (V)/82Q4/251600/251605
--	--

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (In Millions)	3.0	\$4.1	\$4.5	\$2.9	\$1.9	\$1.9	\$2.0	\$2.0

DESCRIPTION/JUSTIFICATION:

The AN/WLQ-4(V) is a passive electronic support measure system for SSN 637 and SSN 21 Class submarines. It is used for tactical operations and ship safety. 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 (carry-on suite of gear that augments the AN/WLQ-4 system capabilities for special submarine missions). 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 fixtures, 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:

Q4001 - 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.

Q4002 - Mini-N-Suite - The funds provided in FY-96 thru FY-99 will be used to purchase repair parts and obsolescent parts for the Mini-N-Suite.

Q4003 - AN/WLQ-4(V)1 Trainer - The funds provided in FY-96 thru FY-99 will be used to procure curriculum updates associated with system upgrades and various R&M Mod Kits.

Q4007 - AN/WLQ-4(V)1 Depot Upgrade - The funds provided in FY-96 thru FY-99 will be used to provide various upgrades to system TPS as well as upgrades to Depot Test Support Equipment.

Q4008 - 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 in FY-98 will be used on ship installations.

Q4009 - AN/WLQ-4(V)1 Intermediate Maintenance Activity (IMA) Support

The installation funds provided in FY-96 thru FY-97 are for the installation of the following: (a) FY96--AN/WLQ-4(V)1 trainer and trainer associated equipments. (b) FY97--obsolescence and R&M modification kits to support the CCMs for the AN/WLQ-4(V)/(V)1 Systems. These equipments will be installed and housed at the In Service Engineering Agent (ISEA) which is NRAD (San Diego, California).

P-1 SHOPPING LIST	
ITEM NO.	PAGE NO.
64	1

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**WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5**

DATE:
FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
**OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATION & ELECTRONIC EQUIPMENT**

P-1 ITEM NOMENCLATURE/SUBHEAD
AN/WLQ-4 (V)/82Q4251600/251605

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
Q4001	RELIABILITY MODIFICATION KITS: Reliability & Maint. Mod Kits ERTS/CRTS Upgrades, SSA ADP, & GFE	A		1,523		\$2,375		\$2,220		\$2,090
Q4002	Mini-N-Suite	A		115		119		40		45
Q4003	AN/WLQ-4(V) Trainer	A		143		130		330		373
Q4007	AN/WLQ-4(V)1 Depot Upgrade	A		824		374		290		317
Q4008	AN/WLQ-4(V)1 HPI Kits	A		0	1	709	2	1,499		
Q4009	AN/WLQ-4(V)1 IMA Support	A		105		246		100		105
Q46IN	Non-FMP Installation			285		169		0		0
	GRAND TOTAL			\$2,995	1	\$4,122	2	\$4,479		\$2,930

P-1 SHOPPING LIST	
ITEM NO. 64	PAGE NO. 2

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**BUDGET PROCUREMENT HISTORY AND PLANNING
EXHIBIT P-5A
(\$000)**

**DATE:
February 1997**

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATION & ELECTRONIC EQUIPMENT**

P-1 ITEM NOMENCLATURE/SUBHEAD

AN/WLQ-4 (V)/82Q4/251600/251605

COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
<u>Q4008</u>	<u>HPI FCK</u>										
	<u>FY97</u>	<u>UNKNOWN</u>	<u>WX</u>	<u>NRAD</u>	<u>04/97</u>	<u>10/98</u>	<u>1</u>	<u>\$709.0</u>	<u>YES</u>	<u>YES</u>	
	<u>FY98</u>	<u>UNKNOWN</u>	<u>WX</u>	<u>NRAD</u>	<u>04/98</u>	<u>10/99</u>	<u>2</u>	<u>\$749.5</u>	<u>YES</u>	<u>YES</u>	

REMARKS:

UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																					
AN/WLQ-4 (V)/82Q4																							
MODIFICATION TITLE:		AN/WLQ-4(V)																					
MODELS OF SYSTEM AFFECTED:		AN/WLQ-4(V)1 ESM SYSTEM, Q4001																					
DESCRIPTION/JUSTIFICATION:		Provides Reliability & Modification Kits for the CCM Trainer.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		In Production																					
FINANCIAL PLAN (IN MILLIONS)																							
		FY96																		COMP		TOTAL	
		QTY	& PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	QTY	COST	QTY	COST		
RDT&E																				0	0.000		
PROCUREMENT		1	23.865	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1	23.865		
QUANTITY																				0	0.000		
INSTALLATION KITS																				0	0.000		
INSTALLATION KITS NONRECURRING																				0	0.000		
EQUIPMENT		1	23.865	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1	23.865		
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		
INTERIM CONTRACTOR SUPPORT																				0	0.000		
INSTALLATION OF HARDWARE																							
FY96 EQUIPMENT AND PRIOR *SEE NOTE BELOW		1	1.863	0	0.169																1	2.032	
FY97 EQUIPMENT																				0	0.000		
FY98 EQUIPMENT*																				0	0.000		
FY99 EQUIPMENT*																				0	0.000		
FY0099 EQUIPMENT																				0	0.000		
FY00 EQUIPMENT																				0	0.000		
FY01 EQUIPMENT																				0	0.000		
FY02 EQUIPMENT																				0	0.000		
FY03 EQUIPMENT																				0	0.000		
TO COMPLETE																				0	0.000		
TOTAL INSTALLATION COST		1	1.863	VAR	0.169	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	2.032			
TOTAL PROCUREMENT COST		1	23.865	1	0.000	2	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	23.865		
TOTAL COST		25.728		0.169	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	25.897			
METHOD OF IMPLEMENTATION:		AITS																					
CONTRACT DATE:		PRIOR YEAR: 05/94			ADMINISTRATIVE LEADTIME: 6 MONTHS			PRODUCTION LEADTIME: 18 MONTHS															
PRODUCTION DELIVER DATE:		PRIOR YEAR: 01/95			CURRENT YEAR:			BUDGET YEAR 1:			BUDGET YEAR 2:			04/97									
					CURRENT YEAR:			BUDGET YEAR 1:			BUDGET YEAR 2:			10/98									
INSTALLATION SCHEDULE:																							
INPUT =====>																							
		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03				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				1			
FY96 & PRIOR		0,1,0,0		0,0,0,0																0			
FY97																				0			
FY98																				0			
FY99																				0			
FY00																				0			
FY01																				0			
FY02																				0			
FY03																				0			
OUTPUT =====>																							
		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03				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				1			
FY96 & PRIOR		0,0,1,0		0,0,0,0																0			
FY97																				0			
FY98*																				0			
FY99*																				0			
FY00																				0			
FY01																				0			
FY02																				0			
FY03																				0			

NOTE: FUNDS TO BE PROVIDED FOR COMPONENTS FOR THE CCM TRAINER.
 THE FY-96/97 INSTALLATION FUNDS ARE NOT FOR AN INSTALLATION OF A COMPLETE SYSTEM;
 THEREFORE, 0 IS IDENTIFIED IN FY-97.

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P3A AN/WLQ-4 (V)/82Q4 MODIFICATION TITLE: MODELS OF SYSTEM AFFECTED: DESCRIPTION/JUSTIFICATION:		INDIVIDUAL MODIFICATION																				
AN/WLQ-4(V) AN/WLQ-4(V)1 ESM SYSTEM, Q4008 Provides a High Probability of Intercept for the AN/WLQ-4(V) Submarine ESM System.		In Production																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		FY96																				
FINANCIAL PLAN (IN MILLIONS)		QTY	& PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	COMP QTY	COMP COST	TOTAL QTY	TOTAL COST	
RDT&E																						
PROCUREMENT		0	0.000	1	0.709	2	1.499	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	2.208	
QUANTITY																				0	0.000	
INSTALLATION KITS																				0	0.000	
INSTALLATION KITS NONRECURRING																				0	0.000	
EQUIPMENT		0	0.000	1	0.709	2	1.499	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	2.208	
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	
INTERIM CONTRACTOR SUPPORT																				0	0.000	
INSTALLATION OF HARDWARE																						
FY96 EQUIPMENT AND PRIOR																				0	0.000	
FY97 EQUIPMENT								1	0.000											1	0.000	
FY98 EQUIPMENT*										2	0.000									2	0.000	
FY99 EQUIPMENT*																				0	0.000	
FY0099 EQUIPMENT																				0	0.000	
FY00 EQUIPMENT																				0	0.000	
FY01 EQUIPMENT																				0	0.000	
FY02 EQUIPMENT																				0	0.000	
FY03 EQUIPMENT																				0	0.000	
TO COMPLETE																				0	0.000	
TOTAL INSTALLATION COST								1	0.000	2	0.000									3	0.000	
TOTAL PROCUREMENT COST		1	0.000	1	0.709	2	1.499	0	0.000	0	0.000	0	0.000	0				0.000	0	0.000	0	2.208
TOTAL COST			0.000		0.709		1.499		0.000		0.000		0.000					0.000	0	0.000		2.208
METHOD OF IMPLEMENTATION:		AITs				ADMINISTRATIVE LEADTIME: 6 MONTHS				PRODUCTION LEADTIME: 18 MONTHS												
CONTRACT DATE:		PRIOR YEAR: 05/94		CURRENT YEAR:		BUDGET YEAR 1:		BUDGET YEAR 2:		04/97		BUDGET YEAR 2:		10/98								
PRODUCTION DELIVER DATE:		PRIOR YEAR: 01/95		CURRENT YEAR:		BUDGET YEAR 1:		BUDGET YEAR 2:														
INSTALLATION SCHEDULE:																						
INPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03												TOTAL	
FY96 & 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	1,2,3,4												0	
FY97					0,1,0,0																1	
FY98						0,1,1,0															2	
FY99																					0	
FY00																					0	
FY01																					0	
FY02																					0	
FY03																					0	
OUTPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03												TOTAL	
FY96 & 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	1,2,3,4												0	
FY97					0,1,0,0																1	
FY98*						0,0,0,2															2	
FY99*																					0	
FY00																					0	
FY01																					0	
FY02																					0	
FY03																					0	

NOTE: THE INSTALLATION COST FOR FY-97 AND FY-98 WILL BE CONSIDERED AS A TURN-KEY OPERATION; THEREFORE NO INSTALLATION FUNDS ARE REQUIRED.

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CLASSIFICATION: UNCLASSIFIED

EXHIBIT P-3A

UNCLASSIFIED

**REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES
EXHIBIT P-23B**

**DATE:
February 1997**

APPROPRIATION/BUDGET ACTIVITY
**OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATION & ELECTRONIC EQUIPMENT**

P-1 ITEM NOMENCLATURE
AN/WLQ-4 (V)/82Q4/251600/251605

COST CODE	ITEM	TOTAL INVENTORY OBJECTIVE / REQUIREMENT	QUANTITY ON HAND AND NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY97 PROGRAM FUNDS	PLANNED BUDGET YEAR PROC FY-98	PLANNED BUDGET YEAR PROC FY-99	BALANCE	PHASING RATIONALE
Q4008	HPI FCK	3	0	0	0	1	2	0	0	

MEMO ENTRIES

<p>COST CODE: Q4008-HPI FCK</p> <p>SHIP INST. 2 CCM 1</p> <p>TOTAL 3</p>		
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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY/BA-2: COMMUNICATION & ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE SUPPORT EQUIPMENT PROGRAM/82ML/256000/005			
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (In Millions)	\$4.4	\$5.3	\$6.9	\$4.0	\$16.6	\$21.0	\$27.6	\$27.4

(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 special submarine missions and 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 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.

- 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.
- 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.
- C. ML005 - Procures AN/BRD-7 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..
- D. ML010 - Procures WLR-8 Field Change Kits to replace obsolete displays.
- E. ML011 - Procures AN/WLR-8 R&M Field Change Kits.
- F. ML013 - Procures special purpose test equipment to aid in testing and troubleshooting ESM Systems at the Submarine IMAs.

P-1 SHOPPING LIST	
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BUDGET ITEM JUSTIFICATION SHEET
EXHIBIT P-40

DATE:
FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATION & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
SUBMARINE SUPPORT EQUIPMENT
PROGRAM/82ML/256000/005

- G. ML014 - Provides for the refurbishment of the AN/WLR-8 Systems for backfit on SSN 688 Submarines.
- H. ML015 - Procures SSN ESM Backfit System Improvements in FY2000/1.
- I. ML016 - Procures HPI Reliability and Maintainability Field Change Kits and Field Change Kits to replace obsolete materials.
- J. ML5IN - Provides for the Installation of Equipment including Fleet Modernization Program Installations, Installations of Training Equipment and Installation of Equipment in Other Shore Facilities. Installations will be performed by AITs.
- K. MLDSA - The budget reflects the transfer of design services into the appropriate equipment P1 line item beginning in FY 1998.

P-1 SHOPPING LIST	
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UNCLASSIFIED

**WEAPON SYSTEM COST ANALYSIS
EXHIBIT P-5**

**DATE:
FEBRUARY 1997**

**APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATION & ELECTRONIC EQUIPMENT**

**P-1 ITEM NOMENCLATURE/SUBHEAD
SUBMARINE SUPPORT EQUIPMENT
PROGRAM/82ML/256000/005**

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	(SUBMARINE WARFARE - N87)									
ML002	EHF EXTENTION FCK	A	2	721		0		0		0
ML003	SSEP SPECIAL SUPPORT EQUIPMENT	A		260		253		263		269
ML005	AN/BRD-7 FCK'S	A	5	296	17	921		509		919
ML010	AN/WLR-8 DISPLAY OBSOLESCENCE	A		0	27	844	31	780		0
ML011	AN/WLR-8 R&M FCKS	A		0		0		593		526
ML013	ESM IMA SUPPORT	A		29		205		161		164
ML014	AN/WLR-8 REFURB.	A	3	1,265	3	1,295		0		0
ML5IN	INSTAL. OF EQUIP. (FMP)			1,788		1,789		3,645		1,680
MLDSA	DSA INSTAL. FUNDING*							953		427
	TOTAL			\$4,359		\$5,307		\$6,904		\$3,985
	*The budget reflects the transfer of design services into the appropriate equipment P1 line item beginning in FY 1998.									

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A (\$000)										DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY/BA-2: COMMUNICATION & ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE SUPPORT EQUIPMENT PROGRAM/82ML256000/005					
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
ML002	<u>EHF EXT FCK</u>										
	FY96	S T RESEARCH NEWINGTON, VIRGINIA	WX	NRAD	06/96	08/97	2	\$360.5	YES	NO	
ML005	<u>AN/BRD-7 FCK</u>										
	FY96	A&T SAN DIEGO, CA.	WX	NRAD	06/96	01/97	5	\$59.2	YES	NO	
	FY97	A&T SAN DIEGO, CA.	WX	NRAD	4/97	01/98	17	\$54.2	YES	NO	
ML010	<u>AN/WLR-8 DISPLAY</u>										
	FY97	A&T SAN DIEGO, CA.	WX	NRAD	04/97	04/98	27	\$31.3	YES	NO	
	FY98	UNKNOWN	WX	NRAD	04/98	04/99	31	\$25.2	YES	NO	
ML014	<u>AN/WLR-8 REFURB.</u>										
	FY96	NRAD	WX	NRAD	04/96	7/96	3	\$421.7	YES	NO	
	FY97	NRAD	WX	NRAD	01/97	08/97	3	\$431.7	YES	NO	
REMARKS:											

UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																				
SUBMARINE SUPPORT EQUIPMENT PROGRAM/82ML																						
MODIFICATION TITLE:		SUBMARINE SUPPORT EQUIPMENT PROGRAM, 3893K/256000/005																				
MODELS OF SYSTEM AFFECTED:		AN/WLR-8 HPI FCK, ML001/SHF																				
DESCRIPTION/JUSTIFICATION:		Provides intercept, surveillance, and signal parameter analysis.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		In Production																				
FINANCIAL PLAN (IN MILLIONS)		QTY	FY96 & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	COMP QTY	COMP COST	TOTAL QTY	TOTAL COST	
RD&E																					0	0.000
PROCUREMENT		60	30.604	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	60	30.604	
QUANTITY																					0	0.000
INSTALLATION KITS																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT*		45	23.850																		45	23.850
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT**		3	1.390																		3	1.390
SUPPORT EQUIPMENT**		6	2.756																		6	2.756
OTHER (Procured under subhead 82LA)		6	2.608																		6	2.608
INTERIM CONTRACTOR SUPPORT																					0	0.000

INSTALLATION OF HARDWARE

FY96 EQUIPMENT AND PRIOR*	20	3.073	8	1.205	16	2.505	7	1.123												51	7.906		
FY97 EQUIPMENT																				0	0.000		
FY98 EQUIPMENT																				0	0.000		
FY99 EQUIPMENT																				0	0.000		
FY00 EQUIPMENT																				0	0.000		
FY01 EQUIPMENT																				0	0.000		
FY02 EQUIPMENT																				0	0.000		
FY03 EQUIPMENT																				0	0.000		
TO COMPLETE																				0	0.000		
TOTAL INSTALLATION COST	20	3.073	8	1.205	16	2.505	7	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	51	6.783			
TOTAL PROCUREMENT COST	60	30.604	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	60	30.604			
TOTAL COST		33.677	1.205	2.505																0.000	0.000	60	37.387

METHOD OF IMPLEMENTATION: AITs ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 18 MONTHS

CONTRACT DATE: PRIOR YEAR: 04/95 CURRENT YEAR: 04/96 BUDGET YEAR 1: 04/97 BUDGET YEAR 2: 04/98

PRODUCTION DELIVER DATE: PRIOR YEAR: 10/96 CURRENT YEAR: 10/97 BUDGET YEAR 1: 10/98 BUDGET YEAR 2: 10/99

INSTALLATION SCHEDULE:

INPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL	
FY96 & 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	1,2,3,4	1,2,3,4	51	
FY97	2,2,8,8	1,2,2,3	3,4,4,5	1,2,2,2							
FY98											
FY99											
FY00											
FY01											
FY02											
FY03											
OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL	
FY96 & 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	1,2,3,4	1,2,3,4	51	
FY-97	2,2,8,8	1,2,2,3	3,4,4,5	1,2,2,2							
FY98											
FY99											
FY00											
FY01											
FY02											
FY03											

* 13 (FY98), 7 (FY99), ARE SHF FCK'S THAT WERE DIVERTED FROM TRIDENT TO NON-VLS 688 CLASS SUBS.

** INSTALL FUNDING NOT REQUIRED FOR TRAINING AND SUPPORT EQUIPMENT.

P3A		INDIVIDUAL MODIFICATION																						
SUBMARINE SUPPORT EQUIPMENT PROGRAM/82ML																								
MODIFICATION TITLE:		SUBMARINE SUPPORT PROGRAM, 3893K/256000/005																						
MODELS OF SYSTEM AFFECTED:		AN/WLR-8 HPI FCK, ML002/EHF																						
DESCRIPTION/JUSTIFICATION:		Provides intercept, surveillance, and signal parameter analysis.																						
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		In Production																						
FINANCIAL PLAN (IN MILLIONS)		QTY	FY96 & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	COMP QTY	COMP COST	TOTAL QTY	TOTAL COST			
RDT&E																					0	0.000		
PROCUREMENT		57	19.381	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	57	19.381			
QUANTITY																					0	0.000		
INSTALLATION KITS																					0	0.000		
INSTALLATION KITS NONRECURRING																					0	0.000		
EQUIPMENT		45	16.311																		45	16.311		
EQUIPMENT NONRECURRING																					0	0.000		
ENGINEERING CHANGE ORDERS																					0	0.000		
DATA																					0	0.000		
TRAINING EQUIPMENT**		3	0.800																		3	0.800		
SUPPORT EQUIPMENT**		3	0.760																		3	0.760		
OTHER (Procured under subhead 82LA)		6	1.510																		6	1.510		
INTERIM CONTRACTOR SUPPORT																					0	0.000		
INSTALLATION OF HARDWARE																								
FY96 EQUIPMENT AND PRIOR*		20	1.583	8	0.621	16	1.296	7	0.580												51	4.080		
FY97 EQUIPMENT																					0	0.000		
FY98 EQUIPMENT																					0	0.000		
FY99 EQUIPMENT																					0	0.000		
FY00 EQUIPMENT																					0	0.000		
FY01 EQUIPMENT																					0	0.000		
FY02 EQUIPMENT																					0	0.000		
FY03 EQUIPMENT																					0	0.000		
TO COMPLETE																					0	0.000		
TOTAL INSTALLATION COST		20	1.583	8	0.621	16	1.296	7	0.580	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	51	4.080			
TOTAL PROCUREMENT COST		57	19.381	0.000		0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	57	19.381			
TOTAL COST		20.964		0.621	0	1.296	0.580														0.000	0.000	57	23.461
METHOD OF IMPLEMENTATION:		AIts		ADMINISTRATIVE LEADTIME: 6 MONTHS				PRODUCTION LEADTIME: 18 MONTHS																
CONTRACT DATE:		PRIOR YEAR: 04/95		CURRENT YEAR: 04/96		BUDGET YEAR 1: 04/97		BUDGET YEAR 2: 04/98																
PRODUCTION DELIVER DATE:		PRIOR YEAR: 10/96		CURRENT YEAR: 10/97		BUDGET YEAR 1: 10/98		BUDGET YEAR 2: 10/99																
INSTALLATION SCHEDULE:																								
INPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	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	1,2,3,4	1,2,3,4											51		
FY96 & PRIOR		2,2,8,8	1,2,2,3	3,4,4,5	0,2,3,2																			
FY97																								
FY98																								
FY99																								
FY00																								
FY01																								
FY02																								
FY03																								
OUTPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	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	1,2,3,4	1,2,3,4											51		
FY96 & PRIOR		2,2,8,8	1,2,2,3	3,4,4,5	0,2,3,2																			
FY97																								
FY98																								
FY99																								
FY00																								
FY01																								
FY02																								
FY03																								

* 13 (FY98), AND 7 (FY99), ARE EHK FOK'S THAT WERE DIVERTED FROM TRIDENT TO NON-VLS 688 CLASS SUBS.
 ** INSTALL FUNDING NOT REQUIRED FOR TRAINING AND SUPPORT EQUIPMENT.

P3A INDIVIDUAL MODIFICATION
 SUBMARINE SUPPORT EQUIPMENT PROGRAM/82ML
 MODIFICATION TITLE: SUBMARINE SUPPORT PROGRAM/256000/005
 MODELS OF SYSTEM AFFECTED: SSN ESM BACKFIT SYSTEM IMPROVEMENTS
 DESCRIPTION/JUSTIFICATION: PROVIDES INTERCEPT, SURVEILLANCE, AND SIGNAL PARAMETER ANALYSIS IN ORDER TO RESOLVE OBSOLESCENT EQUIPMENT PROBLEMS
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	QTY	FY96 & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	COMP QTY	COMP COST	TOTAL QTY	TOTAL COST							
FINANCIAL PLAN (IN MILLIONS)																											
RDTE																				0.000							
PROCUREMENT								5		14.543		7		17.947		8		21.509		8	21.454	3	7.800	31	83.253		
QUANTITY																									0	0.000	
INSTALLATION KITS																									0	0.000	
INSTALLATION KITS NONRECURRING																									0	0.000	
EQUIPMENT									4	11.635		6		15.383		8		21.509		6	16.090		0	0.000	24	64.617	
EQUIPMENT NONRECURRING																									0	0.000	
ENGINEERING CHANGE ORDERS																									0	0.000	
DATA																									0	0.000	
TRAINING EQUIPMENT**								1		2.908		1		2.564			1		2.682		0	0.000			3	8.154	
SUPPORT EQUIPMENT**																	1		2.682		3	7.800			4	8.800	
OTHER																									0	0.000	
INTERIM CONTRACTOR SUPPORT																									0	0.000	
INSTALLATION OF HARDWARE																											
FY96 EQUIPMENT AND PRIOR*																									0	0.000	
FY97 EQUIPMENT																										0	0.000
FY98 EQUIPMENT																										0	0.000
FY99 EQUIPMENT																										0	0.000
FY00 EQUIPMENT											1	0.742	3	1.190												4	1.932
FY01 EQUIPMENT													3	1.189		3	0.891									6	2.080
FY02 EQUIPMENT															5	1.484		3	0.900							8	2.384
FY03 EQUIPMENT																	6	1.800								6	1.800
TO COMPLETE																										0	0.000
TOTAL INSTALLATION COST	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1	0.742	6	2.379	8	2.375	9	2.700							24	8.196	
TOTAL PROCUREMENT COST		0.000		0.000	0	0.000	0	0.000	5	14.543	7	17.947	8	21.509	8	21.454	3	7.800							31	48.290	
TOTAL COST		0.000		0.000		0.000		0.000		14.543		18.689		23.888		23.829		10.500									43.732

METHOD OF IMPLEMENTATION: AITs ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 18 MONTHS
 CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:
 PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR 1: BUDGET YEAR 2:

INSTALLATION SCHEDULE:	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
INPUT =====>	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	1,2,3,4	TOTAL
FY96 & PRIOR										
FY97										
FY98										
FY99										
FY00						0,0,1,0	2,1,0,0			4
FY01							0,0,1,2	2,1,0,0		6
FY02								0,1,2,2	2,1,0,0	8
FY03									0,2,2,2	6
TO COMPLETE										
OUTPUT =====>	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	1,2,3,4	24
FY96 & PRIOR										
FY97										
FY98										
FY99										
FY00						0,0,1,0	2,1,0,0			4
FY01							0,0,1,2	2,1,0,0		6
FY02								0,0,2,3	2,1,0,0	8
FY03									2,2,1,1	6
TO COMPLETE										24

** INSTALL FUNDING NOT REQUIRED FOR TRAINING AND SUPPORT EQUIPMENT.

UNCLASSIFIED

**REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES
EXHIBIT P-23B**

DATE:

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

**OTHER PROCUREMENT NAVY/BA-2:
COMMUNICATION & ELECTRONIC EQUIPMENT**

P-1 ITEM NOMENCLATURE

**SUBMARINE SUPPORT EQUIPMENT
PROGRAM/82ML/256000/005**

COST CODE	ITEM	TOTAL INVENTORY OBJECTIVE / REQUIREMENT	QUANTITY ON HAND AND NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY97 PROGRAM FUNDS	PLANNED BUDGET YEAR PROC FY-98	PLANNED BUDGET YEAR PROC FY-99	BALANCE	PHASING RATIONALE
ML002	EHF EXT. FCK	30	0	0	30	0	0	0	0	
ML005	AN/BRD-7 FCK	211	0	0	194	17	0	0	0	
ML010	AN/WLR-8 DIS	58	0	0	0	27	31	0	0	
ML014	AN/WLR-8 REF	6	0	0	3	3	0	0	0	
ML015	SSN BFT ESM SY. IMPR.	31	0	0	0	0	0	0	31	

MEMO ENTRIES

COST CODE:					
ML002-EHF EX FCKS		ML005-AN/BRD-7 FCKS		ML010-AN/WLR-8 DISPLAY	
SHIP INSTALLS	25	SHIP INSTALLS	168	SHIP INSTALLS	50
SUBSCOL NLON	3	TRAINERS	18	SUBSCOL NLON	2
CCM NISE WEST	1	SWING SETS	12	NSTC PEARL HARBOR	1
SWING SETS	1	INTERIM SPARES	8	CCM	1
TOTAL	30	CCM	5	SWING SETS	4
		TOTAL	211	TOTAL	58
ML014-AN/WLR-8 REFURB.		ML015-SSN BACKFIT ESM SYS. IMPROVEMENTS			
SHIP INSTALLS	6	SHIP INSTALLS	24		
		TRAINERS	3		
		SWING SETS	3		
TOTAL	6	CCM	1		
		TOTAL	31		

P-1 SHOPPING LIST	
ITEM NO.	PAGE NO.
65	8

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET

DATE: February 1997

P-40

APPROPRIATION/BUDGET ACTIVITY

OP,N/2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT

P-1 ITEM NOMENCLATURE

ADVANCED COMBAT DIRECTION SYSTEM (ACDS) (12LU)-2605

QUANTITY	1996	1997	1998	1999	2000	2001	2002	2003
COST								
(In Millions)	\$12.1	\$29.5	\$14.3	\$6.2	\$13.4	\$6.3	\$6.3	\$6.5

The P-1 Item Nomenclature has been changed from Navy Tactical Data System (NTDS)

The Advanced Combat Direction System provides a general purpose combat direction system (CDS) in major warships, which permits rapid integration of ship sensor information, analysis and Subsystems. Data Processing and Data Display Subsystems are assigned to the Program Executive Office, Theater Air Defense 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.

FY 96-99 funds are for:

(LU047) Ruggedized Non-Developmental Item (NDI)/Commercial-Off-The-Shelf (COTS) display/computer/peripheral support equipment, and switching equipment, for CV/CVN Class ships to replace and augment specific ACDS equipment for major combat direction system warfighting improvements and integration with Link 16 (Model 5 C2P/JTIDS), Cooperative Engagement Capability (CEC), Joint Maritime Command Information System (JMCIS) and other combat system elements.

(LU059) Ruggedized NDI/COTS display/computer/peripheral support equipment, and switching equipment, for LHD-1 Class ships to replace and augment specific ACDS equipment for major replace and augment specific ACDS equipment for major combat direction system warfighting improvements and integration with Link 16 (Model 5 C2P/JTIDS), Cooperative Engagement Capability (CEC), Joint Maritime Command Information System (JMCIS) and other combat system elements.

(LU005) Field changes and ORDALTs for ACDS/NTDS ships and shore sites;

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;

(LU056) Initial Training - Funding is for procurement of training documentation and technical services for conduct of operator and technician training prior to establishment of organic training.

(LU061) Shore Site Emulation Equipment - Funding is for the procurement of emulator systems/equipment and for upgrade of existing emulator systems/equipment for shore sites. (FY 96 and FY97 only).

(LU830) Production Engineering - Funding is for technical services and documentation for the procurement of ACDS equipment, field changes and ORDALTs.

(LU900) Consulting Services - Funding is for specialized contractor engineering and technical support supplementing the government's capabilities for acquisition, production, integration and test of ACDS/NTDS equipment/field changes, and computer programs and documentation. Contractor support includes system engineering/specifications, production engineering, production and test of computer program modifications, system documentation, configuration management and integrated logistics support.

(LU5IN/LU6IN) Equipment Installation - Funding is for installation of equipment including Fleet Modernization Program (FMP) installation, installation of training equipment, and installation of equipment in other shore facilities.

(LUDSA) Design Services - The budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY98 and out.

DD FORM 2454, JUN 86

BUDGET PROCUREMENT HISTORY AND PLANNING

DATE: February 1997

P-5A

APPROPRIATION/BUDGET ACTIVITY OP,N/2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT				P-1 ITEM NOMENCLATURE ADVANCED COMBAT DIRECTION SYSTEM (ACDS)						SUBHEAD 12LU		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE	
LU047	<u>CV/CVN ACDS</u>											
	<u>Command Table Set (N1)</u>											
		Command Table	1998	NRaD San Diego, CA (N3)	(N3)	NRaD	1/98	10/98	2	274	YES	NO
		CLSD	1998	Hewlett-Packard Co. Rockville, MD	C/FP	NISMC	1/98	10/98	4	37	YES	NO
		Command Table	1999	NRaD San Diego, CA (N3)	(N3)	NRaD	1/99	10/99	2	279	YES	NO
		CLSD	1999	To Be Determined	C/FP	NISMC	1/99	10/99	4	38	YES	NO
	<u>Data Management Processor Set (N2)</u>											
		DMP	1998	NRaD San Diego, CA (N3)	(N3)	NRaD	1/98	10/98	2	128	YES	NO
		MK 70 Swbd Mod	1998	Vitro Corporation Silver Spring, MD	SS/FP	NAVSEA	1/98	10/98	2	(N4) 31	YES	NO
		DMP	1999	NRaD San Diego, CA (N3)	(N3)	NRaD	1/99	10/99	3	130	YES	NO
	MK 70 Swbd Mod	1999	Vitro Corporation Silver Spring, MD	SS/FP	NAVSEA	1/99	10/99	3	26	YES	NO	

NOTES:
 (1) Command Table Set for CV/CVN Class ships is 1 Command Table and 2 Color Large Screen Displays (CLSD). Shore site equipment quantities may vary.
 (2) Data Management Processor Set for CV/CVN Class ships is 1 Data Management Processor (DMP) unit and 1 MK 70 Switchboard Modification kit. Shore site equipment quantities may vary.
 (3) Command Table and Data Management Processor assembled by Navy Activity (NRaD San Diego) using ruggedized cabinets and NDI/COTS components.
 (4) P-5 Exhibit includes \$41K nonrecurring cost for design and documentation for lead ship with MK 70 Mod 15 Swbd configuration.

BUDGET PROCUREMENT HISTORY AND PLANNING										DATE: February 1997	
P-5A											
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE						SUBHEAD	
OP,N/2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT				ADVANCED COMBAT DIRECTION SYSTEM (ACDS)						12LU	
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
LU059	LHA/LHD ACDS										
	Command Table Set (LHD) (N1)										
	Command Table	1997	NRaD San Diego, CA (N4)	(N4)	NRaD	3/97	12/97	1	268	YES	NO
	CLSD	1997	Hewlett-Packard Co. Rockville, MD	C/FP	NISMC	3/97	12/97	2	37	YES	NO
	Command Table	1999	NRaD San Diego, CA (N4)	(N4)	NRaD	1/99	10/99	2	279	YES	NO
	CLSD	1999	To Be Determined	C/FP	NISMC	1/99	10/99	4	38	YES	NO
	Data Management Processor Set (LHD) (N2)										
	DMP	1997	NRaD San Diego, CA (N4)	(N4)	NRaD	3/97	12/97	2	125	YES	NO
	MK 70 Swbd Mod	1997	Vitro Corporation Silver Spring, MD	SS/FP	NAVSEA	3/97	12/97	1	44	YES	NO
	DMP	1999	NRaD San Diego, CA (N4)	(N4)	NRaD	1/99	10/99	2	130	YES	NO
	MK 70 Swbd Mod	1999	Vitro Corporation Silver Spring, MD	SS/FP	NAVSEA	1/99	10/99	2	(N5) 46	YES	NO
	Open System Module Set (LHD) (N3)										
	OSM	1999	Lockheed Martin Tactical Defense Systems (N6) St. Paul, MN	SS/FP	NAVSEA	1/99	10/99	2	125	YES	NO

NOTES:

- (1) Command Table Set for LHD Class ships is 1 Command Table and 2 Color Large Screen Displays (CLSD). Shore site equipment quantities may vary.
- (2) Data Management Processor Set for LHD Class ships is 1 Data Management Processor (DMP) unit and 1 MK 70 Switchboard Modification kit. Shore site equipment quantities may vary.
- (3) Open System Module Set for LHD Class ships is 2 Open System Modules (OSM), one per UYK-43 computer. Shore site equipment quantities may vary.
- (4) Command Table and Data Management Processor assembled by Navy Activity (NRaD San Diego) using ruggedized cabinets and NDI/COTS components.
- (5) P-5 Exhibit includes \$104K nonrecurring cost for design and documentation for lead LHD ship with MK 70 Mod 33 Swbd configuration.
- (6) Loral Defense Systems - Eagan, St. Paul, MN has been acquired by Lockheed Martin.

DD FORM 2446, JUL 97

P3A INDIVIDUAL MODIFICATION

MODIFICATION TITLE: Advanced Combat Direction System/Navy Tactical Data System (ACDS/NTDS) (12LU)

DATE: February 1997

MODELS OF SYSTEM AFFECTED: FFG 7 CDS (Active Forces) FMP Cost Code: LU5IN

DESCRIPTION/JUSTIFICATION: Installation of MK 60 Switchboard ORDALT for CDS AN/UYP-43 Native Mode.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

	FY96				FY97				FY98				FY99				FY00				FY01				FY02				FY03				TO COMP Qty	TO COMP COST	TOTAL Qty	TOTAL COST																								
	Qty	& PRIOR	Qty		Qty		Qty		Qty		Qty		Qty		Qty		Qty		Qty		Qty		Qty		Qty		Qty																																	
FINANCIAL PLAN (IN MILLIONS)																																																												
RDT&E																																																												
PROCUREMENT	0				0				0				0				0				0				0				0				0				0				0	0.0																		
QUANTITY																																										0.0																		
INSTALLATION KITS																																										0.0																		
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																		
INTERIM CONTRACTOR SUPPORT																																										0.0																		
INSTALLATION OF HARDWARE																																																												
FY96 EQUIPMENT & PRIOR																																										0.0																		
FY97 EQUIPMENT					(N1)			0.1																																		0.1																		
FY98 EQUIPMENT																																										0.0																		
FY99 EQUIPMENT																																										0.0																		
FY00 EQUIPMENT																																										0.0																		
FY01 EQUIPMENT																																										0.0																		
FY02 EQUIPMENT																																										0.0																		
TO COMPLETE																																										0.0																		
TOTAL INSTALLATION COST	0.0				0.1				0.0				0.0				0.0				0.0				0.0				0.0				0.0				0.0				0.0	0.1																		
TOTAL PROCUREMENT COST	0.0				0.0				0.0				0.0				0.0				0.0				0.0				0.0				0.0				0.0				0.0	0.0																		
TOTAL COST	0.0				0.1				0.0				0.0				0.0				0.0				0.0				0.0				0.0				0.0				0.0	0.1																		
METHOD OF IMPLEMENTATION:	Shipyard and Contractor				ADMINISTRATIVE LEADTIME: N/A				PRODUCTION LEADTIME: N/A																																																			
CONTRACT DATE:	PRIOR YEAR: N/A				CURRENT YEAR: N/A				BUDGET YEAR: N/A				BUDGET YEAR 2: N/A																																															
PRODUCTION DELIVER DATE:	PRIOR YEAR: N/A				CURRENT YEAR: N/A				BUDGET YEAR: N/A				BUDGET YEAR 2: N/A																																															
INSTALLATION SCHEDULE:																																																												
INPUT =====>	FY96				FY97				FY98				FY99				FY00				FY01				FY02				FY03				TC				TOTAL																							
FY 96 & 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	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	0	0	0	0	0	0	0	0								
FY 97																																																												
FY 98																																																												
FY 99																																																												
FY 00																																																												
FY 01																																																												
FY 02																																																												
FY 03																																																												
TO COMPLETE																																																												
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
OUTPUT =====>	FY96				FY97				FY98				FY99				FY00				FY01				FY02				FY03				TC				TOTAL																							
FY 96 & 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	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	0	0	0	0	0	0	0	0				
FY 97																																																												
FY 98																																																												
FY 99																																																												
FY 00																																																												
FY 01																																																												
FY 02																																																												
FY 03																																																												
TO COMPLETE																																																												
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

NOTES:

(1) For ORDALT installation in FFG 7 Class MK 60 Switchboards for CDS AN/UYP-43(V) Native Mode. This is a reconfiguration ORDALT that does not require the procurement of new hardware.

INDIVIDUAL MODIFICATION

P3A
MODIFICATION TITLE: Advanced Combat Direction System/Navy Tactical Data System (ACDS/NTDS) (12LU)
MODELS OF SYSTEM AFFECTED: CV/CVN ACDS (FMP and Non-FMP)/Cost Code: LU047/LU060/LU51N/LU61N

DATE: February 1997

DESCRIPTION/JUSTIFICATION: Ruggedized NDI/COTS display/computer/peripheral support/emulation/equipment for major warfighting improvements and integration with Link 16 (Model 5 C2P/JTIDS), CEC, SSDS, and JMCIS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

	FY96																TO COMP Qty	TO COMP COST	TOTAL Qty	TOTAL COST														
	Qty	& PRIOR	Qty	FY97	Qty	FY98	Qty	FY99	Qty	FY00	Qty	FY01	Qty	FY02	Qty	FY 03																		
FINANCIAL PLAN (IN MILLIONS)																																		
RDT&E																																		
PROCUREMENT (N1)	5	1.1	2	(N2)	4	1.1	5	1.2	13	3.3	0		5	1.5	6	1.6	0		40	9.8														
QUANTITY																																		
INSTALLATION KITS																				0	0.0													
INSTALLATION KITS NONRECURRING																				0	0.0													
EQUIPMENT	4	0.8	2	(N2)	4	1.0	5	1.2	8 (N3)	1.9			3 (N3)	0.9	6 (N3)	1.6			32	7.4														
EQUIPMENT NONRECURRING						0.1				0.1										0	0.1													
ENGINEERING CHANGE ORDERS																				0	0.0													
DATA																				0	0.0													
TRAINING EQUIPMENT	1	0.3							2 (N3)	0.5										3	0.8													
SUPPORT EQUIPMENT (N4)									3 (N3)	0.8				2 (N3)	0.6					5	1.4													
OTHER																				0	0.0													
INTERIM CONTRACTOR SUPPORT																				0	0.0													
INSTALLATION OF HARDWARE (N1)																																		
FY96 EQUIPMENT & PRIOR			1	(N5)	4	1.6														5	1.6													
FY97 EQUIPMENT					2	0.1														2	0.1													
FY98 EQUIPMENT							4	1.7												4	1.7													
FY99 EQUIPMENT									5	2.8										5	2.8													
FY00 EQUIPMENT											13	1.2								13	1.2													
FY01 EQUIPMENT																				0	0.0													
FY02 EQUIPMENT															5	1.0				5	1.0													
FY03 EQUIPMENT																				6	0.0													
TO COMPLETE																				0	0.0													
TOTAL INSTALLATION COST		0.0				1.7				1.7						1.0				40	8.4													
TOTAL PROCUREMENT COST		1.1		0.0		1.1				1.2						1.5					9.8													
TOTAL COST		1.1		0.0		2.8				2.9						1.5					18.2													
METHOD OF IMPLEMENTATION: Shipyard and Contractor																																		
ADMINISTRATIVE LEADTIME: 3																																		
PRODUCTION LEADTIME: 9																																		
CONTRACT DATE: PRIOR YEAR: N/A CURRENT YEAR: N/A BUDGET YEAR: 1/98 BUDGET YEAR 2: 1/99																																		
PRODUCTION DELIVER DATE: PRIOR YEAR: N/A CURRENT YEAR: N/A BUDGET YEAR: 10/98 BUDGET YEAR 2: 10/99																																		
INSTALLATION SCHEDULE:																																		
INPUT =====>	FY96				FY97				FY98				FY99				FY00				FY01				FY02				FY03				TC	TOTAL
FY 96 & 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	1	2	3	4	6	5
FY 97					1				1	2	1																						0	2
FY 98									1	1																							4	4
FY 99										2	2							4	1														9	5
FY 00														4	1						9	2	2										2	13
FY 01																																	6	0
FY 02																																	3	5
FY 03																																	2	6
TO COMPLETE																																	0	0
TOTAL	0	0	0	0	0	0	1	0	2	2	2	0	0	2	2	0	0	4	1	0	9	2	2	0	0	0	0	0	3	2	0	0	6	40
OUTPUT =====>	FY96				FY97				FY98				FY99				FY00				FY01				FY02				FY03				TC	TOTAL
FY 96 & 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	1	2	3	4	6	5
FY 97					1				1	3	1																						0	2
FY 98									1	1																							4	4
FY 99																																	4	5
FY 00														4	1						6	3	2										2	13
FY 01																																	6	0
FY 02																																	3	5
FY 03																																	2	6
TO COMPLETE																																	0	0
TOTAL	0	0	0	0	0	0	0	0	1	0	4	2	0	0	0	0	4	0	0	2	3	6	3	2	2	0	0	0	0	3	0	2	6	40

NOTES: The total program quantity reflects the inventory objective for this item.
 (1) Equipment quantities vary for ACDS ship sets and shore sites, ranging from a group of equipment down to a field change for a single equipment. The procurement and installation costs vary accordingly.
 (2) Modification kits for previously installed Command Table funded under cost code LU005 (Field Change Kits).
 (3) Includes UYK-43 computer Open Systems Module (OSM) which is a plug-in unit.
 (4) Shore site equipment, other than training, for testing, integration and life cycle support.
 (5) Shore site equipment installation funded with FY94 funds.

P3A INDIVIDUAL MODIFICATION
 MODIFICATION TITLE: Advanced Combat Direction System/Navy Tactical Data System (ACDS/NTDS) (12LU)
 MODELS OF SYSTEM AFFECTED: LHA/LHD ACDS (FMP and Non-FMP)/Cost Code: LU059/LU060/LU51N/LU61N

DATE: February 1997

DESCRIPTION/JUSTIFICATION: LHA 1 Class ACDS Ship Sets for integration with AN/SPS-48E Radar and Link 16 hardware (Model 4 C2P/JTIDS), and for joint interoperability; includes reconfiguration of selected ACDS equipment from inactivated CG 16, CG 27, and CGN 38 Class ships, NDI/COTS AN/UUQ-70(V) Advanced Display System (ADS)/emulation equipment and TAC-4 equipment; Ruggedized NDI/COTS display/peripheral support/computer equipment for LHD 1 and LHA 1 Class ships for integration with Link 16 (Model 5 C2P/JTIDS), CEC, SSDS and JMCIS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production

FINANCIAL PLAN (IN MILLIONS)	FY96																TO COMP Qty	TO COMP COST	TOTAL Qty	TOTAL COST														
	Qty	& PRIOR	Qty	FY97	Qty	FY98	Qty	FY99	Qty	FY00	Qty	FY01	Qty	FY02	Qty	FY 03																		
RD&E																																		
PROCUREMENT (N1)	7	23.0	3	0.6	0	5	1.4	12	3.0	6	1.5	3	0.8	2	0.5	0			38	30.8														
QUANTITY																			0	0.0														
INSTALLATION KITS																			0	0.0														
INSTALLATION KITS NONRECURRING																			0	0.0														
EQUIPMENT	5	22.0	2	0.5		4	1.1	6 (N2)	1.5	6 (N2)	1.5	2 (N2)	0.5	2 (N2)	0.5				25	27.1														
EQUIPMENT NONRECURRING							0.1												0	0.1														
ENGINEERING CHANGE ORDERS																			0	0.0														
DATA																			0	0.0														
TRAINING EQUIPMENT	1	0.3	1	0.1				4 (N2)	1.0										6	1.4														
SUPPORT EQUIPMENT (N3)	1	0.7				1 (N2)	0.2	2 (N2)	0.5			1 (N2)	0.3						5	1.7														
OTHER																			0	0.0														
INTERIM CONTRACTOR SUPPORT																			0	0.0														
INSTALLATION OF HARDWARE(N1)																																		
FY96 EQUIPMENT & PRIOR	1	0.3	4	13.2	2	8.8													7	22.3														
FY97 EQUIPMENT					3	0.8													3	0.8														
FY98 EQUIPMENT																			0	0.0														
FY99 EQUIPMENT								5	2.3										5	2.3														
FY00 EQUIPMENT									12	1.5									12	1.5														
FY01 EQUIPMENT											6	1.2							6	1.2														
FY02 EQUIPMENT													3	(N2)					3	0.0														
FY03 EQUIPMENT																	2	(N2)	2	0.0														
TO COMPLETE																	0	0.0	0	0.0														
TOTAL INSTALLATION COST		0.3		13.2		9.6			0.0		2.3		1.5		1.2			0.0	38	28.1														
TOTAL PROCUREMENT COST		23.0		0.6		0.0			1.4		3.0		1.5		0.8			0.0		30.8														
TOTAL COST		23.3		13.8		9.6			1.4		5.3		3.0		2.0			0.5		58.9														
METHOD OF IMPLEMENTATION:	Shipyard and Contractor		ADMINISTRATIVE LEADTIME: 3-6				PRODUCTION LEADTIME: 9-12																											
CONTRACT DATE:	PRIOR YEAR: N/A		CURRENT YEAR: 1/97				BUDGET YEAR: 1/98-4/98				BUDGET YEAR 2: 1/99																							
PRODUCTION DELIVER DATE:	PRIOR YEAR: N/A		CURRENT YEAR: 10/97				BUDGET YEAR: 10/98-4/99				BUDGET YEAR 2: 10/99																							
INSTALLATION SCHEDULE:																																		
INPUT =====>	FY96				FY97				FY98				FY99				FY00				FY01				FY02				FY03				TC	TOTAL
FY 96 & Prior	1	2	3	4	2	1	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		7	
FY 97					2	1	1																										3	
FY 98								1	2																								0	
FY 99												3	2																				5	
FY 00																6	4		2					2	2	2							12	
FY 01																				2	2	2											6	
FY 02																												3					3	
FY 03																																2	2	
TO COMPLETE																																0	0	
TOTAL	0	0	1	0	2	0	1	1	2	2	0	1	0	0	0	0	3	0	0	2	6	4	0	2	2	2	2	0	3	0	0	0	2	38
OUTPUT =====>	FY96				FY97				FY98				FY99				FY00				FY01				FY02				FY03				TC	TOTAL
FY 96 & Prior	1	2	3	4	2	1	1	1	1			1				1	2			4	2	2		2	2	2							7	
FY 97					2	1	1																										3	
FY 98								3																									0	
FY 99												1	2							2													5	
FY 00																4	2	2		4				2	2	2							12	
FY 01																								2	2	2							6	
FY 02																												3					3	
FY 03																																2	2	
TO COMPLETE																																0	0	
TOTAL	0	0	0	0	0	2	1	1	0	1	4	0	0	0	0	1	0	1	2	0	0	6	2	2	0	6	2	2	0	3	0	0	2	38

NOTES: The total program quantity does not reflect the total inventory objective. Two ships are not programmed for this system at this time, LHA 1 and LHA 3. There are 6 inventory items (equipment sets) associated with the two ships (an ACDS Block 0 ship set, DMP set and OSM set for each ship).

(1) Equipment quantities vary for ACDS ship sets and shore sites, ranging from a group of equipment down to a single equipment. The procurement and installation costs vary accordingly.

(2) Includes UYK-43 computer Open Systems Module (OSM) which is a plug-in unit.

(3) Shore site equipment, other than training, for testing, integration and life cycle support.

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY OP,N/BA2:Communications & Electronics								B. P-1 ITEM NOMENCLATURE Advanced Combat Direction System (12LU)								C. DATE: February 1997																				
LU047/LU060 CV/CVN ACDS Command Table/Color Large Screen Displays					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER												
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4													
ACTIVE FORCE INVENTORY	(P)						1C					1C	1C						2C																						
SHIP EQUIPMENT (Non-add)	(P)					(1C)		(1C)																																	
SCHOOLS/OTHER TRAINING	(P)			1C																																					
OTHER	(P)																																								
TOTAL PHASED REQ	(C)	0	0	1	1	1	2	2	2	2	3	4	4	4	4	4	6																								
ASSETS ON HAND	(P)																																								
DELIVERY FY 96 & PRIOR	2C (BP)			1C	1C																																				
FY 97 Non-add	(2C) (P)					(1C)	(1C)																																		
FY 98	2C (P)									1C	1C																														
FY 99	2C (P)																	1C	1C																						
TOTAL ASSETS	(C)	0	0	1	2	2	2	2	2	3	4	4	4	4	5	6																									
QTY OVER (+) OR SHORT (-)		0	0	0	+1	+1	0	0	0	+1	+1	0	0	+1	0																										
D. REMARKS NOTES: (1) Status as of 31 DEC 1996 KEY: C = Display/Computer/Peripheral support/emulation equipment: Command Table and 2 Color Large Screen Displays (C) = Shore Site Equipment, shown as non-add item in parenthesis.					E. RQMT (QTY)								TOTAL RQMT				INSTALLED		ON HAND		FY 98 & PRIOR UNDLVR				UNFUNDED																
					1. APPN - OP,N								15				5		0		4				6																
																	(N1)																								
					2. APPN -																																				
3. PROCUREMENT LEADTIME								ADMIN 3				INITIAL ORDER		12		REORDER				9																					

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TIME PHASED REQUIREMENT SCHEDULE P-23				A. APPROPRIATION/BUDGET ACTIVITY OP,N/BA2:Communications & Electronics								B. P-1 ITEM NOMENCLATURE Advanced Combat Direction System (12LU)								C. DATE: February 1997											
LU047 CV/CVN ACDS Data Management Processor/MK 70 Swbd Mod				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER			
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
ACTIVE FORCE INVENTORY	(P)					1D	1D	1D					1D	1D																	
SHIP EQUIPMENT (Non-add)	(P)																														
SCHOOLS/OTHER TRAINING	(P)																														
OTHER	(P)																														
TOTAL PHASED REQ	(C)	0	0	0	0	1	2	3	3	3	4	5	5	5	7	8															
ASSETS ON HAND	(P)																														
DELIVERY FY 96 & PRIOR	3D (BP)		1D	1D	1D																										
FY 98	2D (P)									1D	1D																				
FY 99	3D (P)													1D	1D	1D															
TOTAL ASSETS	(C)	0	1	2	3	3	3	3	3	4	5	5	5	6	7	8															
QTY OVER (+) OR SHORT (-)		0	+1	+2	+3	+2	+1	0	0	+1	+1	0	0	+1	0	0															
D. REMARKS NOTES: (1) Status as of 31 DEC 1996 KEY: D = Display/Computer/Peripheral support/equipment: Data Management Processor and MK 70 Swbd Modification.				E. RQMT (QTY)								TOTAL RQMT				INSTALLED				ON HAND				FY 98 & PRIOR UNDLVR				UNFUNDED			
				1. APPN - OP,N								14				3 (N1)				0				5				6			
				2. APPN -																											
				3. PROCUREMENT LEADTIME								ADMIN 3				INITIAL ORDER 12				REORDER 9											

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OP,N/2: COMMUNICATIONS & ELECTRONICS EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT Advanced Combat Direction System/LU047 CV/CVN ACDS (12LU) Display/Computer/Peripheral Support Equipment							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
				FCTCPAC OTS	1C			CV 67	(1C) 1D	CV 63	1C 1D	CV 64	(1C) 1D		
FY 1999								FY 2000							
		CVN 65	1C 1D	CVN 72	1C 1D					CVN 70	1C 1D	CVN 73	1D		
										CVN 71	1C 1D				
Key: C = Command Table and 2 Color Large Screen Displays D = Data Management Processor and MK 70 Switchboard Modification (C) = Upgrade (modification) of previously installed Command Table, shown as non-add item in parenthesis FCTCPAC OTS= Operator Training Site at San Diego															

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	DATE: February 1997
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APPROPRIATION/BUDGET ACTIVITY OP,N/2: COMMUNICATIONS & ELECTRONICS EQUIPMENT	P-1 ITEM NOMENCLATURE/PROJECT UNIT Advance Combat Direction System/LU059/LU060 LHA/LHD ACDS (12LU) LHA ACDS Ship Set
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1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY														

FY 1997								FY 1998							
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NRaD	(1A)			LHA 2	1A	LHA 4	1A							LHA 5	1A
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FY 1999								FY 2000							
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KEY: A = LHA ACDS ship set
 (A) = LHA ACDS Shore Site equipment, shown as non-add item in parenthesis.
 NRaD = System integration test site at San Diego.

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY OP,N/BA2:Communications & Electronics								B. P-1 ITEM NOMENCLATURE Advanced Combat Direction System (12LU)								C. DATE: February 1997																		
LU059/LU060 LHA/LHD ACDS Command Table/Color Large Screen					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER										
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4											
ACTIVE FORCE INVENTORY	(P)	1C				1C								1C			1C																						
SHIP EQUIPMENT (Non-add)	(P)																																						
SCHOOLS/OTHER TRAINING	(P)					1C																																	
OTHER	(P)																																						
TOTAL PHASED REQ	(C)	1	1	1	1	2	3	3	3	3	3	3	3	4	4	4	5																						
ASSETS ON HAND	(P)																																						
DELIVERY FY 96 & PRIOR	2C (BP)	1C		1C																																			
FY 97	1C (P)					1C																																	
FY 99	2C (P)													1C	1C																								
TOTAL ASSETS	(C)	1	1	2	2	3	3	3	3	3	3	3	3	4	5	5	5																						
QTY OVER (+) OR SHORT (-)		0	0	+1	+1	+1	0	0	0	0	0	0	0	0	+1	+1	0																						
D. REMARKS					E. RQMT (QTY)								TOTAL RQMT				INSTALLED				ON HAND				FY 98 & PRIOR UNDLVR				UNFUNDED										
NOTES: (1) Status as of 31 DEC 1996					1. APPN - OP,N								7				1 (N1)				0				2				4										
KEY: C = LHD Display/Computer/peripheral support equipment: Command Table and 2 Color Large Screen Displays.					2. APPN -																																		
					3. PROCUREMENT LEADTIME								ADMIN 3				INITIAL ORDER 12				REORDER 9																		

DD Form 2447, JUN 86

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OP,N/2: COMMUNICATIONS & ELECTRONICS EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT Advance Combat Direction System/LU059 LHA/LHD ACDS (12LU) Display/Computer/Peripheral Support Equipment							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
LHD 1 (N1)	1C 1D							LHD MTS	1C (1D)	LHD 3	1C 1D				
FY 1999								FY 2000							
								LHD 4	1C 1D					LHD 6	1C 1D
														NRaD	1E
<p>NOTE : (1) Installation by AIT during 4/96-3/97 overhaul period.</p> <p>KEY: C = Command Table and 2 Color Large Screen Displays D for LHD = Data Management Processor and MK 70 Switchboard Modification D for LHA = Data Management Processor, MK 70 Switchboard Modification and Command Table Modification E = 2 UYK-43 Computer Open System Module (OSM) field change kits (1 per computer). (D) for Shore Sites = Data Management Processor Parenthesis signifies non-add items in P-23 exhibit.</p> <p>LHD MTS = LHD Maintenance Training Site at FCTCLANT Dam Neck NRaD = System integration test site at San Diego.</p>															

CLASSIFICATION: **UNCLASSIFIED**

Exhibit P-40 BUDGET ITEM JUSTIFICATION											Date February 1997		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number 1810/OP,N-2 Communications and Electronic Equipment							P-1 Line Item Nomenclature Cooperative Engagement Capability (CEC)						
Program Element for Code B Items 0603755N (FY 1994-97) 0603658N (FY 1998-03)						Other Related Program Elements							
	ID Code	Prior Years	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Comp	Total
Proc Qty	B						9	11	9	14	15	58	116
Gross Cost							57,522	107,905	104,780	113,540	111,748	617,087	1,112,582
Less PY Adv Proc													0
Plus CY Adv Proc													0
Net Proc (=P-1)		0	0	0	0	0	57,522	107,905	104,780	113,540	111,748	617,087	1,112,582
Initial Spares													0
Total Proc Cost		0	0	0	0	0	57,522	107,905	104,780	113,540	111,748	617,087	1,112,582
Flyaway U/C							5.325	4.349	4.679	4.39	3.902	4.283	4.394
Wpn Sys Proc U/C							6.391	9.810	11.642	8.110	7.450	10.639	9.591
Description													
<p>The Cooperative Engagement Capability (CEC) significantly improves Battle Force Anti-Air Warfare (AAW) capability by coordinating all Battle Force AAW sensors into a single, real time, composite track picture having fire control quality. CEC distributes sensor data from each ship and aircraft, or cooperating unit (CU), to all other CUs in the battle force through a real time, line of sight, high data rate sensor and engagement data distribution network. CEC is highly resistant to jamming and provides accurate gridlocking between CUs. CEC significantly improves battle force in-depth defenses, including both local area and ship defense capabilities against current and future AAW threats. CEC will also enable the development of effective over-land air defense systems able to counteract emerging air threats, including over-land 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.</p> <p>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. DDG993, 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>													

CLASSIFICATION: **UNCLASSIFIED**

Exhibit P-40 BUDGET ITEM JUSTIFICATION										Date February 1997			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number 1810/OP,N-2 Communications and Electronic Equipment							P-1 Line Item Nomenclature Cooperative Engagement Capability (CEC)						
Program Element for Code B Items 0603755N (FY 1994-97) 0603658N (FY 1998-03)					Other Related Program Elements								
	ID Code	Prior Years	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Comp	Total
Proc Qty	B												
Gross Cost													
Less PY Adv Proc													
Plus CY Adv Proc													
Net Proc (=P-1)													
Initial Spares													
Total Proc Cost													
Flyaway U/C													
Wpn Sys Proc U/C													
Description													
(Continued)													
RDT&E,N Program Element Funding:													
	Fiscal Year	Program Element	Program Element Title										
	1994-97	0603755N	Ship Self Defense										
	1998-03	0603658N	Cooperative Engagement Capability (CEC)										
Program Milestones:													
	Fiscal Year	Quarter	Milestone										
	1998	1st	M/S IIA -Limited Rate Initial Production (LRIP)										
	1998	3rd	M/S DT-IIC/OT-IIA2 Initial Operational Test and Evaluation (IOT&E) (Shipboard System)										
	1999	1st	M/S III - Full Rate Production (FRP)										
	1999	3rd	M/S DT-IIIA - TECHEVAL (Airborne System)										
	1999	4th	M/S OT-IIIA - OPEVAL (Airborne System)										
Technical Data Package (TDP) Availability: September 1998													
Estimated Date of Approval for Service Use: December 1998													
Equipment to be Replaced: Not applicable													
Discussion: CEC has been successfully tested/demonstrated during live missile firing exercises which have included CEC IOC certification testing (September 1996), MOUNTAIN TOP (January 1996), ASCIET 96 (September 1995), and Battle Group Tactical Exercises (BGTE) (Dec 94-Mar 95). The accelerated CEC development and acquisition schedules result from Congressional and OSD direction. No major system design changes have been incorporated since entry into E&MD (Milestone II) in May 1995. As a result of minimal design changes, the program schedule has been maintained and contractor cost performance is satisfactory.													

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS EXHIBIT P-5							Date: February 1997			
APPROPRIATION/BUDGET ACTIVITY OPN-2 Communications and Electronic Equipment					P-1 Line Item Nomenclature Cooperative Engagement Capability (CEC) (12UC)					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
UC001	Cooperative Engagement Transmitting/Processing System (CETPS) AN/USG-2	B							9	\$ 47,929
UC002	AN/UYQ-70 Display								4	428
UC003	Management Support									1,150
UC51N	FMP Installation									2,611
UC61N	Non-FMP Installation									2,247
UCDSA	Design Services									3,157
	TOTAL									\$ 57,522

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. Date February 1997	
B. Appropriation/Budget Activity OPN-2, Communications and Electronics Equipment					C. P-1 Line Item Nomenclature Cooperative Engagement Capability (CEC) (S/H 12UC)					
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
UC001 Cooperative Engagement Transmitting/Processing System (CETPS)										
FY 1999	Raytheon/E-Syst. St. Petersburg, FL	SS/FP	NAVSEA	11/98	06/00	9	5.325	No	No	N/A
FY 2000	Raytheon/E-Syst. St. Petersburg, FL	C/FP	NAVSEA	10/99	06/01	#REF!	4.349	No	No	N/A
FY 2001	Raytheon/E-Syst. St. Petersburg, FL	C/FP	NAVSEA	10/00	06/02	#REF!	4.679	No	No	N/A
FY 2002	Raytheon/E-Syst. St. Petersburg, FL	C/FP	NAVSEA	10/01	06/03	#REF!	4.390	No	No	N/A
FY 2003	Raytheon/E-Syst. St. Petersburg, FL	C/FP	NAVSEA	10/02	06/04	#REF!	3.902	No	No	N/A
C. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

Exhibit P-3a Individual Modification

MODELS OF SYSTEMS AFFECTED: **AN/USG-2(V)** TYPE MODIFICATION: BGAAW Improvement MODIFICATION TITLE: **CETPS**
 DESCRIPTION/JUSTIFICATION: Battle Group Anti-Air Warfare (AAW) Improvement
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: M/S-II (May 95) M/S-IIA (1Q FY98) M/S-III (1Q FY99) TDP AVAIL (Sep 98)

PROCUREMENT PLAN (\$ in Millions)

	Prior Yrs		FY 1995		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	\$	Qty	\$
RDT&E (Qty Indicates FY of Delivery)	11	357.6		153.8		251.7	6	224.7	5	139.2		87.6		46.2		48.8		49.8		50.9		Cont.	22	1410.3
PROCUREMENT																								
INST KIT NON-RECUR																								
INST KIT																								
EQ NON-RECUR																								
EQ					0	0.0	0	0.0	0	0.0	7	37.3	10	43.5	9	42.1	14	61.5	15	58.5	113	243.4	113	486.3
ECO																								
TRAINING											2	10.7											3	15.0
SUPPORT EQ																								
INTERIM CONTRACTOR SUPPORT																								
INSTALLATION COST																								
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9	47.9	10	43.5	9	42.1	14	61.5	15	58.5	113	243.4	116	501.3

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: SHIPYARDS
 ADMINISTRATIVE LEADTIME: 12 Months
 CONTRACT DATES:
 DELIVERY DATE:

Current Year:
 Current Year:

PRODUCTION LEADTIME:
 Budget Year 1: 18 Months
 Budget Year 1: 18 Months

Budget Year 2: 18 Months
 Budget Year 2: 18 Months

Note: Hardware installation is accomplished over a 3-year span. In the first two years, costs are incurred for installation planning (performing ship checks and developing Ship Installation Drawings). Actual installation incurred costs is Year 1 - 4%; Year 2 - 5%; Year 3 - 91%. The total quantity (116) reflects the OP,N funded inventory objective for this item.

INSTALLATION PLAN (\$ in Millions)

	Prior Yrs		FY 1995		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	\$	Qty	\$	
Prior Yrs																								0	0.0
FY 1995																								0	0.0
FY 1996																								0	0.0
FY 1997																								0	0.0
FY 1998																								0	0.0
FY 1999												3.0	9	15.3										9	18.3
FY 2000												1.7		3.0	6	14.3	5	8.8						11	27.8
FY 2001															1.0	4.5	5	14.1	4	4.9				9	24.5
FY 2002																1.4	3.9	12	20.5					14	29.3
FY 2003																	1.3		2.4				15	34.2	
To Compl																							58	158.7	
Total	0	.0	0	.0	0	.0	0	.0	0	.0	0	4.7	9	19.3	6	20.2	10	28.1	16	27.8	75	196.4	116	296.5	

Installation Schedule

	Prior Year	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				To Comp	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																															
Out												9					9														
																3	3	4	1	3	2	4	6	81		116					

CLASSIFICATION: **UNCLASSIFIED**

Exhibit P-3a Individual Modification

MODELS OF SYSTEMS AFFECTED: **AN/UYQ-70**
 DESCRIPTION/JUSTIFICATION: Battle Group Anti-Air Warfare (AAW) Improvement
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

TYPE MODIFICATION: BGAAW Improvement MODIFICATION TITLE: **Display Set**

PROCUREMENT PLAN (\$ in Millions)

	Prior Yrs		FY 1995		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	\$	Qty	\$
RDT&E (Qty Indicates FY of Delivery)																								
PROCUREMENT																								
INST KIT NON-RECUR																								
INST KIT																								
EQ NON-RECUR																								
EQ					0	0.0	0	0.0	0	0.0	0	0.0	52	29.0	65	33.3	15	6.0	30	11.5	334	167.0	496	246.8
ECO																								
TRAINING											4	0.4											4	0.4
SUPPORT EQ																								
INTERIM CONTRACTOR SUPPORT																								
INSTALLATION COST																								
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	0.4	52	29.0	65	33.3	15	6.0	30	11.5	334	167.0	500	247.2

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: SHIPYARDS
 ADMINISTRATIVE LEADTIME: 3 Months
 CONTRACT DATES:
 DELIVERY DATE:

Current Year:
 Current Year:

PRODUCTION LEADTIME:
 Budget Year 1: 6-12 Months
 Budget Year 1: 6-12 Months

Budget Year 2: 6-12 Months
 Budget Year 2: 6-12 Months

Note: Hardware installation is accomplished over a 3-year span. In the first two years, costs are incurred for installation planning (performing ship checks and developing Ship Installation Drawings). Actual installation is accomplished in the third year. A general estimate of incurred costs is Year 1 - 4%; Year 2 - 5%; Year 3 - 91%. The total quantity (500) reflects the OP,N funded inventory objective for this item.

INSTALLATION PLAN (\$ in Millions)

	Prior Yrs		FY 1995		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	\$	Qty	\$		
Prior Yrs																								0	0.0	
FY 1995																									0	0.0
FY 1996																									0	0.0
FY 1997																									0	0.0
FY 1998																									0	0.0
FY 1999											4	2.2													4	2.2
FY 2000											.8	10.1	52	10.1											52	10.9
FY 2001											.3			.4	37	6.9	28	12.0							65	19.6
FY 2002													.2		.9	15	4.4			30					15	#REF!
FY 2003															.2		.2			12.6					30	13.0
To Compl																								334	167.0	
Total	0	.0	0	.0	0	.0	0	.0	0	.0	4	3.3	52	10.7	37	8.0	43	16.6	0	42.6	334	167.0	500	#REF!		

Installation Schedule

	Prior Year	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				To Comp	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										4				52				25				40				15				30				334	500
Out										4				52				25				40				15				30				334	500

CLASSIFICATION: **UNCLASSIFIED**

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OPN-2, Communications and Electronics Equipment				C. P-1 Item Nomenclature Cooperative Engagement Capability (CEC) (S/H 12UC)				
ITEM	Total I.O./ Requirement	Quantity On Hand & In Use	Quantity In Use	Quantity Due In With FY1996-97 Prog. Funds	Planned Budget Year Procurement		BALANCE	Phasing Rationale
Common Equipment Set (CES)	195	0	0	0	9		186	Budgetary Constraints
MEMO ENTRIES								
OPN Funded:	SCN Funded:	APN Funded:						
Training 3	DDG51 13	Training 2						
CG 22	LPD17 12	E-2C 47						
DDG-51 44	CV/CVN 4	APN Total 49						
CV/CVN 8	LHD 1							
LHD/LHA 11	SCN Total 30							
DDG993 4								
LSD-41 12								
DD-963 12								
OPN Total 116								

BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUI				JMCIS AFLOAT (FORMERLY TFCC) BLI:2608 52JG				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$13.3	\$25.6	\$22.4	\$23.5	\$21.9	\$22.6	\$25.2	\$25.6
<p>PROGRAM JUSTIFICATION: The Joint Maritime Command Information System (JMCIS) Afloat program (formerly referred to as Navy Tactical Command System A-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). JMCIS 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. JMCIS Afloat consists of the following:</p> <p>The JMCIS Afloat Unit Level system is the tactical command, control, and computers system for the battle group/force warfighting combatants and is located in shipboard command and control spaces. It is 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 JMCIS Afloat system upgrades will begin in FY 97.</p> <p>The JMCIS Afloat Force level system is the core battle group/force commander warfighting command, control, computers (C3I) and intelligence system. It is located on force level combatants (i.e. CV/CVN, LCC, LHA, LHD, MCS and AGF) and centrally located in the flag command and control spaces with workstations distributed on a local area network throughout ship spaces. The JMCIS Afloat system consists of workstations, color large screen displays, remote displays, video switches, fiber optic local area networks which provide the tactical commander with 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 JMCIS Afloat capability was delivered to the fleet in two phases. JMCIS Afloat baseline system provided non-SCI capabilities. The JMCIS Afloat III upgrade adds equipment to achieve full JMCIS Afloat capability for force level platforms/sites. This upgrade adds SCI capability along with additional computer processing, communication interfaces, information distribution, operator workstations, remote monitors and peripheral support equipment for a fully functional JMCIS-Afloat system. The shipboard JMCIS Afloat baseline systems were completed in FY94. JMCIS Afloat III procurement and installation will complete in FY 97. Upgrades to the JMCIS Afloat procurements began in FY96 to add additional Joint service capability.</p> <p>The JMCIS Afloat Integrated Video Display system 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 JMCIS Afloat and will be completed in FY 03.</p>								

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIP	JMCIS AFLOAT (FORMERLY TFCC) BLI:2608	52JG
<p>JMCIS Afloat Force Level, Unit Level, and Shore site upgrades will support the evolutionary acquisition of modern non-development hardware and software to meet changing joint requirements of command, control, computer 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 FY97, and JMCIS Afloat 2 way data link interface to Link 16 on force level and unit level platforms to begin in FY98. In addition, hardware/software improvements to include improved CRT and flat panel 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 Information Technology</p> <p>FY96 will procure two additional JMCIS Afloat III systems, state of the art upgrades to JMCIS Afloat Force Level platforms, equipment for JMCIS Afloat III Operator/Maintenance training sites, production engineering support, and installation funds to support planned FY96 installs.</p> <p>FY97 includes funds to procure two additional JMCIS Afloat III Shipboard systems, sixteen additional C3I systems for Mine Warfare platforms, equipment for JMCIS Afloat III for Operator/Maintenance training sites; upgrades to unit level ships (DD's, DDG's, CG's) to provide a Link-16/JMCIS 98 interface, procure one force level platform CTAPS capability and procure CTAPS hardware for one production hardware/software integration facility; state of the art upgrades for both JMCIS Afloat Unit Level combatant platforms and Force Level Flag Command ships; production engineering support, and installation funds to support planned FY97 installs.</p> <p>FY98 includes funds to procure four additional C3I systems for Mine Warfare platforms, three additional Integrated Video Systems, upgrade equipment for JMCIS Afloat Shore sites, state of the art upgrades for both JMCIS Afloat Unit Level combatant platforms and Force Level Flag Command ships to include two way Link 16 and Radiant Mercury capability, production engineering support, and installation funds to support planned FY98 installs.</p> <p>FY99 includes funds to procure one additional C3I systems for Mine Warfare platforms, three additional Integrated Video systems, additional upgrade equipment for JMCIS Afloat Shore sites, state of the art upgrades for both JMCIS Afloat Unit Level combatant platforms and Force Level Flag Command ships to include two way Link 16 and Radiant Mercury capability, production engineering support, and installation funds to support planned FY99 installs.</p> <p>INSTALLING AGENT: All installations will be accomplished by AIT.</p> <p>Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>		

P-1 SHOPPING LIST
ITEM NO. PAGE NO.
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Exhibit P-40

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE		
						February 1997		
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUI			JMCIS AFLOAT (FORMERLY TFCC) BLI:2608			52JG		
MODIFICATION SUMMARY (\$M)								
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:								
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>
JMCIS Afloat III	\$6.9 \$0.6	\$5.0						
JMCIS Afloat Integrated Video Display System			\$4.7	\$4.6	\$4.6	\$4.7	\$6.3	\$6.2
JMCIS Afloat III Site Site equip	\$0.8	\$0.8						
JMCIS Afloat Unit Level Upgrade		\$3.8	\$2.7	\$3.7	\$4.8	\$5.2	\$5.8	\$1.8
JMCIS Afloat Force Level Upgrade	\$2.7	\$7.2	\$10.0	\$10.0	\$7.8	\$8.7	\$9.0	\$13.6
JMCIS Afloat Shore Site Upgrade Equip		\$0.3	\$0.9	\$2.0	\$1.7	\$1.0	\$0.8	\$0.8
JMCIS Afloat/MIW System Equip	\$0.4	\$6.2	\$1.6	\$0.4	\$0.4			
Total	\$11.4	\$23.3	\$19.9	\$20.7	\$19.3	\$19.6	\$21.9	\$22.4

P-1 SHOPPING LIST
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Exhibit P-40
UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEMS COST ANALYSIS						DATE: February 1997					
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				JMCIS Afloat (formerly TFCC) BLI: 2608 52JG							
COST CODE	ELEMENT OF COST	IDENT CODE	QTY	TOTAL COST IN THOUSANDS OF DOLLARS							
				FY 96	FY 97	FY 98	FY 99				
			TOTAL COST	TOTAL COST	TOTAL COST	TOTAL COST					
JG021	JMCIS Afloat III Shipboard	A	2	3,996	2	4,011					
JG023	Integrated Video Display S	N/A					3	2,246	3	2,442	
JG027	JMCIS Afloat III Shore Site	N/A	VAR	346	VAR	570					
JG028	JMCIS Afloat Unit Level Up	A			VAR	2,635	VAR	1,937	VAR	2,549	
JG029	JMCIS Afloat Force Level U	A	VAR	1,326	VAR	5,117	VAR	7,606	VAR	7,812	
JG030	JMCIS Afloat Shore Site Upgrade Equipment	A				250	VAR	741	VAR	1,658	
JG031	JMCIS Afloat/MIW System	A			16	4,736	4	1,212	1	310	
JG666	Initial Training	A		535		778		520		690	
JG776	Non-FMP Installation	A		522		223		202		338	
JG777	FMP Installation	A		5,312		5,822		6,023		5,558	
	Design Service Agent	A						541		681	
JG830	Production Engineering Su	A		1,224		1,466		1,375		1,496	
	TOTAL PROGRAM			13,261		25,608		22,403		23,534	

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						JMCIS Afloat (formerly TFCC) BLI: 2608 52JG						
COST CODE	ELEMENT OF COST	FY	CONTRACT AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS VAILABL NOW	SPECS REV REQUIRED	IF YES, WHEN VAILABL
JG021	JMCIS Afloat III Shipboard Equip	FY96	Various	Option C/FFP	NISMIC/SPAWAR	Mar-96	May-96	2	\$1,998,000	YES	NO	N/A
		FY97	Various	Option C/FFP	NISMIC/SPAWAR	Jan-97	Mar-97	2	\$2,005,500	YES	NO	N/A
JG023	JMCIS Afloat Integrated Video Display System	FY98	Various	Option C/FFP	SPAWAR	Nov-97	Jan-98	3	\$748,667	YES	NO	N/A
		FY99	Various	Option C/FFP	SPAWAR	Nov-98	Jan-99	3	\$814,000	YES	NO	N/A
JG031	JMCIS Afloat/MIW System Equipment	FY97	Various	Option C/FFP	NISMIC/SPAWAR	Jan-97	Mar-97	16	\$296,000	YES	NO	N/A
		FY98	Various	Option C/FFP	NISMIC/SPAWAR	Nov-97	Jan-98	4	\$303,000	YES	NO	N/A
		FY99	Various	Option C/FFP	NISMIC/SPAWAR	Nov-98	Jan-99	1	\$310,000	YES	NO	N/A
D. REMARKS Unit cost for each JMCIS Afloat system is dependent upon platform class/type, mission and function.												

MODIFICATION TITLE: JMCIS-AFLOAT III SHIPBOARD (52JG/JG021)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: NTCS-A III is a continuation of the TFCC III and NIPS III systems under the new Program name "JMCIS Afloat" formerly "NTCS-A." JMCIS Afloat III upgrades the TFCC and NIPS Baseline systems to add SCI capability along with additional computer processing, communication interfaces, information distribution, operator workstations, remote monitors and peripheral support equipment for a fully functional 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		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment	13	30.8	2	4.0															15	34.8	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware	13	10.4	2	1.0															15	11.4	
(PY) Eqpt	13	10.4																	13	10.4	
FY 97 Eqpt			2	1.0															2	1	
FY 98 Eqpt																					
FY 99 Eqpt																					
FY 00 Eqpt																					
FY 01 Eqpt																					
FY 02 Eqpt																					
FY 03 Eqpt																					
FY TC Eqpt																					
TOTAL INSTALLATION COST		10.4		1.0																	11.4
TOTAL PROCUREMENT COST		41.2		5.0																	46.2
METHOD OF IMPLEMENTATION:	AIT		ADMINISTRATIVE LEADTIME						3	PROCUREMENT LEADTIME:						4					

CONTRACT DATES: FY 1997: Jan-97 FY 1998: FY 1999:

DELIVERY DATES: FY 1997: Mar-97 FY 1998: FY 1999:

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	13		2															
OUTPUT	13		2															
INSTALLATION SCHEDULE:			1	2	3	4		1	2	3	4		1	2	3	4	TC	TOTAL
INPUT																		15
OUTPUT																		15

* Includes 2 systems installed from FMP Mod Support Line.

MODIFICATION TITLE: JMCIS-AFLOAT/INTEGRATED VIDEO DISPLAY SYSTEM (52JG/JG023)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: The JMCIS-Afloat/Integrated Video Display System will provide a secure briefing system for live and taped briefings to command, control, and mission planning spaces on JMCIS force level combatants. This video display system will be directly integrated into an existing JMCIS system using the local area 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		IC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	5	2.5			3	2.2	3	2.4	3	2.2	3	2.4	4	3.2	4	3.1	25	18	25	18.0		
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Intern Contractor Support																						
Installation of Hardware	5	1.7			3	2.5	3	2.2	3	2.4	3	2.3	4	3.1	4	3.1	25	17.3	25	17.3		
(PY) Eqpt	5	1.7																	5	1.7		
FY 97 Eqpt																			0	0.0		
FY 98 Eqpt					3	2.5													3	2.5		
FY 99 Eqpt							3	2.2											3	2.2		
FY 00 Eqpt									3	2.4									3	2.4		
FY 01 Eqpt											3	2.3							3	2.3		
FY 02 Eqpt													4	3.1					4	3.1		
FY 03 Eqpt															4	3.1			4	3.1		
FY TC Eqpt																	0	0	0	0.0		
TOTAL INSTALLATION COST		1.7		0		2.5		2.2		2.4		2.3		3.1		3.1		17.3		17.3		
TOTAL PROCUREMENT COST		4.2		0		4.7		4.6		4.6		4.7		6.3		6.2		35.3		35.3		
METHOD OF IMPLEMENTATION:	AIT		ADMINISTRATIVE LEADTIME								2	PROCUREMENT LEADTIME:								3		
CONTRACT DATES:	FY 1997:				FY 1998:				Nov-97				FY 1999:				Nov-98					
DELIVERY DATES:	FY 1997:				FY 1998:				Jan-98				FY 1999:				Jan-99					
INSTALLATION SCHEDULE:	PY	FY 97			FY 98			FY 99			FY 00											
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	5									1	1	1					1	1	1			
OUTPUT	5										2	1								2	1	
INSTALLATION SCHEDULE:		FY 01			FY 02			FY 03			IC			TOTAL								
		1	2	3	4	1	2	3	4	1	2	3	4									
INPUT			1	1	1			1	2	1			1	2	1						25	
OUTPUT				2	1				2	2				2	2						25	

* 2 systems procured and installed under subhead 52S3

MODIFICATION TITLE: JMCIS-AFLOAT III SHORE SITES (52JG/JG027)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION:

The JMCIS Afloat III Shore Sites are required to train Navy personnel who will operate and maintain systems installed in the fleet. A JMCIS Afloat SCI suite will be installed in the Bahrain Command Center in FY 95 to meet that Joint Command Center's operational requirements. Various equipment is procured for installation as "Lots" by east coast/west coast or other 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		IC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment	VAR	1.4	VAR	0.6																VAR	2.0
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware	4	1.0	2	0.2																6	1.2
(PY) Eqpt	4	1.0																		4	1.0
FY 97 Eqpt			2	0.2																2	0.2
FY 98 Eqpt																				0	0.0
FY 99 Eqpt																				0	0.0
FY 00 Eqpt																					
FY 01 Eqpt																					
FY 02 Eqpt																					
FY 03 Eqpt																					
FY TC Eqpt																					
TOTAL INSTALLATION COST		1.0		0.2																	1.2
TOTAL PROCUREMENT COST		1.4		0.8																	3.2

METHOD OF IMPLEMENTATION:

AIT ADMINISTRATIVE LEADTIME 3 PROCUREMENT LEADTIME 4

CONTRACT DATES:

FY 1997: VAR FY 1998: FY 1999:

DELIVERY DATES:

FY 1997: VAR FY 1998: FY 1999:

INSTALLATION SCHEDULE:

	PY	FY 97			FY 98			FY 99			FY 00						
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	4			2													
OUTPUT	4				2												

INSTALLATION SCHEDULE:

		FY 01			FY 02			FY 03			IC	TOTAL
		1	2	3	4	1	2	3	4			
INPUT											6	
OUTPUT											6	

MODIFICATION TITLE: JMCIS - AFLOAT UNIT LEVEL UPGRADE (52JG/JG028)
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Supports the evolutionary acquisition of modern non-development hardware and software on JMCIS Afloat Unit Level Platforms to meet changing requirements of (and meet emergent interface requirements of Joint Task Force Operations. Various equipments is procured based on platform and current capability 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		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment			VAR	2.6	VAR	1.9	VAR	2.5	VAR	3.3	VAR	3.7	VAR	3.7	VAR	1.2	TBD	TBD	VAR	18.9	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware			11	1.2	12	0.8	15	1.1	21	1.5	28	1.5	58	2.1	6	0.6	TBD	TBD	151	8.8	
(PY) Eqpt																				0	0
FY 97 Eqpt			11	1.2																11	1.2
FY 98 Eqpt					12	0.8														12	0.8
FY 99 Eqpt							15	1.1												15	1.1
FY 00 Eqpt									21	1.5										21	1.5
FY 01 Eqpt											28	1.5								28	1.5
FY 02 Eqpt													58	2.1						58	2.1
FY 03 Eqpt															6	0.6				6	0.6
FY TC Eqpt																	TBD	TBD			Cont.
TOTAL INSTALLATION COST				1.2		0.8		1.1		1.5		1.5		2.1		0.6					8.8
TOTAL PROCUREMENT COST				3.8		2.7		3.6		4.8		5.2		5.8		1.8					27.70
METHOD OF IMPLEMENTATION:	AIT		ADMINISTRATIVE LEADTIME:				2		PROCUREMENT LEADTIME:				3								
CONTRACT DATES:	FY 1997: VAR		FY 1998: VAR				FY 1999: VAR														
DELIVERY DATES:	FY 1997: VAR		FY 1998: VAR				FY 1999: VAR														
INSTALLATION SCHEDULE:																					
INPUT																					
OUTPUT																					
INSTALLATION SCHEDULE:																					
INPUT																					
OUTPUT																					

MODIFICATION TITLE: JMCIS - AFLOAT FORCE LEVEL UPGRADE (52JG/JG029)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Supports the evolutionary acquisition of modern non-development hardware and software on JMCIS Afloat Force Level Platforms to meet changing requirements of of C4I and meet emergent interface requirements of Joint Task Force Operations to include JFACC/CTAPS 5.2, Two way LINK 16, and Radiant Mercury along with current software/hardware. Various equipment is procured based on platform and current capability 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		IC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment	VAR	1.9	VAR	5.1	VAR	7.6	VAR	7.8	VAR	6.2	VAR	6.8	VAR	7.0	VAR	10.6	TBD	TBD	VAR	53.0	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware	2	1.3	8	2.1	7	2.4	10	2.2	6	1.6	3	1.9	3	2.0	5	3.0	TBD	TBD	44	16.5	
(PY) Eqpt	2	1.3																	2	1.3	
FY 97 Eqpt			8	2.1															8	2.1	
FY 98 Eqpt					7	2.4													7	2.4	
FY 99 Eqpt							10	2.2											10	2.2	
FY 00 Eqpt									6	1.6									6	1.6	
FY 01 Eqpt											3	1.9							3	1.9	
FY 02 Eqpt													3	2.0					3	2.0	
FY 03 Eqpt															5	3.0			5	3.0	
FY TC Eqpt																	TBD	TBD	Cont.		
TOTAL INSTALLATION COST		1.3		2.1		2.4		2.2		1.6		1.9		2		3				16.5	
TOTAL PROCUREMENT COST		3.2		7.2		10.0		10.0		7.8		8.7		9.0		13.6				69.50	

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 3

CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

DELIVERY DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	2		3	3	2		3	3	1		5	5			3	3	
OUTPUT	2		2	2	4		2	2	3		2	5	3			3	3

INSTALLATION SCHEDULE:	PY	FY 01				FY 02				FY 03				IC	TOTAL	
		1	2	3	4	1	2	3	4	1	2	3	4			
INPUT			1	2			1	2			3	2			44	
OUTPUT				1	2			1	2			1	2	1		44

MODIFICATION TITLE: JMCIS - Afloat MINE WARFARE (MIW) SHIPBOARD SYSTEM (52JG/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, working aids and provides the means to send and receive tactical data between MCM and MHC and other ships in the battle group.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		IC		Total		
	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	4.7	4	1.2	1	0.3	1	0.3										26	7.7
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware	4	0.4	16	1.5	4	0.4	1	0.1	1	0.1										26	2.5
(PY) Eqpt	4	0.4																		4	0.4
FY 97 Eqpt			16	1.5																16	1.5
FY 98 Eqpt					4	0.4														4	0.4
FY 99 Eqpt							1	0.1												1	0.1
FY 00 Eqpt									1	0.1										1	0.1
FY 01 Eqpt																				0	0
FY 02 Eqpt																				0	0
FY 03 Eqpt																					
FY TC Eqpt																					
TOTAL INSTALLATION COST		0.4		1.5		0.4		0.1		0.1		0		0							2.5
TOTAL PROCUREMENT COST		1.6		6.2		1.6		0.4		0.4		0.00		0							10.2

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 2 PROCUREMENT LEADTIME: 3

CONTRACT DATES: FY 1997: Jan-97 FY 1998: Nov-97 FY 1999: Nov-98

DELIVERY DATES: FY 1997: Mar-97 FY 1998: Jan-98 FY 1999: Jan-99

	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT	4		4	6	6		2	2				1					1
OUTPUT	4		4	6	6		2	2				1					1

		FY 01				FY 02				FY 03				IC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4		

INPUT															26
OUTPUT															26

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES								A. DATE 16 SEPTEMBER 1996	
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE JMCIS Afloat (formerly TFCC) BLI: 2608 52JG					
ITEM	TOTAL I/C REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY WITH FY AND PRIOR FUND	PLANNED BUDGET YEAR (FY97) OCUREME	PLANNED BUDGET YEAR (FY98) OCUREME	PLANNED BUDGET YEAR (FY99) OCUREME	BALANCE	PHASING RATIONALE
JG021 JMCIS Afloat III	15		12	1	2				
JG023 JMCIS Afloat- Integrated Display S	25	1	4			3	3	14	Out Year
JG031 JMCIS AfloatMIW Sys	26		4		16	4	1	1	Out Year
MEMO ENTERED									
ITEM #1 JG021		ITEM #2 JG023		ITEM #3 JG031					
CV/CVN 7		CV/CVN 12		MCM 14					
LHA/LHD 6		LHA/LHD/L 12		MHC 12					
AGF/LCC 2		AGF 1							
TOTAL I/C 15					TOTAL I/C 25		TOTAL I/C 26		
ITEM #4		ITEM #5		ITEM #6					
TOTAL I/C					TOTAL I/C		TOTAL I/C		

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BUDGET ITEM JUSTIFICATION SHEET						Date February 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				2611000		Naval Tactical Command Support System		52DY
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$30.7	\$31.8	\$49.7	\$58.4	\$30.4	\$29.2	\$36.9	\$36.9
<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 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 (NAS's), 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>								

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Naval Tactical Command Support System	52DY
Funding for FY96 procured: 1) NTCSS equipment for the KITTYHAWK, KENNEDY, and EISENHOWER Battle Groups; 2) NTCSS equipment for Fleet Training Centers and MALS; 3) 95 sets of NALCOMIS Organizational Maintenance Activities (OMA) Phase III equipment; 4) equipment sets for ship systems; and 5) necessary production engineering and installation support.		
Funding for FY97 procures: 1) NTCSS equipment for the LINCOLN and REAGAN Battle Groups; 2) NTCSS equipment for Fleet Training Centers and MALS; 3) 84 sets of sets of NALCOMIS Organizational Maintenance Activities (OMA) Phase III equipment; 4) equipment sets for ships not part of a battle group; and 5) necessary production engineering and installation support.		
Funding for FY98 procures: 1) NTCSS equipment for Naval Air Stations, Shore Maintenance Activities, Fleet Training Centers and MALS; 2) various other equipment sets for ships not previously installed as part of a battle group; and 3) necessary production engineering and installation support.		
Funding for FY99 procures: 1) NTCSS equipment for Naval Air Stations, Shore Support Facilities, Fleet Training Centers and MALS; 2) various other equipment sets sets for ships not previously installed as part of a battle group; and 3) necessary production engineering and installation support.		
INSTALLATION AGENT: All FMP installation will be accomplished by Alteration Installation Team (AIT).		
Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.		

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE		
APPROPRIATION/BUDGET ACTIVITY						February 1997		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT			P-1 ITEM NOMENCLATURE					
			Naval Tactical Command Support System			52DY		
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation cost budgeted.								
<u>EQUIPMENT</u>	<u>FY 96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>
BG Equipment	\$15.6	\$14.0	\$2.4					
MALS/Shore Equipment	\$1.8	\$5.4	\$9.7	\$20.6	\$12.1	\$11.7	\$11.8	
Ship Set Equipment	\$.1	\$3.5	\$35.4	\$34.6	\$14.9	\$8.1		
Ship Set Equipment Upgrades					\$.8	\$6.9	\$21.6	\$21.3
MALS/Shore Upgrades								\$12.4
TOTAL	\$17.5	\$22.9	\$47.5	\$55.2	\$27.8	\$26.7	\$33.4	\$33.7

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WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Naval Tactical Command Support System			52DY		
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
DY001	Battle Group (BG) Equipment	A	3	11,948	2	8,652				
DY002	MALS/Shore Equipment	A	4	1,600	9	4,953	10	9,190	23	19,985
DY003	NALCOMIS Phase III Equipment	A	95	10,219	84	7,176				
DY004	Ship Set Equipment	A	2	103	12	2,172	43	26,813	50	22,019
DY500	Production Engineering Spt.	A	Var	2,936	Var	1,920	Var	2,163	Var	3,247
DY776	Non-FMP Installation	A		192		359		498		619
DY777	FMP Installation	A								
	Installation			3,707		6,590		10,273		11,677
	Design Service Agent							773		876
	TOTAL PROGRAM			30,705		31,822		49,710		58,423

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE Naval Tactical Command Support System 52DY							
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
DY001	Battle Group Equipment	96	PRC	I/Q	Navy	Jan-96	Apr-96	3	\$505,333	Yes	No	
		96	TBD/NTOPS	I/Q	Navy	Nov-95	Jan-96	3	\$552,000	Yes	No	
		96	Hewlett Packard/TAC4	I/Q	Navy	Nov-95	Mar-96	3	\$956,000	Yes	No	
		96	Various	TBD	Navy	Var	Var	3	\$1,969,333	N/A	N/A	
	Battle Group Equipment*	97	TBD/NTOPS	I/Q	Navy	Nov-96	Jan-97	2	\$1,142,292	Yes	No	
		97	Hewlett Packard/TAC4	I/Q	Navy	Nov-96	Mar-97	2	\$2,049,187	Yes	No	
		97	Various	TBD	Var	Var	Var	2	\$1,134,520	N/A	N/A	
D. REMARKS * Unit cost variance is due to the difference in Battle Group build												

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING											A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE Naval Tactical Command Support System 52DY						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
DY002	MALS/Shore Equipment	96	SYBASE-Baltimore SYSOREX-Fairfax	IDIQ	NISE-East NISMIC	Mar-96	Apr-96	4	\$150,000	Yes	No	
				I/Q		Feb-96	Mar-96	4	\$250,000			
	MALS/Shore Equipment	97	Hewlett Packard/TAC 4 Various	IDIQ	Navy	Nov-96	Jan-97	9	\$128,333	Yes	No	
				IDIQ		Nov-96	Jan-97	9	\$422,000	Yes	No	
	MALS/Shore Equipment	98	TBD/NTOPS Hewlett Packard/TAC 4 Various	IDIQ	Navy	Nov-97	Jan-98	10	\$218,000	Yes	No	
				IDIQ		Nov-97	Jan-98	10	\$236,000	Yes	No	
				IDIQ		Nov-97	Jan-98	10	\$465,000	N/A	N/A	
	MALS/Shore Equipment	99	TBD/NTOPS TBD/TAC 5 Various	IDIQ	Navy	Nov-98	Jan-99	23	\$224,000	Yes	No	
				IDIQ		Nov-98	Jan-99	23	\$194,000	Yes	No	
				IDIQ		Nov-98	Jan-99	23	\$450,910	N/A	N/A	

D. REMARKS

NOTE: The unit costs are notional, individual installation costs for 4 installations in FY96, 9 in FY97, 10 in FY98 and 23 in FY99. Cost variance is due to the difference in individual installation requirements.

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE Naval Tactical Command Support System 52DY						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
DY003	NALCOMIS Phase III Equipment	96	Sysorex, Inc. (option)	I/Q	ITAC	Nov-95	Jan-96	95	\$107,568	Yes	No	
		97	Sysorex, Inc. (option)	I/Q	ITAC	Nov-96	Jan-97	84	\$85,428	Yes	No	
D. REMARKS												

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE Naval Tactical Command Support System 52DY							
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
DY004	Ship Set Equipment	96	Various			Mar-96	May-96	2	\$51,500	Yes	No	
	Ship Set Equipment	97	Hewlett Packard/TAC 4	IDIQ	Navy	Nov-96	Jan-97	12	\$85,000	Yes	No	
			Various	IDIQ	Navy	Nov-96	Jan-97	12	\$96,000	N/A	N/A	
	Ship Set Equipment	98	TBD/NTOPS	IDIQ	Navy	Nov-97	Jan-98	43	\$120,000	Yes	No	
			Hewlett Packard/TAC 4	IDIQ	Navy	Nov-97	Jan-98	43	\$211,000	Yes	No	
			Various	IDIQ	Navy	Nov-97	Jan-98	43	\$292,558	N/A	N/A	
	Ship Set Equipment	99	TBD/NTOPS	IDIQ	Navy	Nov-98	Jan-99	50	\$117,200	Yes	No	
			TBD/TAC 5	IDIQ	Navy	Nov-98	Jan-99	50	\$153,000	Yes	No	
			Various	IDIQ	Navy	Nov-98	Jan-99	50	\$170,180	N/A	N/A	

D. REMARKS

Note: Cost variance is due to the difference in ship classes being installed

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MODIFICATION TITLE: Naval Tactical Command Support System (NTCSS) 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)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment	10	47.2	2	8.7																12	55.9
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Eqpt	9	32.2																		9	32.2
FY97 Eqpt			2	5.3																2	5.3
FY98 Eqpt					1	2.4														1	2.4
FY99 Eqpt																					
FY00 Eqpt																					
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost	9	32.2	2	5.3	1	2.4														12	39.9
Total Procurement Cost		79.4		14.0		2.4															95.8

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES:

FY 1996: 11/95 FY 1997: 11/96 FY 1998: N/A FY 1999: N/A

DELIVERY DATE:

FY 1996: 1/96 FY 1997: 1/97 FY 1998: N/A FY 1999: N/A

INSTALLATION SCHEDULE:

INPUT

OUTPUT

PY	FY 97				FY 98				FY 99				FY 00				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
9	1	1			1													
9		1	1			1												

INSTALLATION SCHEDULE:

INPUT

OUTPUT

12
12

UNCLASSIFIED

MODIFICATION TITLE: Naval Tactical Command Support System (NTCSS) NALCOMIS Phase III Equipment (DY003)
 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)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment	191	22.8	84	7.2																275	30.0
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Eqpt	191																				191
FY97 Eqpt			84																		84
FY98 Eqpt																					
FY99 Eqpt																					
FY00 Eqpt																					
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost	191		84																		275
Total Procurement Cost		22.8		7.2																	30.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 month PROCUREMENT LEADTIME: 1 month
 CONTRACT DATES: FY 1996 11/95 FY 1997: 11/96 FY 1998 N/A FY 1999 N/A

DELIVERY DATE: FY 1996: 1/96 FY 1997: 1/97 FY 1998 N/A FY 1999 N/A

PY	FY 97			FY 98			FY 99			FY 00						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INSTALLATION SCHEDULE:

	PY	FY 01			FY 02			FY 03			TC	Total			
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	191	17	31	18	18										275
OUTPUT	191	17	31	18	18										275

INSTALLATION SCHEDULE:

INPUT	275
OUTPUT	275

* NOTE: Additional 84 procured as OMA's under the CAP line item for a total of 359 installations. Installations costs less than \$0.1M per year.

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MODIFICATION TITLE: Naval Tactical Command Support System (NTCSS)/Ship Set Equipment (52DY/DY004)
 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.). (Note: Total inventory adjusted to reflect increased units completed under BG line.)

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
RDT&E																						
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment	10	1.7	12	2.2	43	26.8	50	22.0	32	9.6	36	3.8								183	66.1	
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Eqpt	10	1.6																			10	1.6
FY97 Eqpt			12	1.3																	12	1.3
FY98 Eqpt					43	8.6															43	8.6
FY99 Eqpt							50	12.6													50	12.6
FY00 Eqpt									32	5.3											32	5.3
FY01 Eqpt											36	4.3									36	4.3
FY02 Eqpt																						
FY03 Eqpt																						
FY TC Eqpt																						
Total Installation Cost	10	1.6	12	1.3	43	8.6	50	12.6	32	5.3	36	4.3								183	33.7	
Total Procurement Cost		3.3		3.5		35.4		34.6		14.9		8.1										99.8

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 2 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES:

FY 1996: 3/96 FY 1997: 11/96 FY 1998: 11/97 FY 1999: 11/98

DELIVERY DATE:

FY 1996: 5/96 FY 1997: 1/97 FY 1998: 11/98 FY 1999: 1/99

INSTALLATION SCHEDULE:

	PY	FY 97				FY 98				FY 99				FY 00				TC	Total			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT	10		6	6		6	16	15	6	9	27	14		6	20	6						
OUTPUT	10			6	6		14	20	8		17	23	11		9	17					6	

INSTALLATION SCHEDULE:

INPUT			28	8																		183
OUTPUT					28	8																183

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY							C. P-1 ITEM NOMENCLATURE			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							Naval Tactical Command Support System 52DY			
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE	
DY001	Battle Group (BG) Equipment	12	10		2				Complete	
DY003	NALCOMIS Phase III	275	191		84				Complete	
MEMO ENTERED										
ITEM #1	DY001	Battle Group (BG) Equipment	ITEM #2	DY003	item	ITEM #3	cost code	item		
hull/location	qty*	hull/location	hull/location	qty*	hull/location	hull/location	qty	hull/location	qty	
CARRIER	12		NALCOMIS	275						
COMBAT										
AMPHIBOUS										
SUPPORT										
SUBMARINE										
*Total requirement is 12 4 procured under the CAP line item.			*Total required is 359 Additional 84 procured as OMA's under the CAP line item.							
TOTAL I/O		12	TOTAL I/O		275	TOTAL I/O				
ITEM #4	cost code	item	ITEM #5	cost code	item	ITEM #6	cost code	item		
hull/location	qty	hull/location	hull/location	qty	hull/location	hull/location	qty	hull/location	qty	
TOTAL I/O			TOTAL I/O			TOTAL I/O				

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BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT			Advanced Tactical Data Link Systems			2614	Q2DR	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$15.1	\$17.4	\$17.0	\$36.3	\$27.6	\$26.7	\$31.5	\$36.3
<p>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.</p> <p>LINK-16 TERMINALS: The AN/URC-107(V) provides selected U.S. Navy tactical air, U.S. Navy ships, and Marine Corps ground units crypto secure, jam resistant, low-probability-of-exploitation communication of tactical data and voice at a high data rate. It has the additional capabilities of common-grid navigation and the use of automatic relay capabilities inherent in the equipment that enable long-range communication and provide jam resistance. JTIDS full rate production approval was granted on 1 March 1995 and the contract was signed on 2 March 1995. MIDS-LVT, incorporated into an equivalent shipboard suite, will reduce the cost of providing this capability when it enters production in FY99.</p> <p>COMMAND AND CONTROL PROCESSOR (C2P) / COMMON DATA LINK MANAGEMENT SYSTEM (CDLMS): The C2P performs link translation and processing functions and provides the interface between the Tactical Digital Information Links (TADILS) A, C, and J (i.e., Link 11, 4A, and 16) and selected shipboard processors (Advanced Combat Direction Systems (ACDS) and AEGIS C&D). The C2P extracts information from TADILs, translate between TADILs, and provide the information derived from the links to the on-board processors. It will also format information from the on-board processors and provide it to the link equipment for transmission. This line item procures the standard Navy Non-Developmental Item (NDI) hardware that hosts the C2P software. The C2P(R) is a Versa Module Eurocard (VME) based system. In FY 96 and in FY 97 C2P(R) units will be procured for backfit installs on non-AEGIS ships. In FY 97/98 and out, all new procurements will be CDLMS units</p>								

**P-1 SHOPPING LIST
ITEM NO. 70 PAGE NO. 1**

Exhibit P-40

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	February 1997
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Advanced Tactical Data Link Systems 2614 Q2DR	
<p>which include upgraded capabilities for multi-link control and management. CDLMS will integrate the Common Shipboard Data Terminal Sets (CSDTS) and will host the Ship Gridlock System with Auto-Correlation (SGS/AC) VME.</p> <p>LINK-11 TERMINALS: This program also provides for Common Shipboard Data Terminal Sets (CSDTS) which replaces obsolete data terminal sets on all combatant ships, provides LINK-11 capability to non-TDS ships and enables LINK-11 combatants to operate on two simultaneous LINK-11 nets. This effort moves from the HF Link 11 line item commencing in FY 98.</p> <p>JUSTIFICATION OF FY 96 REQUIREMENTS: FY 96 procured AN/URC-107(V) ship terminals and C2P(R) computer sets for installation on ships; ship classes are LHD and LHA. Also purchased were installation of prior years purchased equipments, support and test equipment, interim support, production support, and training support.</p> <p>JUSTIFICATION OF FY 97 REQUIREMENTS: FY 97 procured AN/URC-107(V) ship terminals and C2P(R) computer sets for installation on ships; ship classes are LHA, LHD, and DDG. Also included were funds for installation, support and test equipment, interim support, production support, and training support.</p> <p>JUSTIFICATION OF FY 98 REQUIREMENTS: FY 98 will procure AN/URC-107(V) ship terminals and CDLMS computer sets for installation on ships; ship classes are LHA, LHD and DDG. This program also provides for CSDTS backfit. Also included are funds for installation, support and test equipment, production support, and training support.</p> <p>JUSTIFICATION OF FY 99 REQUIREMENTS: FY 99 will procure AN/XXX (MIDS Variant) ship terminals and CDLMS computer sets for installation on ships; ship classes are LHA, LCC, DD, and DDG. This program also provides for CSDTS backfit. Also included are funds for installation, support and test equipment, production support, and training support.</p> <p>INSTALLATION AGENT: NRaD, San Diego, CA</p>		

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Exhibit P-40

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE						
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Advanced Tactical Data Link Systems	2614	Q2DR					
MODIFICATION SUMMARY								
Listed below are the costs (i.e., hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:								
EQUIPMENT	FYPY	FY97	FY98	FY99	FY00	FY01	FY02	FY03
ATDLS	141.6	14.4	16.4	33.6	24.8	23.2	28.6	33.1

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WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Advanced Tactical Data Link Systems 2614 Q2DR					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DR001	AN/URC-107(V)	A	2	3,201	4	6,747	4	6,706		
DR002	Production Support (AN/URC)	N/A		930		1,099				497
DR003	C2P / C2P(R) / CDLMS	A	7	2,900	6	2,364	6	2,610	15	6,720
DR004	Production Support (C2P(R))	N/A		159		250				249
DR008	First Article - TAC-N	N/A		739		637				
DR010	AN/XXX (MIDS Variant)	B							15	20,634
DR011	Production Support (MIDS V)	N/A								562
DR519	Interim Contractor Support	N/A		435						
DR666	Training Support	N/A		1,438		984				650
DR776	Installation of Equipment/No	N/A				245		298		
DR777	FMP	N/A		5,300		5,082		6,820		6,423
	Installation of Equipment/FM	N/A		5,300		5,082		6,256		5,674
	Design Services Allocation	N/A						564		749
DRXXX	CSDTS / LINK-11	N/A					4	557	4	569
	TOTAL PROGRAM			15,102		17,408		16,991		36,304

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE		
										February 1997		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE							
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	CONTRACTOR BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
DR001	AN/URC-107(V)	96	Rockwell/GEC*	C/FFP	USAF	Dec-95	Oct-97	2	\$1,600,500	YES	NO	
		97	Rockwell/GEC*	C/FFP	USAF	Dec-96	Oct-98	4	\$1,686,750	YES	NO	
		98	Rockwell/GEC*	C/FFP	USAF	Dec-97	Oct-99	4	\$1,676,500	YES	NO	
DR003	C2P (R)	96	TBD	C/FFP**	TBD	Aug-96	Oct-97	7	\$414,286	YES	NO	
		97	TBD	C/FFP	TBD	Apr-97	Oct-98	6	\$394,000	YES	NO	
	CDLMS	98	TBD	C/FFP	TBD	Apr-98	Oct-99	6	\$435,000	YES	NO	
		99	TBD	C/FFP	TBD	Apr-99	Oct-00	15	\$448,000	YES	NO	
DRXX	CSDTS / Link-11 ***	98	TBD	C/FFP	SPAWAR	Dec-97	Jun-98	4	\$139,250	YES	NO	
		99	TBD	C/FFP	SPAWAR	Dec-98	Jun-99	4	\$142,250	YES	NO	
DR010	AN/XXX (MIDS Variant	99	TBD	C/FFP	SPAWAR	Dec-98	Oct-00	15	\$1,375,600	NO	NO	

D. REMARKS

- UNIT COST is an average unit cost for the Link-16 ship terminal, antenna, simulator/stimulator, support and test equipment, and non-recurring costs and may include system modification kits.
 * Rockwell, Cedar Rapids IA and GEC, Wayne NJ are the only contractors currently competing on JTIDS terminals.
 ** NAVSEA currently contracts C2P with Loral, St. Paul MN on Indefinite Order/Indefinite Quantity contracts. C2P(R)/CDLMS units will be off-the-shelf hardware.
 *** FY 98 & 99 CSDTS procurement includes non-recurring cost.

MODIFICATION TITLE: **Link-16 (SHORE INSTALLATIONS)**

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: **Link-16 is an integration of the Time Division Multiple Access (TDMA) family of JTIDS/MIDS terminals with the TADIL J message standard. Link-16 consists of the ship terminal and the Command and Control Processor (C2P).**

Starting in FY 97, all ships except AEGIS will get a VME based C2P hardware set. LINK 16 will provide crypto-secure, jam resistant communications of tactical data at a high data rate. The C2P performs link processing functions and provides the interface between the Tactical Digital Information Links and selected shipboard pro

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTON **MS IIIA**

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al				
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$			
RDT&E																							
PROCUREMENT																							
Kit Quantity																							
Installation Kits																							
Installation Kit Nonrecurring																							
Equipment	8	25.0																			8	25.0	
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other - MIDS							2	3.4													2	3.4	
Other - C2P(R)	5	1.2	2	0.8	2	0.9															9	2.9	
Installation of Hardware																							
(PY) Eqpt	8	2.2	5	0.2																	13	2.4	
FY97 Eqpt					4	0.3															4	0.3	
FY98 Eqpt																							
FY99 Eqpt										2	0.4											2	0.4
FY00 Eqpt																							
FY01 Eqpt																							
FY02 Eqpt																							
FY03 Eqpt																							
FY TC Eqpt																							
Total Installation Cost	8	2.2	5	0.2	4	0.3	0	0.0	0	0.0	2	0.4	0	0.0	0	0.0	0	0.0	0	0.0	19	3.1	
Total Procurement Cost	28.4		1.0		1.2		3.4		0.0		0.4	0.0		0.0		0.0		0.0		0	34.4		

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES: FY 1997: 4/97 FY 1998 4/98 FY 1999 4/99

DELIVERY DATE: FY 1997: #### FY 1998 #### FY 1999 ####

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	13		2					2				2					
OUTPUT	8				5				2	2							

INSTALLATION SCHEDULE:	FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT													0	19
OUTPUT			2										0	19

MODIFICATION TITLE: **Link-16 (SHIP INSTALLATIONS)**

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: **Link-16 is an integration of the Time Division Multiple Access (TDMA) family of JTIDS/MIDS terminals with the TADIL J message standard.**

Link-16 consists of the ship terminal and the Command and Control Processor (C2P).

Starting in FY 97, all ships except AEGIS will get a VME based C2P hardware set. LINK 16 will provide crypto-secure, jam resistant communications of tactical data and voice at a high data rate. The C2P performs link processing functions and provides the interface between the Tactical Digital Information Links and selected shipboard processors.

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

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
RDT&E																						
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment	47	91.4	4	8.3	4	8.6	8	17.3	7	13.4	7	12.8	2	3.3						79	155.2	
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Other MIDS (RetireJTIDS)												7	8.2	7	7.3	44	45.3			58	60.8	
Other MIDS (E-2C Swap)							5	3.1	5	2.7	4	2.0	4	2.0	4	2.0	1	0.5			23	12.3
Other C2P (Retire UYK-43)							7	3.3	6	2.9	1	0.5	20	9.9	26	13.2	7	3.6			67	33.4
Installation of Hardware																						
(PY) Eqpt	23	22.1	9	4.9	10	6.0	5	3.0													47	36.0
FY97 Eqpt							4	2.5													4	2.5
FY98 Eqpt									4	3.8											4	3.8
FY99 Eqpt									7	1.2	13	6.1									20	7.3
FY00 Eqpt											6	1.0	12	6.0							18	7.0
FY01 Eqpt													1	0.0	11	5.9					12	5.9
FY02 Eqpt															20	3.9	13	3.4			33	7.3
FY03 Eqpt																	37	7.5			37	7.5
FY TC Eqpt																	52	10.5			52	10.5
Total Installation Cost	23	22.1	9	4.9	10	6.0	9	5.5	11	5.0	19	7.1	13	6.0	31	9.8	102	21.4			227	87.8
Total Procurement Cost		113.5		13.2		14.6		29.2		24.0		22.4		29.4		32.3		70.8				349.5

METHOD OF IMPLEMENTATION: C/FFP ADMINISTRATIVE LEADTIME: mos. PROCUREMENT LEADTIME: mos.

CONTRACT DATES: FY 1997: 12/96 FY 1998: 12/97 FY 1999: 12/98

DELIVERY DATE: FY 1997: 10/98 FY 1998: 10/99 FY 1999: 10/00

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INSTALLATION SCHEDULE:	FY 97				FY 98				FY 99				FY 00				TC	Total				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT	39	4			1	1					1	1	2				9	1	1	1		
OUTPUT	21	3	2	3	1	2		5	3			1	3	3	2		9	1	1	1		

INSTALLATION SCHEDULE:	FY 01				FY 02				FY 03				TC	Total			
	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT		9	1	4	6	2	4	4	3	2	3	14	12			102	227
OUTPUT		9	1	4	6	2	4	4	3	2	3	14	12			102	227

UNCLASSIFIED

MODIFICATION TITLE: **Link-16/JTIDS (SHIP INSTALLATIONS)**

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: **Link-16 is an integration of the Time Division Multiple Access (TDMA) family of JTIDS/MIDS terminals with the TADIL J message standard.**

Link-16 consists of the ship terminal and the Command and Control Processor (C2P).

Starting in FY 97, all ships except AEGIS will get a VME based C2P hardware set. LINK 16 will provide crypto-secure, jam resistant communications of tactical data and voice at a high data rate. The C2P performs link processing functions and provides the interface between the Tactical Digital Information Links and selected shipboard processors.

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

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment	47	57.5	4	6.7	4	6.7													55	71.0	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Other MIDS (Retire/JTIDS)																					
Other MIDS (E-2C Swap)																					
Other C2P (Retire UYK-43)																					
Installation of Hardware																					
(PY) Eqpt	23	22.1	9	4.9	10	6.0	5	3.0												47	36.0
FY97 Eqpt							4	2.5												4	2.5
FY98 Eqpt									4	3.8										4	3.8
FY99 Eqpt																					
FY00 Eqpt																					
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost	23	22.1	9	4.9	10	6.0	9	5.5	4	3.8										55	42.3
Total Procurement Cost		79.6		11.6		12.7		5.5		3.8											113.2

METHOD OF IMPLEMENTATION: C/FFP ADMINISTRATIVE LEADTIME: mos. PROCUREMENT LEADTIME: 22 mos.

CONTRACT DATES: FY 1997: 12/96 FY 1998: 12/97 FY 1999:

DELIVERY DATE: FY 1997: 10/98 FY 1998: 10/99 FY 1999:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INSTALLATION SCHEDULE:

INPUT	41	4				1	1				1	1	2	1	1	1	1
OUTPUT	23	3	2	3	1	2		5	3	1	3	3	2	1	1	1	1

	FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		

INSTALLATION SCHEDULE:

INPUT														55
OUTPUT														55

UNCLASSIFIED

MODIFICATION TITLE: **Link-16/MIDS (SHIP INSTALLATIONS)**

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: **Link-16 is an integration of the Time Division Multiple Access (TDMA) family of JTIDS/MIDS terminals with the TADIL J message standard.**

Link-16 consists of the ship terminal and the Command and Control Processor (C2P).

Starting in FY 97, all ships except AEGIS will get a VME based C2P hardware set. LINK 16 will provide crypto-secure, jam resistant communications of tactical data and voice at a high data rate. The C2P performs link processing functions and provides the interface between the Tactical Digital Information Links and selected shipboard processors.

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

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment					8	13.5	7	10.1	7	9.4	2	2.3							24	35.3	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Other MIDS (Retire JTIDS)																					
Other MIDS (E-2C Swap)																					
Other C2P (Retire UYK-43)																					
Installation of Hardware																					
(PY) Eqpt																					
FY97 Eqpt																					
FY98 Eqpt																					
FY99 Eqpt								8	5.1										8	5.1	
FY00 Eqpt										7	4.9							7	4.9		
FY01 Eqpt												7	5.0					7	5.0		
FY02 Eqpt																	2	1.1	2	1.1	
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost									8	5.1	7	4.9	7	5.0			2	1.1	24	16.1	
Total Procurement Cost						13.5	10.1		14.5		7.2	5.0					1.1			51.4	

METHOD OF IMPLEMENTATION:

C/FFP ADMINISTRATIVE LEADTIME: mos. PROCUREMENT LEADTIME: mos.

CONTRACT DATES:

FY 1997: FY 1998: FY 1999: 12/98

DELIVERY DATE:

FY 1997: FY 1998: FY 1999: 10/00

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT																					
OUTPUT																					

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total	
	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT	3	1	1	3	1	2	2	2	2	2	2	1		2	24
OUTPUT	3	1	1	3	1	2	2	2	2	2	2	1		2	24

UNCLASSIFIED

MODIFICATION TITLE: **Link-16/MIDS (Retire JTIDS) (SHIP INSTALLATIONS)**

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: **Link-16 is an integration of the Time Division Multiple Access (TDMA) family of JTIDS/MIDS terminals with the TADIL J message standard.**

Link-16 consists of the ship terminal and the Command and Control Processor (C2P).

Starting in FY 97, all ships except AEGIS will get a VME based C2P hardware set. LINK 16 will provide crypto-secure, jam resistant communications of tactical data and voice at a high data rate. The C2P performs link processing functions and provides the interface between the Tactical Digital Information Links and selected shipboard processors.

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

FINANCIAL PLAN: (\$ in millions)

	P Y	FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	QTY	\$	QTY	\$	QTY	\$	QTY	\$											
RDT&E																				
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kit Nonrecurring																				
Equipment																				
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Other MIDS (RetireJTIDS)												7	8.2	7	7.3	44	45.3	58	60.8	
Other MIDS (E-2C Swap)																				
Other C2P (Retire UYK-43)																				
Installation of Hardware																				
(PY) Eqpt																				
FY97 Eqpt																				
FY98 Eqpt																				
FY99 Eqpt																				
FY00 Eqpt																				
FY01 Eqpt																				
FY02 Eqpt																7	1.4	7	1.4	
FY03 Eqpt															7	1.4	7	1.4		
FY TC Eqpt															44	8.6	44	8.6		
Total Installation Cost															58	11.4	58	11.4		
Total Procurement Cost												8.2	7.3		56.7				72.2	

METHOD OF IMPLEMENTATION: C/FFP ADMINISTRATIVE LEADTIME: mos. PROCUREMENT LEADTIME: 22 mos.

CONTRACT DATES: FY 1997: FY 1998: FY 1999:

DELIVERY DATE: FY 1997: FY 1998: FY 1999:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INSTALLATION SCHEDULE:

INPUT

OUTPUT

	FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		

INSTALLATION SCHEDULE:

INPUT 58 58

OUTPUT 58 58

UNCLASSIFIED

MODIFICATION TITLE: **Link-16/MIDS (E-2C Swap) (SHIP INSTALLATIONS)**

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION:

Link-16 is an integration of the Time Division Multiple Access (TDMA) family of JTIDS/MIDS terminals with the TADIL J message standard.

Link-16 consists of the ship terminal and the Command and Control Processor (C2P).

Starting in FY 97, all ships except AEGIS will get a VME based C2P hardware set. LINK 16 will provide crypto-secure, jam resistant communications of tactical data and voice at a high data rate. The C2P performs link processing functions and provides the interface between the Tactical Digital Information Links and selected shipboard processors.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MS IIIA

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment																					
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Other MIDS (Retire JTIDS)																					
Other MIDS (E-2C Swap)							5	3.1	5	2.7	4	2.0	4	2.0	4	2.0	1	0.5	23	12.3	
Other C2P (Retire UYK-43)																					
Installation of Hardware																					
(PY) Eqpt																					
FY97 Eqpt																					
FY98 Eqpt																					
FY99 Eqpt										5	1.0									5	1.0
FY00 Eqpt												5	1.1							5	1.1
FY01 Eqpt															4	0.9				4	0.9
FY02 Eqpt																	4	0.9		4	0.9
FY03 Eqpt																	4	0.9		4	0.9
FY TC Eqpt																	1	0.3		1	0.3
Total Installation Cost										5	1.0	5	1.1	4	0.9	9	2.1		23	5.1	
Total Procurement Cost								3.1	2.7		3.0		3.1		2.9		2.6				17.4

METHOD OF IMPLEMENTATION:

C/FFP ADMINISTRATIVE LEADTIME: mos. PROCUREMENT LEADTIME: mos.

CONTRACT DATES:

FY 1997: FY 1998: FY 1999: 12/98

DELIVERY DATE:

FY 1997: FY 1998: FY 1999: 10/00

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT																
OUTPUT																

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total	
	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT			2	3		2	2	1			2	2		9	23
OUTPUT			2	3		2	2	1			2	2		9	23

UNCLASSIFIED

MODIFICATION TITLE: C2P(UYK-43) (SHIP INSTALLATIONS)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Link-16 is an integration of the Time Division Multiple Access (TDMA) family of JTIDS/MIDS terminals with the TADIL J message standard.

Link-16 consists of the ship terminal and the Command and Control Processor (C2P).

Starting in FY 97, all ships except AEGIS will get a VME based C2P hardware set. LINK 16 will provide crypto-secure, jam resistant communications of tactical data and voice at a high data rate. The C2P performs link processing functions and provides the interface between the Tactical Digital Information Links and selected shipboard processors.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS IIIA

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment	40	31.1																		40	31.1
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Other MIDS (Retire JTIDS)																					
Other MIDS (E-2C Swap)																					
Other C2P (Retire UYK-43)																					
Installation of Hardware	****Installation of hardware is completed as a ship set with the Link 16 Terminal and is reflected in the JTIDS and MIDS P-3A exhibits as part of the total cost																				
(PY) Eqpt																					
FY97 Eqpt																					
FY98 Eqpt																					
FY99 Eqpt																					
FY00 Eqpt																					
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost																					
Total Procurement Cost		31.1																			31.1

METHOD OF IMPLEMENTATION:

C/FFP ADMINISTRATIVE LEADTIME: mos. PROCUREMENT LEADTIME: mos.

CONTRACT DATES:

FY 1997: FY 1998: FY 1999:

DELIVERY DATE:

FY 1997: FY 1998: FY 1999:

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	26	6	4	3	3											
OUTPUT	21	3	2	3	1	2		5	3	1	1					

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														40
OUTPUT														40

UNCLASSIFIED

MODIFICATION TITLE: C2P(R)/CDLMS (SHIP INSTALLATIONS)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Link-16 is an integration of the Time Division Multiple Access (TDMA) family of JTIDS/MIDS terminals with the TADIL J message standard.

Link-16 consists of the ship terminal and the Command and Control Processor (C2P).

Starting in FY 97, all ships except AEGIS will get a VME based C2P hardware set. LINK 16 will provide crypto-secure, jam resistant communications of tactical data and voice at a high data rate. The C2P performs link processing functions and provides the interface between the Tactical Digital Information Links and selected shipboard processors.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS IIIA

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment	7	2.8	4	1.6	4	1.9	8	3.8	7	3.3	7	3.4	2	1.0						39	17.8
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Other MIDS (Retire/JTIDS)																					
Other MIDS (E-2C Swap)																					
Other C2P (Retire UYK-43)																					
Installation of Hardware	****Installation of hardware is completed as a ship set with the Link 16 Terminal and is reflected in the JTIDS and MIDS P-3A exhibits as part of the total cost																				
(PY) Eqpt																					
FY97 Eqpt																					
FY98 Eqpt																					
FY99 Eqpt																					
FY00 Eqpt																					
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost																					
Total Procurement Cost		2.8		1.6		1.9		3.8		3.3		3.4		1.0							17.8

METHOD OF IMPLEMENTATION:

C/FFP ADMINISTRATIVE LEADTIME: mos. PROCUREMENT LEADTIME: mos.

CONTRACT DATES:

FY 1997: 4/97 FY 1998: 4/98 FY 1999: 4/99

DELIVERY DATE:

FY 1997: 10/98 FY 1998: 10/99 FY 1999: 10/00

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT	7												1	1	2		1	1	1	1
OUTPUT	4												2	3	2		1	1	1	1

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total					
	1	2	3	4	1	2	3	4	1	2	3	4							
INPUT		3	1	1	3		1	2	2	2		2	2	2	1		2		39
OUTPUT		3	1	1	3		1	2	2	2		2	2	2	1		2		39

UNCLASSIFIED

MODIFICATION TITLE: C2P (CDLMS)/(Retire UYK-43) (SHIP INSTALLATIONS)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Link-16 is an integration of the Time Division Multiple Access (TDMA) family of JTIDS/MIDS terminals with the TADIL J message standard.

Link-16 consists of the ship terminal and the Command and Control Processor (C2P).

Starting in FY 97, all ships except AEGIS will get a VME based C2P hardware set. LINK 16 will provide crypto-secure, jam resistant communications of tactical data and voice at a high data rate. The C2P performs link processing functions and provides the interface between the Tactical Digital Information Links and selected shipboard processors.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS IIIA

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment																					
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Other MIDS (Retire JTIDS)																					
Other MIDS (E-2C Swap)																					
Other C2P (Retire UYK-43)							7	3.3	6	2.9	1	0.5	20	9.9	26	13.2	7	3.6	67	33.4	
Installation of Hardware																					
(PY) Eqpt																					
FY97 Eqpt																					
FY98 Eqpt																					
FY99 Eqpt							7	1.2												7	1.2
FY00 Eqpt									6	1.0										6	1.0
FY01 Eqpt											1	0.017								1	0.0
FY02 Eqpt													20	3.9						20	3.9
FY03 Eqpt																	26	5.2		26	5.2
FY TC Eqpt																	7	1.6		7	1.6
Total Installation Cost								7	1.2	6	1.0	1	0.0	20	3.9		33	6.8	67	13.0	
Total Procurement Cost								3.3	4.1		1.5		9.9	17.1				10.4		46.4	

METHOD OF IMPLEMENTATION:

C/FFP ADMINISTRATIVE LEADTIME: mos. PROCUREMENT LEADTIME: mos.

CONTRACT DATES:

FY 1997: FY 1998: FY 1999: 4/99

DELIVERY DATE:

FY 1997: FY 1998: FY 1999: 10/00

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT																
OUTPUT																

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total	
	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT	6				1				1	10	9			33	67
OUTPUT	6				1				1	10	9			33	67

UNCLASSIFIED

MODIFICATION TITLE: CSDTS/HF Link-11 (Ship Installations)
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

Link-11 is an automatic high speed computer to computer HF or UHF radio communications link for the exchange of tactical data on a near real time basis. This procurement provides Link-11 capability to non-Tactical Data Systems and enables LINK-11 combatants to operate two simultaneous LINK-11 nets with a new off the shelf CSDTS. 1st year has 7 mos delivery schedule/options have 5 mos delivery schedule.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Fully developed off the shelf procurement.
 FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment					4	0.6	4	0.6	4	0.6	4	0.7	4	0.7	4	0.7	107	156.1	131	160.0	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Eqpt																					
FY97 Eqpt																					
FY98 Eqpt					4	0.2	4	0.2	4	0.2	4	0.2	4	0.2	4	0.2	107	11.7	131	12.9	
FY99 Eqpt																					
FY00 Eqpt																					
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost					4	0.2	4	0.2	4	0.2	4	0.2	4	0.2	4	0.2	107	11.7	131	12.9	
Total Procurement Cost						0.8		0.8		0.8		0.9		0.9		0.9		167.8			172.9

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 4 MOS PROCUREMENT LEADTIME: 7 MOS

CONTRACT DATES: FY 1997: FY97 & prior funded in Q2T3 FY 1998: 12/97 FY 1999: 12/98

DELIVERY DATE: FY 1997: N/A FY 1998: 6/98 FY 1999: 6/99

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT																	
OUTPUT																	

INPUT																					
OUTPUT																					

INSTALLATION SCHEDULE:	PY	FY 01				FY 02				FY 03				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT															
OUTPUT															

INPUT															107	131	
OUTPUT																107	131

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TIME PHASED REQUIREMENTS SCHEDULE		A. APPROPRIATION/BUDGET ACTIVITY												B. P-1 ITEM NOMENCLATURE								C. DATE								
		OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMEN												Advanced Tactical Data Link Systems								February 1997								
COST CODE AND NAME		FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				Ltr				
DR001/DR010 JTIDS/MIDS		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	Yrs
ACTIVE FORCE INVENTORY (P)OP,N		3	2	3	1	2		5	3	1	3	3	2	1	1	1	1	3	1	1	3	1	2	2	2	9				
(P)OP,N BF																														
(P)SC,N		1	1	2	3		1	1			3				2								3							12
SCHOOLS/OTHER TRAINING (P)																			2											
OTHER (P)		11	9	4	8	2	1	1	1	1	1	2				3	2	17	18	18	18	34	34	34	34	1292				
TOTAL PHASED REQ (C)		114	129	141	150	162	166	168	175	179	181	188	193	195	196	199	203	206	226	247	271	295	333	371	409	446	###			
ASSETS ON HAND (BP)																														
DELIVER FY96/PRIOR OP,N (P) 55		4				1	1																							
FY96/PRIOR SC,N (P) 20		1	1	2	3		1	1																						
FY96/PRIOR OTHER (P) 110		11	9	6	6	2	1	1	1																					
FY97 OP,N (P) 4												1	1	2																
FY97 SC,N (P) 3												3																		
FY97 OTHER (P) 4										1	1	2																		
FY98 OP,N (P) 4															1	1	1	1												
FY98 SC,N (P) 2															2															
FY98 OTHER (P) 5																3	2													
FY99 OP,N (P) 10																		3	3	1	3									
FY99 OPN MIDS/E-2(P) 5																				2	3									
FY99 SC,N (P) 3																				3										
FY99 OTHER (P) 71																		17	18	18	18									
FY00 OP,N (P) 7																						1	2	2	2	9				
FY00 OPN MIDS/E-2(P) 5																						3	2	2	1	71				
FY00 SC,N (P) 3																														
FY00 OTHER (P) 136																						34	34	34	34	1292				
TOTAL ASSETS (C)		132	148	158	166	175	178	181	183	184	185	190	193	195	196	199	203	206	226	247	271	295	333	371	409	446	###			
QTY OVER (+) OR SHORT (-)		19	17	16	13	12	13	8	5	4	2																			
D. REMARKS		FY 94/95 buy for ship terminals commenced delivery 8 mos. in advance of contractually required date												E.		TOTAL RQMT		INSTALLED		ON HAND		FY 98 PRIOR UNDELIVERED		UNFUNDED						
* Other - 1444 F/A18 Aircraft 107 F14 & 65 submarines & 43 170 OPN includes:		1. APPN. OPN												170		49				14		107								
79 ships+8 JTIDS Trnr + 2 MIDS Trnr + 23 E-2C Swap + 58 R		2. APPN. Other												1661		84				60		###								
DD FORM 2447, JUN 86		3. PRCRMT LEADTIME												ADMIN		4 mos.		INIT ORDER		22 mos.		REORDER 22 mos.								

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TIME PHASED REQUIREMENTS SCHEDULE		A. APPROPRIATION/BUDGET ACTIVITY												B. P-1 ITEM NOMENCLATURE				C. DATE															
		FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				Ltr							
DR003	C2P(R)/CDLMS	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	Yrs			
ACTIVE FORCE INVENTORY	(P)OP,N	3	2	3	1	2		5	3	1	3	3	2	1	1	1	1	3	1	1	3	1	2	2	2					9			
	(P)SC,N	1	1	2	3		1	1			3				2					3		3								12			
SCHOOLS/OTHER TRAINING	(P)				5					2				2												1				53			
OTHER CDLMS BF	(P)									7								6															
TOTAL PHASED REQ	(C) 41	45	48	53	62	64	65	71	74	77	83	86	88	98	101	102	103	112	113	117	120	125	127	129	131	205							
ASSETS ON HAND	(BP)																																
DELIVER FY96/PRIOR OP,N	(P) 60	6	4	3	3	3	2	5																									
FY96/PRIOR SC,N	(P) 20	1	1	2	3		1	1																									
FY96/PRIOR OTHER	(P)																																
FY97 OP,N	(P) 6									2	1	1	2																				
FY97 SC,N	(P) 3										3																						
FY97 OTHER	(P)																																
FY98 OP,N	(P) 6													3	1	1	1																
FY98 SC,N	(P) 2														2																		
FY98 OTHER	(P)																																
FY99 OP,N	(P) 8																	3	1	1	3												
FY99 SC,N	(P) 3																			3													
FY99 OTHER CDLMS	(P) 7													7																			
FY00 OP,N	(P) 7																					1	2	2	2	9							
FY00 SC,N	(P) 3																					3				12							
FY00 OTHER CDLMS	(P) 7																	6				1				53							
TOTAL ASSETS	(C) 44	51	56	61	67	70	73	79	79	81	85	86	88	98	101	102	103	112	113	117	120	125	127	129	131	205							
QTY OVER (+) OR SHORT (-)		6	8	8	5	6	8	8	5	4	2																						
D. REMARKS		E.												TOTAL RQMT				INSTALLED				ON HAND				FY 98 PRIOR UNDELIVERED				UNFUNDED			
Starting in FY 00, CDLMS Back Fit to C2P will commence.		1. APPN. OPN												163				34				38				91							
163 OPN includes:79 ships + 8 C2P Trnr + 9 C2P(R)/CDLMS		2. APPN. Other												43				11				14				18							
+ 67 Retire UYK-43		3. PRCRMT LEADTIME												ADMIN 4 mon				INIT ORDER				18 mon				REORDER 18 mon							

DD FORM 2447, JUN 86

P-1 SHOPPING LIST
ITEM NO. 70 PAGE NO. 21

Exhibit P-23

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TIME PHASED REQUIREMENTS SCHEDULE										DATE February 1997					
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE				COST CODE AND NA				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							Advanced Tactical Data Link System				DR001/10 JTIDS/MIDS				
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY-1997							FY-1998								
DDG-51 Cl	1	DDG-51 Cl	2	DDG-51 Cl	1	CG-47 Clas	1	DDG-51 Cl	2			LHD-1 Clas	1	DDG-51 Cl	2
CG-47 Clas	2			CG-62	1							DDG-51 Cl	2	CG-47 Clas	1
				CG-47 Clas	1							CG-47 Clas	1		
												CG-60	1		
TOTAL	3	TOTAL	2	TOTAL	3	TOTAL	1	TOTAL	2	TOTAL		TOTAL	5	TOTAL	3
FY-1999							FY-2000								
LHA-1 Clas	1	DDG-51 Cl	1	DDG-51 Cl	1	CG-64	1	LHA-1 Clas	1	DDG-51 Cl	1	LHD-1 Clas	1	DDG-51 Cl	1
		LHA-1 Clas	1	CG-59	1	DDG-51 Cl	1								
		CG-63	1	CG-47 Clas	1										
TOTAL	1	TOTAL	3	TOTAL	3	TOTAL	2	TOTAL	1	TOTAL	1	TOTAL	1	TOTAL	1

DD FORM 2447S, JUN 86

* AIT INSTALL

** MIDS E-2C/SHIP P31 UPGRADE BY AIT

P-1 SHOPPING LIST

ITEM NO. 70 PAGE NO. 22

Exhibit P-23A

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TIME PHASED REQUIREMENTS SCHEDULE										DATE February 1997					
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE				COST CODE AND NA					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						Advanced Tactical Data Link System				DR001/10 JTIDS/MIDS					
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY-2001						FY-2002									
LHA-1 Clas	1	DDG-993 C	1			DDG-993 C	1	LCC-19 Cla	1	DD-963 Cla	1	DD-963 Cla	2	DD-963 Cla	2
DDG-51 Cla	2			DDG-993 C	1	LHA-1 Clas	1			LCC-19 Cla	1				
						LHD-1 Clas	1								
		FCTCPAC	2	CVN-68 Cla	2	CVN-68 Cla	3			CVN-68 Cla	2	LHD-1 Clas	2	LHD-1 Clas	1
TOTAL	3	TOTAL	3	TOTAL	3	TOTAL	6	TOTAL	1	TOTAL	4	TOTAL	4	TOTAL	3
FY-2003						FY-2004									
DD-963 Cla	2	DD-963 Cla	2	DD-963 Cla	2	DD-963 Cla	1								
				LHD-1 Clas	2	CVN-68 Cla	2								
TOTAL	2	TOTAL	2	TOTAL	4	TOTAL	3	TOTAL		TOTAL		TOTAL		TOTAL	

DD FORM 2447S, JUN 86

* AIT INSTALL

** MIDS E-2C/SHIP P31 UPGRADE BY AIT

P-1 SHOPPING LIST

ITEM NO. 70

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TIME PHASED REQUIREMENTS SCHEDULE								DATE February 1997							
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE				COST CODE AND NA			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								Advanced Tactical Data Link System				DR003 C2P(R)/CDLMS			
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY-1997								FY-1998							
DDG-51 Cla	1	DDG-51 Cl	2	DDG-51 Cl	1	CG-47 Class	1	DDG-51 Clas	2			LHD-1 Class	1	DDG-51 Cla	2
CG-47 Class	2			CG-62	1							DDG-51 Clas	2	CG-47 Clas	1
				CG-47 Cla	1							CG-47 Class	1		
						ATC**	1					CG-60	1		
						ACSC**	1								
						CSEDS**	1								
						FCTCPAC**	2								
TOTAL	3	TOTAL	2	TOTAL	3	TOTAL	6	TOTAL	2	TOTAL		TOTAL	5	TOTAL	3
FY-1999								FY-2000							
LHA-1 Class	1	DDG-51 Cl	1	DDG-51 Cl	1	CG-64	1	LHA-1 Class	1	DDG-51 C	1	LHD-1 Class	1	DDG-51 Cla	1
		LHA-1 Clas	1	CG-59	1	DDG-51 Cla	1								
		CG-63	1	CG-47 Cla	1			CVN-68 Clas	4						
FCTCLANT**	2							LHD-1 Class	3						
								FCTCLANT**	2						
TOTAL	3	TOTAL	3	TOTAL	3	TOTAL	2	TOTAL	10	TOTAL	1	TOTAL	1	TOTAL	1

DD FORM 2447S, JUN 86

P-1 SHOPPING LIST

Exhibit P-23A

* AIT INSTALL *** VME Units for P3I upgrade to ships by AIT ITEM NO. 70 PAG NO. 24

** MIDS E-2C/SHIP P3I UPGRADE BY AIT

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TIME PHASED REQUIREMENTS SCHEDULE								DATE February 1997							
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE				COST CODE AND NA			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								Advanced Tactical Data Link System				DR003 C2P(R)/CDLMS			
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY-2001								FY-2002							
LHA-1 Class	1	DDG-993 C	1			DDG-993 Cl	1	LCC-19 Clas	1	DD-963 Cl	1	DD-963 Clas	2	DD-963 Cla	2
DDG-51 Cla	2			DDG-993 C	1	LHA-1 Class	1			LCC-19 Cl	1				
LHD-1 Class	3					LHD-1 Class	1								
CVN-68 Clas	3							CVN-68 Clas	1						
TOTAL	9	TOTAL	1	TOTAL	1	TOTAL	3	TOTAL	2	TOTAL	2	TOTAL	2	TOTAL	2
FY-2003								FY-2004							
DD-963 Clas	2	DD-963 Cl	2	DD-963 Cl	2	DD-963 Clas	1								
		CVN-68 Class	1	CG-47 Class*	7	CG-47 Class***	6								
				DDG-51 Class	3	DDG-51 Class*	3								
TOTAL	2	TOTAL	3	TOTAL	12	TOTAL	10	TOTAL		TOTAL		TOTAL		TOTAL	

DD FORM 2447S, JUN 86

P-1 SHOPPING LIST

Exhibit P-23A

* AIT INSTALL *** VME Units for P3I upgrade to ships by AIT ITEM NO. 70 PAGE NO. 25

** VME Units for schools

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE HF LINK - 11/ CSDTS 2614 Q2DR						
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUPLICATED WITH FY 96 AND PRIOR FUNDING	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE	
DRXXX CSDTS	237			4	18	4	4	207	Outyear Funded	
cost code item										
cost code item										
cost code item										
cost code item										
MEMO ENTERED										
ITEM #1 DRXXX CSDTS										
hull/location	qty									
AGF	2									
CG	27									
CGN	2									
CV/CVN	12									
DD	31									
DDG	37									
FFG	23									
LCC	2									
LHA	5									
LHD	7									
LPH/LPD	7									
LSD										
SSN	52									
SSBN	18									
TRAINING	8									
Support Equ	4									
* FY 96 & 97 procured in subhead Q2'										
TOTAL I/O	237									
ITEM #2 cost code item										
hull/location	qty									
					TOTAL I/O					
ITEM #3 cost code item										
hull/location	qty									
					TOTAL I/O					
ITEM #6 cost code item										
hull/location	qty									
					TOTAL I/O					

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-2: COMMUNICATIONS / ELECTRONICS					P-1 ITEM NOMENCLATURE MINESWEEPING SYSTEM REPLACEMENT (72LV)			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$5.1	\$39.8	\$15.8	\$44.4	\$37.6	\$29.4	\$27.5	\$28.0
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. Combat Systems Engineering Changes (LV062): Funding is for engineering changes for the AN/SQQ-32 and AN/SLQ-48 MCM and MHC class combat systems equipment. HM&E Engineering Changes (LV063): Funding is for engineering changes for the circuit breakers and motor controllers used on MCM and MHC class ships. RMS Contingency Systems (LV064): The RMS System will consist of an off-board vehicle with MIW sensors which are specifically designed for the detection, classification, and localization of subsurface mines. Closed Loop Degaussing (CLDG) (LV065): Closed Loop Degaussing supplements existing degaussing systems to increase by a factor of three the time between degaussing system calibrations at a shore-based degaussing range.								

**BUDGET ITEM JUSTIFICATION SHEET
P-40**

**DATE:
FEBRUARY 1997**

**APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY
BA-2: COMMUNICATIONS / ELECTRONICS**

**P-1 ITEM NOMENCLATURE
MINESWEEPING SYSTEM REPLACEMENT (72LV)**

ITEM DESCRIPTION/JUSTIFICATION (CONTINUED):

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.

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, fleet installations of "D" alterations, installations of training equipment in other shore facilities.

Design Services (LVDSA): Funding is for the design services related to the FMP installation.

Items to be procured in FY96: SSQ-94 consisting of : SSQ-32 SIC (Quantity = 5) and NIC (Quantity = 14), Battle Space Profiler 5 units.

Items to be procured in FY97: SSQ-94 consisting of: SSQ-32 SIC (Quantity = 5) SSQ-32 Upgrade consisting of: TAC 4 Consoles, Digital Signal Processors, VME Card Cage, and Telemetry Interface. ICWS consisting of 3 AN/SQQ-32 Towed Bodies.

Items to be procured in FY 98: SSQ-94 consisting of: SQQ-32 SIC (Quantity = 2) and NIC (Quantity =14); Battle Space Profiler 17 units (4 for Reserve Ships); SQQ-32 Upgrade, consisting of TAC 4 Consoles.

Items to be procured in FY 99: SSQ-94 consisting of: SQQ-32 SIC (Quantity = 2) and NIC (Quantity =14); Battle Space Profiler 5 units; SQQ-32 Upgrade, consisting of Towed Body and software upgrades; Remote Minesweeping Syetems, Quantity = 2; CLOsed Loop Degaussing System, Quantity = 1; Integrated Combat Weapon System, consisting of Doppler Speed Log Replacement, and Engine Replacement, 7 System, Quantity = 1; Integrated Combat Weapon System, consisting of Doppler Speed Log Replacement, and Engine Replacement, 7 Waukesha engines to be placed on 1 Reserve ship.

The budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 98.

Code "B" Items: RMS Contingency Systems, PE 0603502N

	Planned	Actual
DTE	July 98	
IOTE	Sept 98	
OTE	Sept 98	
TDP	Sept 98	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT									DATE:	
P-5									FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-2: COMMUNICATIONS / ELECTRONICS						P-1 ITEM NOMENCLATURE/SUBHEAD MINESWEEPING SYSTEM REPLACEMENT (72LV)				
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	MINE WARFARE, N852									
LV057	SSQ-94	A		1,182		1,065		565		971
LV059	BATTLESPACE PROFILER	A	5	306			17	1,113	5	171
LV060	SQQ-32 UPGRADE	A				9,134		9,148		11,080
LV062	COMBAT SYSTEM ENGINEERING CHANGES	A				4,187				
LV063	HM&E ENGINEERING CHANGES	A				4,845				
LV064	RMS CONTINGENCY SYSTEMS	B							2	18,130
LV065	CLOSED LOOP DEGAUSSING (CLD)	A							1	4,327
LV066	INTEGRATED COMBAT WEAPON SYSTEM (ICWS)	A			3	17,459				2,956
LV067	ENGINE REPLACEMENT	A							7	2,976
LV830	PRODUCTION ENGINEERING			144		147		150		450
LV900	CONSULTING SERVICES			125		125		665		1,367
LV5IN	INSTALLATION OF EQUIPMENT			3,308		2,865		3,627		1,712
LVDSA	DESIGN SERVICES ALLOCATION							600		226
TOTAL				5,065		39,827		15,868		44,366

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 71 PAGE NO. 3

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT										DATE	
P-5A										FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OTHER PROCUREMENT, NAVY					MINESWEEPING SYSTEM				72LV		
BA-2: COMMUNICATIONS AND ELECTRONICS					REPLACEMENT						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
LV057	SSQ-94										
	FY 1996	NSWC/CRANE	N/A	NSWC/CRANE	04/96	12/96	VARIOUS	413.0	YES	NO	
	FY 1997	NSWC/CRANE	N/A	NSWC/CRANE	12/96	08/97	VARIOUS	413.0	YES	NO	
	FY 1998	NSWC/CRANE	N/A	NSWC/CRANE	12/97	08/98	VARIOUS	413.0	YES	NO	
	FY 1999	NSWC/CRANE	N/A	NSWC/CRANE	12/98	08/99	VARIOUS	413.0	YES	NO	
LV059	BATTLE SPACE PROFILER										
	FY 1996	UNKNOWN	C/FFP	NSWC/DAHL/CSS	06/98	07/98	5	VARIOUS*	YES	NO	
	FY 1998	UNKNOWN	C/FFP	NSWC/DAHL/CSS	02/98	03/98	17	VARIOUS*	YES	NO	
	FY 1999	UNKNOWN	C/FFP	NSWC/DAHL/CSS	02/99	03/99	5	VARIOUS*	YES	NO	
LV060	SSQ-32 UPGRADE										
	FY 1997	RAYTHEON PORTSMOUTH, RI	SS/FFP	NAVSEA	2/97	03/98	VARIOUS**	VARIOUS	NO	YES	09/96
	FY 1998	RAYTHEON PORTSMOUTH, RI	SS/FFP	NAVSEA	12/97	03/99	VARIOUS**	VARIOUS	NO	YES	09/96
	FY 1999	RAYTHEON PORTSMOUTH, RI	SS/FFP	NAVSEA	12/98	03/00	VARIOUS**	VARIOUS	NO	YES	09/96
LV064	RMS CONTINGENCY										
	FY 1999	UNKNOWN	C/FPI	NAVSEA	12/98	12/99	2	9,065.0	NO	YES	09/98

REMARKS

* UNIT PRICE SHOWN INCLUDES SEVERAL REQUIRED ANCILLARY ITEMS AND ROTATBALE POOL ITEMS IN ADDITION TO THE BATTLE SPACE PROFILER UNIT.

** IMPROVEMENTS WILL BE IMPLEMENTED IN PHASES. FUNDING IN FY 97 AND FY 98 IS FOR COLOR CONSOLE UPGRADE AND ASSOCIATED CHANGES. FUNDING IN FY99 IS FOR TOWED BODY AND SOFTWARE UPGRADES.

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT										DATE	
P-5A										FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OTHER PROCUREMENT, NAVY					MINESWEEPING SYSTEM						
BA-2:COMMUNICATIONS AND ELECTRONICS					REPLACEMENT				72LV		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT* COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
LV065	CLOSED LOOP DEGAUSSING										
	FY 1999	UNKNOWN	C/FFP	NSWC	02/99	10/99	1	4,327.0	YES	NO	
LV066	INTEGRATED COMBAT WEAPON SYSTEM (ICWS)										
	FY 1997	RAYTHEON PORTSMOUTH, RI	SS/FFP	NAVSEA	4/97	7/98	3	5,819.7	YES	NO	
	FY 1999	UNKNOWN	C/FFP	NAVSEA	12/98	12/99	VARIOUS*	VARIOUS*	NO	YES	06/98
LV067	ENGINE REPLACEMENT										
	FY 1999	SOUTHWEST MARINE INGLESIDE, TX	SS/CPAF	NAVSEA	12/98	12/99	7	425.1	YES	NO	
REMARKS											
* PROCUREMENT OF MX610 DOPPLER SPEED LOG REPLACEMENT AND ASSOCIATED SYSTEM INTEGRATION COMPONENTS.											

P3A INDIVIDUAL MODIFICATION																	Feb-97																					
MODIFICATION TITLE: AN/SQQ-32 BACKFIT LV054																																						
MODELS OF SYSTEM AFFECTED:																																						
DESCRIPTION/JUSTIFICATION:																																						
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																																						
																	TO	TO	TOTAL	TOTAL																		
																	COMP	COMP		COST																		
																	QTY	QTY		COST																		
																	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03														
																	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY	QTY												
																	PRIOR																					
FINANCIAL PLAN (IN MILLIONS)																																						
RDT&E																			0 0.000																			
PROCUREMENT																			0 0.000																			
QUANTITY																			0 0.000																			
INSTALLATION KITS																			0 0.000																			
INSTALLATION KITS NONRECURRING																			0 0.000																			
EQUIPMENT																	8	55.900			8 55.900																	
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																			
INTERIM CONTRACTOR SUPPORT																			0 0.000																			
INSTALLATION OF HARDWARE																			0 0.000																			
FY96 EQUIPMENT & PRIOR																	AP	0.090	3	2.253	3	2.633	1	0.896			1	0.755	8 6.627									
FY97 EQUIPMENT																			0 0.000																			
FY98 EQUIPMENT																			0 0.000																			
FY99 EQUIPMENT																			0 0.000																			
FY00 EQUIPMENT																			0 0.000																			
FY01 EQUIPMENT																			0 0.000																			
FY02 EQUIPMENT																			0 0.000																			
FY03 EQUIPMENT																			0 0.000																			
TO COMPLETE																																						
TOTAL INSTALLATION COST																	0.090		2.253		2.633		0.896		0.000		0.000		0.755 6.627									
TOTAL PROCUREMENT COST																	55.900		0.000		0.000		0.000		0.000		0.000		55.900									
TOTAL COST																	55.990		2.253		2.633		0.896		0.000		0.000		62.527									
METHOD OF IMPLEMENTATION: CONTRACTOR																																						
CONTRACT DATE:																	PRIOR YEAR: N/A		CURRENT YEAR: N/A		BUDGET YEAR: N/A		BUDGET YEAR 2: N/A		ADMINISTRATIVE LEADTIME: 4 MONTHS		PRODUCTION LEADTIME: 28 MONTHS											
PRODUCTION DELIVER DATE:																	PRIOR YEAR: N/A		CURRENT YEAR: N/A		BUDGET YEAR: N/A		BUDGET YEAR 2: N/A															
INSTALLATION SCHEDULE:																																						
INPUT =====>																	FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		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		0, 1, 0, 0		8			
FY96 & PRIOR																			0, 0, 1, 2		1, 1, 1, 0		0, 1, 0, 0															
FY97																																						
FY98																																						
FY99																																						
FY00																																						
FY01																																						
FY02																																						
FY03																																						
TO COMPLETE																																						
OUTPUT =====>																	FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		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		1, 2, 3, 4		0, 1, 0, 0		8	
FY96 & PRIOR																			0, 0, 1, 2		1, 1, 1, 0		0, 1, 0, 0															
FY97																																						
FY98																																						
FY99																																						
FY00																																						
FY01																																						
FY02																																						
FY03																																						
TO COMPLETE																																						
VAR/V= VARIOUS																																						
TO COMPLETE																																						

Note: 1 unit to be installed in FY97 and 1 unit to be installed in FY99 are allocated for Reserve ships.

P3A INDIVIDUAL MODIFICATION																	FEBRUARY 1997															
MODIFICATION TITLE: AN/SSN-2 PHASE III BACKFIT LV055																																
MODELS OF SYSTEM AFFECTED:																																
DESCRIPTION/JUSTIFICATION:																																
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																																
																	TO	TO	TOTAL	TOTAL												
																	COMP	COMP		COST												
																	QTY	QTY	QTY	QTY												
																	FY 96&	FY 97	FY 98	FY 99												
																	FY 00	FY 01	FY 02	FY 03												
FINANCIAL PLAN (IN MILLIONS)																	PRIOR															
RDT&E																																
PROCUREMENT																																
QUANTITY																																
INSTALLATION KITS																																
INSTALLATION KITS NONRECURRING																																
EQUIPMENT																	14				18.000				14				18.000			
EQUIPMENT NONRECURRING																																
ENGINEERING CHANGE ORDERS																																
DATA																																
TRAINING EQUIPMENT																																
SUPPORT EQUIPMENT																																
OTHER																																
INTERIM CONTRACTOR SUPPORT																																
INSTALLATION OF HARDWARE																																
FY96 EQUIPMENT & PRIOR																	11				2.300				3				0.376			
FY97 EQUIPMENT																																
FY98 EQUIPMENT																																
FY99 EQUIPMENT																																
FY00 EQUIPMENT																																
FY01 EQUIPMENT																																
FY02 EQUIPMENT																																
FY03 EQUIPMENT																																
TO COMPLETE																																
TOTAL INSTALLATION COST																	2.300				0.376				0.000				0.000			
TOTAL PROCUREMENT COST																	18.000				0.000				0.000				0.000			
TOTAL COST																	20.300				0.376				0.000				0.000			
METHOD OF IMPLEMENTATION: AIT (TIGER TEAM)																																
CONTRACT DATE:																	PRIOR YEAR: N/A				CURRENT YEAR: N/A				BUDGET YEAR: N/A				BUDGET YEAR 2: N/A			
PRODUCTION DELIVER DATE:																	PRIOR YEAR: N/A				CURRENT YEAR: N/A				BUDGET YEAR: N/A				BUDGET YEAR 2: N/A			
INSTALLATION SCHEDULE:																	FY96&				FY97				FY98				FY99			
INPUT =====>																	PRIOR				FY97				FY98				FY99			
																	1, 2, 3, 4				1, 2, 3, 4				1, 2, 3, 4				1, 2, 3, 4			
FY96 & PRIOR																	4,0,2,1				2,1,1,2				1,0,0,0							
FY97																																
FY98																																
FY99																																
FY00																																
FY01																																
FY02																																
FY03																																
TO COMPLETE																	FY96&				FY97				FY98				FY99			
OUTPUT =====>																	PRIOR				FY97				FY98				FY99			
																	1, 2, 3, 4				1, 2, 3, 4				1, 2, 3, 4				1, 2, 3, 4			
FY96 & PRIOR																	4,0,1,2				1,2,1,1				2,0,0,0							
FY97																																
FY98																																
FY99																																
FY00																																
FY01																																
FY02																																
FY03																																
TO COMPLETE																																
VAR/V= VARIOUS																																
TO COMPLETE																																

Note: 1 unit to be installed in FY96 and 2 units to be installed in FY97 are allocated for Reserve ships.

P3A INDIVIDUAL MODIFICATION																	FEBRUARY 1997																			
MODIFICATION TITLE: SSQ-94 TRAINER LV057																																				
MODELS OF SYSTEM AFFECTED:																																				
DESCRIPTION/JUSTIFICATION:																																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																																				
																	TO	TO	TOTAL	TOTAL																
																	COMP	COMP		COST																
																	QTY	QTY	QTY	QTY																
																	FY 96&	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03												
FINANCIAL PLAN (IN MILLIONS)																	PRIOR																			
RDT&E																																				
PROCUREMENT																																				
QUANTITY																																				
INSTALLATION KITS																																				
INSTALLATION KITS NONRECURRING																																				
EQUIPMENT																	VAR	8.176	VAR	1.065	VAR	0.565	VAR	0.971					VAR	10.777						
EQUIPMENT NONRECURRING																																				
ENGINEERING CHANGE ORDERS																																				
DATA																																				
TRAINING EQUIPMENT																																				
SUPPORT EQUIPMENT																																				
OTHER																																				
INTERIM CONTRACTOR SUPPORT																																				
INSTALLATION OF HARDWARE																																				
FY96 EQUIPMENT & PRIOR																	VAR	2.321											0	0.000						
FY97 EQUIPMENT																			VAR	0.201									0	2.321						
FY98 EQUIPMENT																					VAR	0.836							0	0.201						
FY99 EQUIPMENT																							VAR	0.709	VAR	0.057					0	0.836				
FY00 EQUIPMENT																													0	0.766						
FY01 EQUIPMENT																													0	0.000						
FY02 EQUIPMENT																													0	0.000						
FY03 EQUIPMENT																													0	0.000						
TO COMPLETE																																				
TOTAL INSTALLATION COST																			2.321	0.201	0.836	0.709	0.057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.124					
TOTAL PROCUREMENT COST																			8.176	1.065	0.565	0.971	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.777						
TOTAL COST																			10.497	1.266	1.401	1.680	0.057	0.000	0.000	0.000	0.000	0.000	0.000	14.901						
METHOD OF IMPLEMENTATION: AIT (TIGER TEAM)																																				
CONTRACT DATE:																	PRIOR YEAR:		VAR	ADMINISTRATIVE LEADTIME:		VAR	CURRENT YEAR:		VAR	BUDGET YEAR:		VAR	PRODUCTION LEADTIME:		VAR	BUDGET YEAR 2:		VAR		
PRODUCTION DELIVER DATE:																	PRIOR YEAR:		VAR	CURRENT YEAR:		VAR	BUDGET YEAR:		VAR	BUDGET YEAR 2:		VAR			VAR			VAR		
INSTALLATION SCHEDULE:																																				
INPUT =====>																	<u>FY96</u>		<u>FY97</u>		<u>FY98</u>		<u>FY99</u>		<u>FY00</u>		<u>FY01</u>		<u>FY02</u>		<u>FY03</u>		<u>TC</u>		<u>TOTAL</u>	
																	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		1, 2, 3, 4		VAR	
FY96 & PRIOR																	VAR																		VAR	
FY97																			VAR																VAR	
FY98																					VAR														VAR	
FY99																							VAR		VAR										VAR	
FY00																																				
FY01																																				
FY02																																				
FY03																																				
TO COMPLETE																																				
OUTPUT =====>																	<u>FY96</u>		<u>FY97</u>		<u>FY98</u>		<u>FY99</u>		<u>FY00</u>		<u>FY01</u>		<u>FY02</u>		<u>FY03</u>		<u>TC</u>		<u>TOTAL</u>	
																	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		1, 2, 3, 4		VAR	
FY96 & PRIOR																	VAR																		VAR	
FY97																			VAR																VAR	
FY98																					VAR														VAR	
FY99																							VAR		VAR										VAR	
FY00																																				
FY01																																				
FY02																																				
FY03																																				
TO COMPLETE																																				
VAR/V= VARIOUS																																				
TO COMPLETE																																				

P3A INDIVIDUAL MODIFICATION																	FEBRUARY 1997																	
MODIFICATION TITLE: AN/SQQ-32 UPGRADE LV060																																		
MODELS OF SYSTEM AFFECTED:																																		
DESCRIPTION/JUSTIFICATION:																																		
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																																		
																	TO	TO	TOTAL	TOTAL														
																	COMP	COMP																
																	QTY	COST		COST														
QTY	FY 96&	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03																			
FINANCIAL PLAN (IN MILLIONS)																	PRIOR																	
RDT&E																					0	0.000												
PROCUREMENT																					0	0.000												
QUANTITY																					0	0.000												
INSTALLATION KITS																					0	0.000												
INSTALLATION KITS NONRECURRING																					0	0.000												
EQUIPMENT																	VAR	9.134	VAR	9.148	VAR	11.080	VAR	6.814					0	36.176				
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												
INTERIM CONTRACTOR SUPPORT																					0	0.000												
INSTALLATION OF HARDWARE																					0	0.000												
FY96 EQUIPMENT & PRIOR																					0	0.000												
FY97 EQUIPMENT																					0	0.000												
FY98 EQUIPMENT																					0	0.072												
FY99 EQUIPMENT																					0	0.072												
FY00 EQUIPMENT																					0	0.072												
FY01 EQUIPMENT																					0	0.000												
FY02 EQUIPMENT																					0	0.000												
FY03 EQUIPMENT																					0	0.000												
TO COMPLETE																																		
TOTAL INSTALLATION COST																	0.000	0.000	0.000	0.000	0.289	0.000	0.000	0.000	0.000	0.000	0.289							
TOTAL PROCUREMENT COST																	0.000	9.134	9.148	11.080	6.814	0.000	0.000	0.000	0.000	0.000	36.176							
TOTAL COST																	0.000	9.134	9.148	11.080	7.103	0.000	0.000	0.000	0.000	0.000	36.465							
METHOD OF IMPLEMENTATION: AIT (TIGER TEAM)																																		
CONTRACT DATE:																	PRIOR YEAR:				ADMINISTRATIVE LEADTIME: 3 MONTHS				PRODUCTION LEADTIME: 12-15 MONTHS									
PRODUCTION DELIVER DATE:																	PRIOR YEAR:				CURRENT YEAR:				BUDGET YEAR 2: 12/97									
																					CURRENT YEAR:				BUDGET YEAR 2: 3/98									
																									BUDGET YEAR 2: 3/99									
INSTALLATION SCHEDULE:																																		
INPUT =====>																	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC									
																	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	1, 2, 3, 4	1, 2, 3, 4	TOTAL							
FY96 & PRIOR																																		
FY97																					VAR													
FY98																					VAR				VAR									
FY99																					VAR													
FY00																					VAR													
FY01																																		
FY02																																		
FY03																																		
TO COMPLETE																																		
OUTPUT =====>																	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC									
																	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	1, 2, 3, 4	1, 2, 3, 4	TOTAL							
FY96 & PRIOR																																		
FY97																					VAR													
FY98																					VAR				VAR									
FY99																					VAR													
FY00																					VAR													
FY01																																		
FY02																																		
FY03																																		
TO COMPLETE																																		
VAR/V= VARIOUS																																		
TO COMPLETE																																		

P3A INDIVIDUAL MODIFICATION																	FEBRUARY 1997																																							
MODIFICATION TITLE: ENGINE REPLACEMENT LV067																																																								
MODELS OF SYSTEM AFFECTED:																																																								
DESCRIPTION/JUSTIFICATION:																																																								
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																																																								
																	TO	TO	TOTAL	TOTAL																																				
																	COMP	COMP		COST																																				
QTY	FY 96&	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	COST	COST	COST	COST																																				
FINANCIAL PLAN (IN MILLIONS)																	PRIOR																																							
RDT&E																					0	0.000																																		
PROCUREMENT																					0	0.000																																		
QUANTITY																					0	0.000																																		
INSTALLATION KITS																					0	0.000																																		
INSTALLATION KITS NONRECURRING																					0	0.000																																		
EQUIPMENT																					7	2,976	7	3,036	14	6,012																														
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																																		
INTERIM CONTRACTOR SUPPORT																					0	0.000																																		
INSTALLATION OF HARDWARE																					0	0.000																																		
FY96 EQUIPMENT & PRIOR																					0	0.000																																		
FY97 EQUIPMENT																					0	0.000																																		
FY98 EQUIPMENT																					0	0.000																																		
FY99 EQUIPMENT																					0	0.000																																		
FY00 EQUIPMENT																	AP				0.016	AP	0.035	7	2,637	7	2,412	14	5,100																											
FY01 EQUIPMENT																					0	0.000																																		
FY02 EQUIPMENT																					0	0.000																																		
FY03 EQUIPMENT																					0	0.000																																		
TO COMPLETE																					0.000	0.000	0.016	0.035	2,637	2,412	0.000	0.000	0.000	5.100																										
TOTAL PROCUREMENT COST																					0.000	0.000	0.000	2,976	3,036	0.000	0.000	0.000	0.000	0.000	6.012																									
TOTAL COST																					0.000	0.000	0.016	3,011	5,673	2,412	0.000	0.000	0.000	11.112																										
METHOD OF IMPLEMENTATION: AIT (TIGER TEAM)																					ADMINISTRATIVE LEADTIME: 3 MONTHS				PRODUCTION LEADTIME: 12 MONTHS																															
CONTRACT DATE:																	PRIOR YEAR:				CURRENT YEAR:				BUDGET YEAR 2: 12/98																															
PRODUCTION DELIVER DATE:																	PRIOR YEAR:				CURRENT YEAR:				BUDGET YEAR 2: 12/99																															
INSTALLATION SCHEDULE:																																																								
INPUT =====>																	<u>FY96</u>				<u>FY97</u>				<u>FY98</u>				<u>FY99</u>				<u>FY00</u>				<u>FY01</u>				<u>FY02</u>				<u>FY03</u>				<u>TC</u>				<u>TOTAL</u>			
																	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				1, 2, 3, 4							
FY96 & PRIOR																																																								
FY97																																																								
FY98																																																								
FY99																									0,0,0,7				0,0,7,0								14																			
FY00																																																								
FY01																																																								
FY02																																																								
FY03																																																								
TOCOMPLETE																																																								
OUTPUT =====>																	<u>FY96</u>				<u>FY97</u>				<u>FY98</u>				<u>FY99</u>				<u>FY00</u>				<u>FY01</u>				<u>FY02</u>				<u>FY03</u>				<u>TC</u>				<u>TOTAL</u>			
																	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				1, 2, 3, 4							
FY96 & PRIOR																																																								
FY97																																																								
FY98																																																								
FY99																													7,0,0,7												14															
FY00																																																								
FY01																																																								
FY02																																																								
FY03																																																								
TO COMPLETE																																																								
VAR/V= VARIOUS																																																								
TO COMPLETE																																																								

BUDGET ITEM JUSTIFICATION SHEET					DATE:																		
P-40					FEBRUARY 1997																		
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE																		
OTHER PROCUREMENT, NAVY					SHALLOW WATER MCM (72SW)																		
BA-2: COMMUNICATIONS / ELECTRONICS																							
	1996	1997	1998	1999	2000	2001	2002	2003															
QUANTITY																							
COST (In Millions)	\$0.8	\$0.9	\$0.0	\$15.0	\$26.3	\$31.5	\$34.3	\$35.1															
<p>ITEM DESCRIPTION/JUSTIFICATION:</p> <p>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. Each of the equipments below is necessary to complete a "toolbox" for the Combat Engineer to perform this task.</p> <p>SECTOR LIGHT SYSTEM (SLS) - SW001: A NDI light that projects a very narrow beam of light. The beam is used by amphibious forces to follow a narrow path through the surf zone that has been previously cleared of mines and obstacles.</p> <p>SHALLOW WATER ASSAULT BREACHING SYSTEM (SABRE) - SW020: A linear demolition charge deployed into the deep end of the surf zone (10' - 3') to clear anti-invasion mines from the assault lanes.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">PE #0603502</td> <td style="width: 30%;">SLS</td> <td style="width: 50%;">SABRE</td> </tr> <tr> <td>DT</td> <td>JUN 95</td> <td>JUN 98</td> </tr> <tr> <td>OT</td> <td>N/A</td> <td>OCT 98</td> </tr> <tr> <td>TDP</td> <td>AUG 95</td> <td>NOV 99</td> </tr> <tr> <td>AFRP</td> <td>SEP 95</td> <td>DEC 99</td> </tr> </table>									PE #0603502	SLS	SABRE	DT	JUN 95	JUN 98	OT	N/A	OCT 98	TDP	AUG 95	NOV 99	AFRP	SEP 95	DEC 99
PE #0603502	SLS	SABRE																					
DT	JUN 95	JUN 98																					
OT	N/A	OCT 98																					
TDP	AUG 95	NOV 99																					
AFRP	SEP 95	DEC 99																					

CLASSIFICATION:

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT P-5							DATE: FEBRUARY 1997						
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-2: COMMUNICATIONS / ELECTRONICS			P-1 ITEM NOMENCLATURE/SUBHEAD SHALLOW WATER MCM (72SW)										
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS										
			FY 1996		FY 1997		FY 1998		FY 1999				
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST			
	MINE WARFARE, N852												
SW001	SECTOR LIGHT SYSTEM	B	30	657	30	636							
SW011	FIRST ARTICLE TEST	A		45									
SW012	INITIAL TRAINING	A		14		15							
SW021	SABRE TACTICAL SYSTEM	A							96			9,796	
SW022	FULL SCALE INERT TRAINERS	A							30			2,189	
SW023	SUB-CALIBER TRAINER	A							150			476	
SW024	LAUNCH CONTROLLERS	A							230			1,837	
SW830	PRODUCTION ENGINEERING	A		118		291							215
SW900	CONSULTING SERVICES	A											450
TOTAL				834		942		0				14,963	

DD FORM 2446, JUN 86

P-1 SHOPPING LIST
ITEM NO. 7 PAGE NO. 2

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT										DATE	
P-5A										FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OTHER PROCUREMENT, NAVY/BA-2: COMMUNICATIONS / ELECTRONICS					SHALLOW WATER MCM				72SW72SW		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
SW001	FY 1996	QUALTRONICS HAWTHORNE, CA	SS/FFP	HQ/NAVSEA	09/96	01/97	30	22.0	YES	NO	
SW001	FY 1997	QUALTRONICS HAWTHORNE, CA	SS/FFP	HQ/NAVSEA	10/96	05/97	30	21.2	YES	NO	
SW021	FY 1999	UNKNOWN	C/FFP	HQ/NAVSEA	04/99	12/99	96	102.0	YES	NO	
SW022	FY 1999	UNKNOWN	C/FFP	HQ/NAVSEA	04/99	12/99	30	73.0	YES	NO	
SW023	FY 1999	UNKNOWN	C/FFP	HQ/NAVSEA	04/99	12/99	150	3.2	YES	NO	
SW024	FY 1999	UNKNOWN	C/FFP	HQ/NAVSEA	04/99	12/99	230	8.0	YES	NO	
REMARKS											
SW001, SECTOR LIGHT SYSTEM, CONSISTS OF ONE SECTOR LIGHT (HQ); ONE COMPASS, ONE TRIPOD, TWO BATTERY CASES, FOUR LITHIUM BATTERIES, ONE STORAGE CASE (CSS).											

**OTHER PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION SHEET (DOD EXHIBIT P-40)**

DATE:
Feb-97

NAVMAT FORMAT 7110/1

BUDGET ACTIVITY: OTHER PROCUREMENT NAVY BA-2	P-1 ITEM NOMENCLATURE: EMSP (Enhanced Modular Signal Processor) C2LX
---	---

	FY1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Quantity	7	0	0	0	0	0	0	0
Cost (In Million)	26.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ITEM DESCRIPTION/JUSTIFICATION

Procurement of AN/UYS-2A(V) units for SPAWAR PD-80 Surveillance Towed Array Sonar System (SURTASS); PEO AA, A&SM (PMA-299) Airborne Low Frequency Sonar (ALFS); and PEO-USW (PMO411) (AN/SQQ-89). Profile established to properly fund Congressionally authorized multi-year procurement, includes economic order quantities of components. Quantities indicate "Equivalent Average Units" of multiple configurations.

150 equivalent units (of this multi-year buy of 150 units) have been procured (FY92-FY96.)
 Installation agents are the following:
 ALFS units - Hughes Aircraft
 AN/SQQ-89 units - Westinghouse
 SURTASS units - Hughes Aircraft

DD Form 2454, June 1986

P-1 SHOPPING LIST ITEM NO.	PAGE NO.
73	1

APPROPRIATION: OTHER PROCUREMENT NAVY	WEAPON SYSTEM COST ANALYSIS (P-5)	DATE: Jan-92
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BUDGET ACTIVITY: BA-2	P-1 LINE ITEM: EMSP (Enhanced Modular Signal Proce	SUBHEAD C2LX
--------------------------	---	-----------------

COST CODE	WEAPON SYTEM COST ELEMENTS	I/C	FY1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COST

LX001	AN/UYS-2A(V)	A	7	\$26,360	0	\$0	0	\$0	0	\$0
	TOTAL			\$26,360		\$0		\$0		\$0

P-1 SHOPPING PAGE NO.	
LIST LINE ITEM NO.	
73	2

APPROPRIATION: OTHER PROCUREMENT NAVY	BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	DATE Feb-97
--	---	----------------

BUDGET ACTIVITY: BA-2	P-1 ITEM NOMENCLATURE EMSP (ENHANCED MODULAR SIGNAL PROCES	SUBHEAD C2LX
--------------------------	---	-----------------

COST CODE	COST ELEMENT FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAIL NOW WHEN	ARE SPEC REVISIONS REQUIRED?	IF YES, WHEN AVAILABLE
-----------	--------------------------	-------------------------	--------------------------	---------------	------------	------------------------	-----	-----------	----------------------	------------------------------	------------------------

LX001											
FY96	AN/UYS-2A(V)	AT&T, GREENSBOR	FFP/MY	NAVSEA	Dec-91	**	7	.77M (AVG)	YES	NO	

NOTES:
 *Cost averaged across the multi-year procurement per equivalent average unit, including component/material economic order.
 **23 September 1993 was the first delivery of a 5 year Multi-Year Contract with continuing deliveries throughout the period of performance.

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES (DOD EXHIBIT P-23B)							A. Date FEB 1997	
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY BA-2				C. P-1 ITEM NOMENCLATURE EMSP (ENHANCED MODULAR SIGNAL PROCESSOR)				
ITEM	TOTAL IO / REQUIREMENTS	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY9 PROGRAM FUNDS	PLANNED BUDGET YEAR PROCUREMENT	BALANCE	PHASING RATIONALE
AN/UYS-2A(V)	150*	0	0	150	0	0	0	
MEMO ENTRIES								
ITEM #1 Units 150 Total <u>150</u>		ITEM #2		ITEM #3		ITEM #4		ITEM #5
ITEM #6		ITEM #7		ITEM #8		ITEM #9		ITEM #10

P-1 SHOPPING, LIST ITEM NO.	PAGE NO
73	4

NOTE: *Quantities shown support the delivery of 150 equivalent units.

BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997																				
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE NAVSTAR GPS 521R 265700																						
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																		
QUANTITY																										
COST (in millions)	\$1.4	\$4.8	\$5.0	\$9.9	\$9.8	\$10.6	\$10.9	\$11.1																		
<p>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 NAVSTAR 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.</p> <p>FY96 funding provided for production support for NAVSSI & installs 5 NAVSSI systems.</p> <p>FY97 funding procures 7 RTS for retrofit kits, installation of 12 NAVSSI & 6 RTS systems and production support.</p> <p>FY98 funding procures 3 NAVSSI systems, 3 RTS retrofit kits, installation of 14 NAVSSI systems and install of 4 RTS.</p> <p>FY99 funding procures 11 NAVSSI systems , various retrofit kits and installations of 11 systems & 10 RTS..</p> <p>Installations are being done for each class/ship through the preparation of ship alteration proposals and ship alteration records.</p> <p>INDENT CODE: A</p> <p>Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p> <p style="text-align: center;">MODIFICATION SUMMARY (\$M)</p> <p>Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:</p> <table border="1"> <thead> <tr> <th>EQUIPMENT</th> <th>FY96</th> <th>FY97</th> <th>FY98</th> <th>FY99</th> <th>FY00</th> <th>FY01</th> <th>FY02</th> <th>FY03</th> </tr> </thead> <tbody> <tr> <td>GPS/NAVSSI</td> <td>\$0.6</td> <td>\$3.1</td> <td>\$5.0</td> <td>\$9.0</td> <td>\$9.0</td> <td>\$10.2</td> <td>\$10.0</td> <td>\$10.0</td> </tr> </tbody> </table>									EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	GPS/NAVSSI	\$0.6	\$3.1	\$5.0	\$9.0	\$9.0	\$10.2	\$10.0	\$10.0
EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03																		
GPS/NAVSSI	\$0.6	\$3.1	\$5.0	\$9.0	\$9.0	\$10.2	\$10.0	\$10.0																		

**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM COST ANALYSIS							DATE: February 1997				
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					NAVSTAR GPS			521R 265700			
COST CODE	ELEMENT OF COST	IDENT CODE	QTY	TOTAL COST IN THOUSANDS OF DOLLARS							
				FY 96		FY 97		FY 98		FY 99	
				TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
1R005	Production Support	A	VAR	875	VAR	430	VAR	458	VAR	850	
1R009	NAVSSI	A					3	734	11	3,583	
1R011	NAVSSI - Retrofit Kit	A			VAR	1,451	VAR	247	VAR	1,808	
1R777	Install Equip - FMP	A	VAR	573	VAR	2,953	VAR	3,280	VAR	3,333	
	Install Equip - Design Servi	A					VAR	287	VAR	327	
TOTAL PROGRAM				1,448		4,834		5,006		9,901	

DD FORM 2446, JUN 86

P-1 SHOPPING LIST
ITEM NO. 74 PAGE NO.: 2

Exhibit P-5

**UNCLASSIFIED
CLASSIFICATION**

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY										February 1997		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE							
					NAVSTAR GPS			521R 265700				
COST CODE	ELEMENT OF COST FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE	
1R009	NAVSSI * FY 98 / Option FY 99 / Option	Various Various	WX/RCP WX/RCP	Various Various	Nov-97 Nov-98	Feb-98 Jan-99	3 11	\$244,666 \$325,727	YES YES	NO NO		
D. REMARKS * NAVSSI is being procured on several contracts; the Navy's TAC 3/4 and GSA ITS contract and Air Force JPO contract for GVRC and NRaD contract for FOAL. NAVSSI system costs include DCS, BWS, 2 RTS, 2 GVRC, and 2 FOAL. NAVSSI system unit cost will vary depending on the configuration required on the ships being procured in that fiscal year.												

MODIFICATION TITLE: NAVSTAR Global Positioning System (GPS) (521R) (NAVSSI, 1R009)
 MODELS OF SYSTEMS AFFECTED: All models of ships will have NAVSTAR GPS
 DESCRIPTION/JUSTIFICATION: 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 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment NAVSSI	65	10.6					3	0.7	11	3.6	14	4.8	14	4.9	11	4	14	5.2	57	21.9	189	55.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						0 0.0
PRIOR YR EQUIP	37	2.9	5	0.6	12	3.0	11	2.7														65 9.2
FY 96 EQUIP																						0 0.0
FY 97 EQUIP																						0 0.0
FY 98 EQUIP							3	0.8														3 0.8
FY 99 EQUIP									11	2.9												11 2.9
FY 00 EQUIP											14	4.2										14 4.2
FY 01 EQUIP													14	4.0								14 4.0
FY 02 EQUIP															11	3.1						11 3.1
FY 03 EQUIP																	14	4.8				14 4.8
FY TC EQUIP																			57	21.7		57 21.7
TOTAL INSTALLATION COST	37	2.9	5.0	0.6	12.0	3.0	14	3.5	11	2.9	14	4.2	14	4	11	3.1	14	4.8	57	21.7	189	50.7
TOTAL PROCUREMENT COST	65	13.5	5	0.6		3.0	3	4.2	11	6.5	14	9	14	8.9	11	7.1	14	10	57	43.6	189	55.7

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 1 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1996: FY 1997: FY 1998: Nov-97 FY 1999: Nov-98

DELIVERY DATES: FY 1996: FY 1997: FY 1998: Feb-98 FY 1999: Jan-99

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	8	3	12	9	5	1	5	6	5	3	1	5	5	0	2	4	5		
OUTPUT	0	1	7	8	14	5	4	6	4	4	1	6	6	2	0	2	4		
INSTALLATION SCHEDULE:	PY	FY 00				FY 01				FY 02				FY 03				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		0	3	5	6	0	4	5	5	0	2	4	5	0	3	5	6	57	189
OUTPUT		5	0	3	5	6	0	4	5	5	0	2	4	5	0	3	5	63	189

MODIFICATION TITLE: NAVSTAR Global Positioning System (GPS) (521R) RETROFIT (1R011)
 MODELS OF SYSTEMS AFFECTED: All models of ships will have NAVSTAR GPS
 DESCRIPTION/JUSTIFICATION: 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 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		IC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment NAVSSI					7	0.1	3	0.8	10	1.8	0		4	0.93	10	1.8	0				34	5.43
Equipment Nonrecurring																		0				
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																					0	0.0
PRIOR YR EQUIP																					0	0.0
FY 96 EQUIP																					0	0.0
FY 97 EQUIP					6		1														7	0.0
FY 98 EQUIP							3														3	0.0
FY 99 EQUIP									10	0.80											10	0.8
FY 00 EQUIP											0.0										0	0.0
FY 01 EQUIP												4	0.4								4	0.4
FY 02 EQUIP														10	0.9						10	0.9
FY 03 EQUIP																		0.0			0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST	0	0	0	0	6	0.0	4	0.0	10	0.8	0	0.0	4	0.4	10	0.9	0	0.0	0	0.0	34	2.1
TOTAL PROCUREMENT COST	0	0	0	0	7	0.1	3	0.8	10	2.6	0	0.0	4	1.33	10	2.7	0	0.0	0	0	34	5.43

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 months PROCUREMENT LEADTIME: 3 months

CONTRACT DATES: FY 1996: FY 1997: Mar-97 FY 1998: Nov-97 FY 1999: Nov-98

DELIVERY DATES: FY 1996: FY 1997: May-97 FY 1998: Jan-97 FY 1999: Mar-99

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99								
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT										6											5	5
OUTPUT										4			3	3							2	5

INSTALLATION SCHEDULE:	PY	FY 00				FY 01				FY 02			FY 03									
		1	2	3	4	1	2	3	4	1	2	3	1	2	3	4						
INPUT										2	2				5	5						34
OUTPUT													2	2		5			3			34

* INSTALLATION INCLUDED IN INSTALL COST OF NAVSSI

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES								A. DATE			
								February 1997			
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				NAVSTAR GPS						521R	2657
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUPLICATED WITH FY'S AND PRIOR FUND	PLANNED BUDGET YEAR (FY97)	PLANNED BUDGET YEAR (FY98)	PLANNED BUDGET YEAR (FY99)	BALANCE	PHASING RATIONALE		
1R009 NAVSSI	189	30	35			3	11	110	utyear Funde utyear Funde		
MEMO ENTERED											
ITEM #1 1R009 NAVSSI hull/location qty hull/location qty NAVSSI SYSTEMS ARE INSTALLE 189 SURFACE SHIPS DUR PIERSIDE AVAILABILITIES TOTAL I/O 189			ITEM #2 TOTAL I/O			ITEM #3 TOTAL I/O					
ITEM #4 TOTAL I/O			ITEM #5 hull/location qty hull/location qty TOTAL I/O			ITEM #6 hull/location qty hull/location qty TOTAL I/O					

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BUDGET ITEM JUSTIFICATION SHEET					DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUI			HF LINK-11 Data Terminals			2660		Q2T3
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$3.5	\$3.2						
<p>PROGRAM COVERAGE: Tactical Digital Information Link (TADIL) A (LINK-11) is an automatic, high-speed computer-to-computer High Frequency (HF) or Ultra High Frequency (UHF) radio communication link which permits Naval Tactical Data System (NTDS) equipped ships, Airborne Tactical Data System (ATDS) equipped aircraft, Marine Corps Tactical System (MCTS) units, and all other TADIL-A units to exchange tactical data on a near-real time basis. This program provides for procurement of LINK-11 Terminals on all combatant ship classes to accommodate new mission requirements. The LINK-11 system contains a standard LINK-11 Programmable Data Terminal Set (PDTS) consisting of an off-the-shelf LINK-11 Data Terminal Set (AN/USQ-125) which offers significant improvements in system availability, reliability and capability. This program also provided for Common Shipboard Data Terminal Sets (CSDTS) to replace obsolete data terminal sets on selected combatant ships, by provideing LINK-11 capability to non-TDS ships and enables LINK-11 combatants to operate on two simultaneous LINK-11 nets. In addition, the program provided for replacement of non-standard Mobil Universal Link Translators (MULTS). Funding in FY96 and FY97 provided for these requirements.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: N/A</p> <p>EXPLANATION OF PROGRAM CHANGE: Program moves to Advanced Tactical Data Link Systems (ADTLS), subhead Q2DR in FY 98 and out.</p> <p>INSTALLING AGENT: NCCOSC, ISE EAST COAST DET., NORFOLK</p>								

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Exhibit P-40

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 1997	
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUI	HF LINK-11 Data Terminals	2660	Q2T3
MODIFICATION SUMMARY			
Listed below are the costs (i.e., hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:			
EQUIPMENT	FY96	FY97	FY98 FY99 FY00 FY01 FY02 FY03
LINK-11	3.4	2.7	

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WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					HF LINK-11 Data Ter		2660		Q2T3	
COST CODE	ELEMENT OF COST	IDENT CODE	QTY	TOTAL COST IN THOUSANDS OF DOLLARS						
				FY 96		FY 97		FY 98		FY 99
				TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
T3001	AN/USQ-125	A	10	447						
T3002	CSDTS	A	4	1,314	18	1,859				
T3008	MULTS	A			4	500				
T3003	PRODUCTION SUPPORT	N/A	Var	100	Var	362				
T3666	INITIAL TRAINING	N/A		31	Var	50				
T3776	Non-FMP INSTALLATION	N/A			Var	284				
T3777	FMP INSTALLATION	N/A	Var	1,576	Var	114				
TOTAL PROGRAM				3,468		3,169				

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE		
										February 1997		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						HF LINK-11 Data Terminals						
						2660			Q2T3			
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
T3001	AN/USQ-125	Y 96	GAC - Phil, PA	C/FFP/OPT	NISE EAST DET	Jan-96	Mar-96	10	\$44,700	Yes	No	
T3002	CSDTS	Y 96	MIKROS	C/FFP	SPAWAR	Nov-96	Apr-97	4	\$328,500	Yes	No	
		FY 97	MIKROS	C/FFP/OPT	SPAWAR	Feb-97	Jul-97	18	\$103,278	Yes	No	
T3008	MULTS	Y 97	GAC- Phil, PA	C/FFP/OPT	NISE EAST DET	Oct-96	Mar-97	4	\$125,000	Yes	No	
D. REMARKS												

MODIFICATION TITLE: HF Link-11 (Shore Installations)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Link-11 is an automatic high speed computer to computer HF or UHF radio communications link for the exchange of tactical data on a near real time basis. This procurement provides Link-11 capability to non-Tactical Data Systems and enables LINK-11 combatants to operate two simultaneous LINK-11 nets with a new off the shelf CSDTS trainers.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Fully developed off the shelf procurement.

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment																					
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment			8	0.8																8	0.8
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Eqpt																					
FY97 Eqpt			8	0.1																8	0.1
FY98 Eqpt																					
FY99 Eqpt																					
FY00 Eqpt																					
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost			8	0.1																8	0.1
Total Procurement Cost				0.9																	0.9

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 4 MOS PROCUREMENT LEADTIME: 6 MOS

CONTRACT DATES: FY 1997: 2/97 FY 1998: N/A FY 1999: N/A

DELIVERY DATE: FY 1997: 7/97 FY 1998: N/A FY 1999: N/A

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT				2	6												
OUTPUT				2	6												

INSTALLATION SCHEDULE:		FY 01				FY 02				FY 03				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4		
INPUT															8
OUTPUT															8

UNCLASSIFIED

MODIFICATION TITLE:

HF Link-11 (Ship Installations)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION:

Link-11 is an automatic high speed computer to computer HF or UHF radio communications link for the exchange of tactical data on a near real time basis. This procurement provides Link-11 capability to non-Tactical Data Systems and enables LINK-11 combatants to operate two simultaneous LINK-11 nets with a new off the shelf CSDTS trainers. 1st year has 7 mos delivery schedule/options have 5 mos delivery schedule.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Fully developed off the shelf procurement.

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 01		FY 02		FY 03		T C		Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																			
PROCUREMENT																			
Kit Quantity																			
Installation Kits																			
Installation Kit Nonrecurring																			
Equipment			10	1.1													10	1.1	
Equipment Nonrecurring		0.6																	0.6
Engineering Change Orders																			
Data																			
Training Equipment																			
Support Equipment	2	0.2															2	0.2	
Other																			
Interim Contractor Support																			
Installation of Hardware																			
(PY) Eqpt	2	0.1															2	0.1	
FY97 Eqpt			10	0.13															
FY98 Eqpt																			
FY99 Eqpt																			
FY00 Eqpt																			
FY01 Eqpt																			
FY02 Eqpt																			
FY03 Eqpt																			
FY TC Eqpt																			
Total Installation Cost	2	0.1	10	0.1													12	0.2	
Total Procurement Cost		0.9		1.2															2.1

METHOD OF IMPLEMENTATION:

AIT ADMINISTRATIVE LEADTIME: 4 MOS PROCUREMENT LEADTIME: 6 MOS

CONTRACT DATES:

FY 1997: 2/97 FY 1998: N/A FY 1999: N/A

DELIVERY DATE:

FY 1997: 7/97 FY 1998: N/A FY 1999: N/A

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	2			4	6											
OUTPUT	2			4	6											

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														12
OUTPUT														12

UNCLASSIFIED

MODIFICATION TITLE:

HF Link-11 (Shore Installations)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION:

Link-11 is an automatic high speed computer to computer HF or UHF radio communications link for the exchange of tactical data on a near real time basis. This procurement provides for a non-standard Mobil Universal Link Translators (MULTS).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Fully developed off the shelf procurement.

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment																					
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Eqpt																					
FY97 Eqpt																					
FY98 Eqpt																					
FY99 Eqpt																					
FY00 Eqpt																					
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost			4	0.1																4	0.1
Total Procurement Cost				0.6																	0.6

METHOD OF IMPLEMENTATION:

AIT ADMINISTRATIVE LEADTIME: 4 MOS PROCUREMENT LEADTIME: 6 MOS

CONTRACT DATES:

FY 1997: 10/96 FY 1998: N/A FY 1999: N/A

DELIVERY DATE:

FY 1997: 3/97 FY 1998: N/A FY 1999: N/A

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT		4														
OUTPUT		4														

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														4
OUTPUT														4

UNCLASSIFIED

MODIFICATION TITLE:

HF Link-11 (Ship Installations)

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION:

Link-11 is an automatic high speed computer to computer HF or UHF radio communications link for the exchange of tactical data on a near real time basis. This procurement allows for the replacement of obsolete Link-11 Data Terminal Sets (DTS) with a new off the shelf replacement DTS (the AN/USQ-125).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment	48	2.9																		48	2.9
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Eqpt	48	2.9																		48	2.9
FY97 Eqpt																					
FY98 Eqpt																					
FY99 Eqpt																					
FY00 Eqpt																					
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																					
FY TC Eqpt																					
Total Installation Cost	48	2.9																		48	2.9
Total Procurement Cost		5.8																			5.8

METHOD OF IMPLEMENTATION:

AIT ADMINISTRATIVE LEADTIME: 4 MOS PROCUREMENT LEADTIME: 3 MOS

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

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	48															
OUTPUT	48															

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														48
OUTPUT														48

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OPN, BA-2 Communications and Electronic Equipment					Armed Forces Radio and Television (82K0) BLI: 2666			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$3.5	\$3.3	\$15.7	\$16.5	\$4.4	\$4.5	\$4.6	\$4.7
<p>NAVSEA</p> <p>PUC K0014: The goal of the Armed Forces Radio & Television (AFRT) Shipboard Information Training and Entertainment (SITE) Closed Circuit Television (CCTV) system program is to provide improved quality of life at sea and on overseas shore bases. These systems contribute significantly to the habitability of Navy ships by providing news, command information, training, and entertainment programming. There are probably few Navy programs with so much measurable return for the dollar. They improve morale, combat effectiveness and retention rates of deployed personnel. All shipboard SITE CCTV systems use commercial off-the-shelf (COTS) equipment and are based on a five year installation cycle and a seven year life cycle. The next generation SITE CCTV Systems will begin to be procured in FY 1999. The AFRT/SITE program equipment consists of the following subsystems:</p> <p>(a) SITE CCTV (Upgrade) - Engineering change to the current SITE 200, 300, and 400 systems. The upgrade uses COTS equipment to enhance the capabilities of the current SITE systems in order to play all formats of programming distributed by Armed Forces Radio and Television Service (AFRTS) and the Navy Motion Picture Service (NMPS). Total of 196 units required through FY 98. A total of 76 units were procured in FY 96, leaving 54 units to be procured in FY 97 and 66 units to be procured FY 98. Naval Media Center (NAVMEDIACEN) Fleet Support Detachment (FSD) is the installing agent. Each installation is made based on ship availability. Minimal lead time is required to procure and install each unit. FY98 unit cost for the SITE 200 upgrade is approximately \$13K and SITE 300/400 upgrade is \$34K. Option 3 and 4 of the original SITE contract included upgrade components.</p> <p>(b) AN/UXQ-66 (SITE 501) - Closed Circuit Television System (CCTV) used for entertainment, training and command information on board aircraft carriers. It is designed to playback videocassettes and compact discs distributed by Armed Forces Radio and Television Service (AFRTS) and the Navy Motion Picture Service (NMPS) over three channels on a cable distribution system. Systems also allows for the production of training tapes and command information programs. System is designed to interface with pierside cable systems where available. Requires manpower of two dedicated technicians and three operators. Total of 7 systems required through FY 98 at an estimated unit cost of \$335K. The first five units were procured in FY 96 and prior. One unit is included in FY97, leaving 1 unit to be procured in subsequent years. Naval Media Center (NAVMEDIACEN) Fleet Support Detachment (FSD) is the Installing agent. Each installation is made based on ship availability. Each system requires 6 month lead time to be built and delivered.</p>								

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OPN, BA-2 Communications and Electronic Equipment	Armed Forces Radio and Television (82K0) BLI: 2666	
<p>(c) SITE 2000/500 - Same as above SITE 501 system, except this will be part of the new procurement beginning in FY99. Total of 5 systems required through FY03 at an estimated FY99 unit cost of \$410K.</p> <p>(d) SITE 2000/400 - Same as above, SITE 2000/500 system, with the exception of only two-channel capability and smaller editing and production capability and designed for installation on LHA, LHD, LSD, AOE, and LPD classes. System is designed to interface with pierside cables systems where available. Requires manpower of one dedicated technician and operator. Total of 33 systems required at an estimated unit cost of \$200K. No units have been procured in prior years, and no units will be procured until FY 99. Naval Media Center (NAVMEDIACEN) Fleet Support Detachment (FSD) is the Installing agent. Each installation is made based on ship availability. Each system requires 4 month lead time to be built and delivered. The SITE 2000/400 Systems have a seven year life cycle.</p> <p>(e) SITE 2000/300 - Closed Circuit Television System designed primarily for playback of AFRTS and NMPS cassettes over two channels. Capable of producing simple local programs for training and command information. Designed for installation on DD, DDG, CG, and AO classes. System is designed to interface with pierside cable systems where available. Requires manpower of one dedicated technician who also serves as operator. Total of 79 systems required at an estimated unit cost of \$81K. No units have been procured in prior years and no units will be procured until FY 99. Naval Media Center (NAVMEDIACEN) Fleet Support Detachment (FSD) is the Installing agent. Each installation is made based on ship availability. Each system requires 4 month lead time to be built and delivered.</p> <p>(f) SITE 2000/200 - Compact CCTV system used to playback AFRTS and NMPS cassettes over two channels on submarines. Capable of making simple recordings for training and command information. System is designed to interface with pierside cable systems where available. Requires no dedicated technician or operator. Total of 40 systems required at an estimated unit cost of \$54K. No units have been procured in prior years, and no units will be procured until FY 99. Naval Media Center (NAVMEDIACEN) Fleet Support Detachment (FSD) is the Installing agent. Each installation is made based on ship availability. Each system requires 3 month lead time to be built and delivered.</p> <p>PUC K0015: AFSTRS - Armed Forces Satellite Transmitted Radio Service (AFSTRS) provides worldwide transmission of radio news, sports and information programming to Navy ships and overseas stations via its Pacific, Atlantic, and Indian Ocean satellites; provides up to the minute news; and replaces Voice of America shortwave transmitters. Total of 213 systems required at an estimated unit cost of \$25K. A total of 213 units have been procured in prior years, leaving no units to be procured in the budget or subsequent years. Naval Media Center (NAVMEDIACEN) Fleet Support Detachment (FSD) is the Installing agent. Each installation is made based on ship availability. Each system requires 6 month lead time to be built and delivered. FY97 requirement listed in Direct Satellite Program.</p>		

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN, BA-2 Communications and Electronic Equipment	P-1 ITEM NOMENCLATURE Armed Forces Radio and Television (82K0) BLI: 2666	
<p>(a) DIRECT SATELLITE (DS) - The DS System provides satellite delivered television and audio programming consisting of AFRTS and CNN International Feed for U.S. Navy Forces Afloat and at other designated locations. The DS System will provide reliable and efficient informational and entertainment television programming for the ship's crew and will be duplicated for distribution to other ships within the Battle group not so equipped. In FY97 funding is required to procure a prototype Direct Satellite System at an estimated cost of \$104K. Naval Media Center (NAVMEDIACEN) Fleet Support Detachment (FSD) is the installing agent. The installation will be based on ship availability and TYCOM nomination.</p> <p>PUC K0016: SHIPBOARD AUDIO ENTERTAINMENT SYSTEM (SAES): The new SAES is an assemblage of commercial Non-Developmental Items (NDI) that replaces the older/non-portable AN/SIH-7. The prototype system has been built and meets existing performance requirements, including compatibility with existing shipboard subsystems, interface connections, space, and weight requirements. This system is a standard/reliable means to play program material distributed by the Armed Forces Radio and Television Service (AFRTS). Total of 154 systems required at an estimated FY98 unit cost of \$27K. In prior years 32 units were procured. In FY97 and FY98 17 units will be procured each year, leaving 88 units to be procured in subsequent years. Naval Media Center (NAVMEDIACEN) Fleet Support Detachment (FSD) is the Installing agent. Each installation is made based on ship availability. Each system requires 2-3 month lead time to be built and delivered. The following ship classes require the total of 154 SAES Units: AGF, AO, AOE, CG, CV/CVN, DD, DDG, LCC, LHA, LHD, LPD, LPH, LSD.</p> <p>PUC K0017: INTEGRATED RADIO FREQUENCY DISTRIBUTION SYSTEM (IRFDS): The IRFDS is required for shipwide 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. Existing IRFDS have degraded over time such that many shipboard TV receivers display a severely degraded picture. This system replaces the unsupportable Circuit 14TV. IRFDS uses Non-Developmental Items (NDI) from commercial vendors. Total of 148 systems are required. An average FY98 unit cost to engineer, furnish and install is \$249K. 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. Five units have been procured in prior years, 4 units have been included in FY 97 and FY 98, leaving 135 units to be procured in subsequent years. Naval Media Center (NAVMEDIACEN) Fleet Support Detachment (FSD) is the Installing agent with minimal support provided by shipyard. Each installation is made based on ship availability. Each system requires minimal lead time to be built and delivered. The following ship classes require the total of 148 INTEGRATED RADIO FREQUENCY DISTRIBUTION SYSTEM (IRFDS) Units: AGF, AO, AOE, CG, CV/CVN, DD, DDG, LCC, LHA, LHD, LPD, LPH, LSD. IRFDS procurement also includes the purchase of equipment to integrate all television displays onto one distribution system.</p> <p>PUC K0018: - FY 96 and outyear Installation funding identified supports installation of SITE CCTV (K0014), AFSTRS (K0015), SAES (K0016), and IRFDS (K0017).</p>		

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OPN, BA-2 Communications and Electronic Equipment					Armed Forces Radio and Television (82K0) Television Direct-To-Sailors BLI: 2666			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY			110	110				
COST (In Millions)			\$12.0	\$11.9				
<p>SPAWAR</p> <p>Television Director-to-Sailor will provide a receive-only television capability to 220 ships of 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 and ground based earth stations and terrestrial connectivity (via O&MN funding). Each ship will be outfitted with COTS 1,2 meter C-band satellite transceiver and enclosed stabilized antenna terminal for reception of the television signal.</p> <p>Justification of Budget Year Requirements:</p> <p>FY 1998 and FY 1999 funds will be placed on contract for the procurement of hardware to satisfy the TV-DTS requirement with 1010 systems bought in each of FY 98 and FY 99.</p> <p>Installation of Equipment: This subline funding to Alteration Installation Teams (AIT) at Navy field activities for installation of equipment procured for ships.</p>								

P-1 SHOPPING LIST

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CLASSIFICATION
UNCLASSIFIED

CLASSIFICATION:

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)									DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD						
OPN, BA-2 Communications and Electronic Equipment				Armed Forces Radio and Television (82K0)						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
NAVSEA										
<u>SUBMARINES (N87)</u>										
K0014	SITE CCTVs (SITE 200 Upgrade)	A	27	344	27	351	26	349		
K0014	SITE CCTVs 2000/200								8	434
<u>SURFACE SHIPS (N86)</u>										
K0014	SITE CCTVs (300/400 Upgrade)	A	49	1,630	27	919	40	1,409		
K0014	SITE CCTVs 2000/300	A							10	805
K0014	SITE CCTVs 2000/400	A							6	1,200
K0015	AFSTRS/DS	A	4	100	1	104				
K0016	SAES	A	16	400	17	442	17	459	17	478
K0017	IRFDS	A	2	507	4	948	4	995	4	1,035
<u>AIRCRAFT CARRIERS (N88)</u>										
K0014	SITE CCTVs (SITE 501)	A	1	336	1	341	1	335		
K0014	SITE CCTVs 2000/ 500	A							1	410
K0INS	EQUIPMENT INSTALLATION (NON-FMP)	A		172		190		168		170
TOTAL					3,489		3,295		3,715	4,532

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CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)								DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD							
OPN, BA-2 Communications and Electronic Equip				Television Direct-To-Sailors							
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COST	
	SPAWAR										
K0018	TV-DTS	A					110	6,000	110	6,000	
K0777	INSTALL OF EQUIPMENT	A					VAR	5,950	VAR	5,940	
TOTAL					0		0		11,950		11,940

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING										DATE	
EXHIBIT (P-5A)										FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OPN, BA 2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					ARMED FORCES RADIO & TV				82K0		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	NAVSEA										
	FY 96										
K0014	SITE (200 Upgrade)	TV Audio Support Activity	MIPR	NAVSEA	12/95	1/96	27	12.7	YES	N/A	
K0014	SITE (300/400 Upgrade)	TV Audio Support Activity	MIPR	NAVSEA	12/95	1/96	49	33.3	YES	N/A	
K0014	SITE 501	TV Audio Support Activity	MIPR	NAVSEA	1/96	6/96	1	336.0	YES	N/A	
K0015	AFSTRS	TV Audio Support Activity	MIPR	NAVSEA	12/95	2/96	4	25.0	YES	N/A	
K0016	SAES	TV Audio Support Activity	MIPR	NAVSEA	6/96	8/96	16	25.0	YES	N/A	
K0017	IRFDS (Note 1)	TV Audio Support Activity	MIPR	NAVSEA	1/96	5/96	2	253.5	YES	N/A	
	FY 97										
K0014	SITE (200 Upgrade)	TV Audio Support Activity	MIPR	NAVSEA	10/96	12/96	27	13.0	YES	N/A	
K0014	SITE (300/400 Upgrade)	TV Audio Support Activity	MIPR	NAVSEA	10/96	12/96	27	34.0	YES	N/A	
K0014	SITE 501	TV Audio Support Activity	MIPR	NAVSEA	1/97	6/97	1	341.0	YES	N/A	
K0015	AFSTRS/DS	TV Audio Support Activity	MIPR	NAVSEA	11/96	1/97	1	104.0	NO	N/A	
K0016	SAES	TV Audio Support Activity	MIPR	NAVSEA	11/96	1/97	17	26.0	YES	N/A	
K0017	IRFDS (Note 1)	TV Audio Support Activity	MIPR	NAVSEA	1/97	3/97	4	237.0	YES	N/A	
	FY 98										
K0014	SITE (200 Upgrade)	TV Audio Support Activity	MIPR	NAVSEA	10/97	12/97	26	13.4	YES	N/A	
K0014	SITE (300/400 Upgrade)	TV Audio Support Activity	MIPR	NAVSEA	10/97	12/97	40	35.2	YES	N/A	
K0014	SITE 501	TV Audio Support Activity	MIPR	NAVSEA	1/98	6/98	1	335.0	YES	N/A	
K0016	SAES	TV Audio Support Activity	MIPR	NAVSEA	11/97	1/98	17	27.0	YES	N/A	
K0017	IRFDS (Note 1)	TV Audio Support Activity	MIPR	NAVSEA	1/98	3/98	4	248.8	YES	N/A	
REMARKS											
General Note: Unit Costs have been rounded to the nearest hundred.											
Note: (1) In addition to hardware, total cost includes \$148K/unit for Engineering and installation support.											

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BUDGET PROCUREMENT HISTORY AND PLANNING										DATE	
EXHIBIT (P-5A)										FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OPN, BA 2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					ARMED FORCES RADIO & TV				82K0		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	NAVSEA										
	FY 99										
K0014	SITE 2000/200	TBD	FFP	NAVSEA	2/99	5/99	#REF!	54.3	NO	N/A	
K0014	SITE 2000/300	TBD	FFP	NAVSEA	2/99	6/99	10	80.5	NO	N/A	
K0014	SITE 2000/400	TBD	FFP	NAVSEA	2/99	6/99	6	200.0	NO	N/A	
K0014	SITE 2000/500	TBD	FFP	NAVSEA	2/99	6/99	1	410.0	NO	N/A	
K0016	SAES	TV Audio Support Agency	MIPR	NAVSEA	11/98	1/99	17	28.1	YES	N/A	
K0017	IRFDS	TV Audio Support Agency	MIPR	NAVSEA	1/99	3/99	4	258.8	YES	N/A	
REMARKS											
General Note: Unit Costs have been rounded to the nearest hundred.											

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CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING										DATE	
EXHIBIT (P-5A)										FEB 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OPN, BA 2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					ARMED FORCES RADIO & TV Television Direct-to-Sailors (82K0)				82K0		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
	<u>SPAWAR</u>										
K0018	<u>FY 1998</u> TV-DTS	TBD	FP	NRAD	OCT-97	DEC-97	110	54,545	YES	NO	N/A
K0018	<u>FY 1999</u> TV-DTS	TBD	FP	NRAD	OCT-98	DEC-98	110	54,545	YES	NO	N/A
REMARKS: Unit costs include production and procurement of ancillary hardware for interface with Navy communication systems.											

INDIVIDUAL MODIFICATION													FEBRUARY 1997																					
P3A																																		
MODIFICATION TITLE: ARMED FORCES RADIO & TV (82K0) - AFSTRS/DS/K0015																																		
MODELS OF SYSTEM AFFECTED: AFSTRS/DS/K0015																																		
DESCRIPTION/JUSTIFICATION: Armed Forces Satellite Transmitted Radio Service provides worldwide transmission of radio news, sports, and information programming to Navy ships and overseas stations. Procurement of Direct Satellite (DS) prototype system FY97. DS will provide both radio (AFSTRS) and tv (TVRO) functions in one unit.																																		
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: AFSTRS procurement completed.																																		
FY96													TO TO																					
													COMP		TOTAL		TOTAL																	
													QTY		COST		QTY		COST															
QTY & PRIOR QTY FY 97 QTY FY 98 QTY FY 99 QTY FY 00 QTY FY 01 QTY FY 02 QTY FY 03																																		
<u>RDT&E</u>																																		
<u>PROCUREMENT</u>																																		
QUANTITY													213		1				214		0													
INSTALLATION KITS																			0		0													
INSTALLATION KITS NONRECURRING																			0		0													
EQUIPMENT													213		5.445		1		0.104		0		0		0		0		0		214		5.549	
EQUIPMENT NONRECURRING																											0		0					
ENGINEERING CHANGE ORDERS																											0		0					
DATA																									0		0							
TRAINING EQUIPMENT																									0		0							
SUPPORT EQUIPMENT																									0		0							
OTHER																									0		0							
INTERIM CONTRACTOR SUPPORT																									0		0							
<u>INSTALLATION OF HARDWARE</u>																																		
FY96 EQUIPMENT & PRIOR													213		1.676												213		1.676					
FY97 EQUIPMENT																	1		0.015								1		0.015					
FY98 EQUIPMENT																											0		0					
FY99 EQUIPMENT																											0		0					
FY00 EQUIPMENT																											0		0					
FY01 EQUIPMENT																											0		0					
FY02 EQUIPMENT																											0		0					
FY03 EQUIPMENT																											0		0					
TO COMPLETE																											0		0					
TOTAL INSTALLATION COST													1.676		0.015		0		0		0		0		0		0		0		214		1.691	
TOTAL PROCUREMENT COST													5.445		0.104		0		0		0		0		0		0		0				5.549	
TOTAL COST													7.121		0.119		0		0		0		0		0		0		0				7.240	
METHOD OF IMPLEMENTATION: AIT																	ADMINISTRATIVE LEADTIME:				PRODUCTION LEADTIME: 3-6 Months													
CONTRACT DATE:													PRIOR YEAR: N/A				CURRENT YEAR: Nov-9				BUDGET YEAR: BUDGET YEAR 2:													
PRODUCTION DELIVER DATE:													PRIOR YEAR: N/A				CURRENT YEAR: Feb-9				BUDGET YEAR: BUDGET YEAR 2:													
INSTALLATION SCHEDULE:																																		
INPUT =====>													FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		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		1, 2, 3, 4		TOTAL			
FY 96 & PRIOR													210,1,1,1																		213			
FY 97															0,0,0,1																1			
FY 98																															0			
FY 99																															0			
FY 00																															0			
FY 01																															0			
FY 02																															0			
FY 03																															0			
TO COMPLETE																															0			
TOTAL													210,1,1,1		0,0,0,1																		214	
OUTPUT =====>													FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		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		1, 2, 3, 4		TOTAL			
FY 96 & PRIOR													210,1,1,1																		213			
FY 97															0,0,0,1																1			
FY 98																															0			
FY 99																															0			
FY 00																															0			
FY 01																															0			
FY 02																															0			
FY 03																															0			
TO COMPLETE																															0			
TOTAL													210,1,1,1		0,0,0,1																		214	

P3A INDIVIDUAL MODIFICATION														FEBRUARY 1997																																							
MODIFICATION TITLE: ARMED FORCES RADIO & TV (82K0) - SAES/K0016																																																					
MODELS OF SYSTEM AFFECTED: SAES/K0016																																																					
DESCRIPTION/JUSTIFICATION: Shipboard Audio Entertainment System replaces the older/non-supportable AN/SIH-7. Due to contract award delay installation will not begin until FY97.																																																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																																																					
FY96														TO TO																																							
QTY&PRIOR QTY FY 97 QTY FY 98 QTY FY 99 QTY FY 00 QTY FY 01 QTY FY 02 QTY FY 03														COMFCOMP TOTAL		TOTAL																																					
FINANCIAL PLAN (IN MILLIONS)																																																					
RD&E														0		0																																					
PROCUREMENT														0		0																																					
QUANTITY														32		17																																					
INSTALLATION KITS														0		0																																					
INSTALLATION KITS NONRECURRING														0		0																																					
EQUIPMENT														32		0.800		17		0.442		17		0.459		17		0.478		8		0.234		8		0.243		4		0.126		4		0.131		47		1.321		154		4.234	
EQUIPMENT NONRECURRING														0		0																																					
ENGINEERING CHANGE ORDERS														0		0																																					
DATA														0		0																																					
TRAINING EQUIPMENT														0		0																																					
SUPPORT EQUIPMENT														0		0																																					
OTHER														0		0																																					
INTERIM CONTRACTOR SUPPORT														0		0																																					
INSTALLATION OF HARDWARE																																																					
FY96 EQUIPMENT & PRIOR														32		0.064		32		0.064																																	
FY97 EQUIPMENT														6		0.012		11		0.022		17		0.034																													
FY98 EQUIPMENT																6		0.012		11		0.028		17		0.040																											
FY99 EQUIPMENT																		13		0.032		4		0.010		17		0.042																									
FY00 EQUIPMENT																				8		0.021		8		0.021																											
FY01 EQUIPMENT																				8		0.024		8		0.024																											
FY02 EQUIPMENT																						4		0.014		4		0.014																									
FY03 EQUIPMENT																								4		0.016		4		0.016																							
TO COMPLETE																								47		0.19		47		0.188																							
TOTAL INSTALLATION COST														0.000		0.076		0.034		0.060		0.031		0.024		0.014		0.016		0.188		154		0.443																			
TOTAL PROCUREMENT COST														0.800		0.442		0.459		0.478		0.234		0.243		0.126		0.131		1.321		4.234																					
TOTAL COST														0.800		0.518		0.493		0.538		0.265		0.267		0.140		0.147		1.509		4.677																					
METHOD OF IMPLEMENTATION: AIT (NAVMEIACEN/FSD)																																																					
CONTRACT DATE: Nov-96																																																					
PRODUCTION DELIVER DATE:																																																					
ADMINISTRATIVE LEADTIME:				PRODUCTION LEADTIME: 2-3 Months																																																	
CURRENT YEAR: N/A				CURRENT YEAR: Nov-97				BUDGET YEAR 2: Nov-98																																													
PRIOR YEAR: N/A				CURRENT YEAR: Jan-97				BUDGET YEAR: Jan-98				BUDGET YEAR 2: Jan-99																																									
INSTALLATION SCHEDULE:																																																					
INPUT =====>																																																					
FY96																																																					
FY97																																																					
FY98																																																					
FY99																																																					
FY00																																																					
FY01																																																					
FY02																																																					
FY03																																																					
IC																																																					
TOTAL																																																					
OUTPUT =====>																																																					
FY96																																																					
FY97																																																					
FY98																																																					
FY99																																																					
FY00																																																					
FY01																																																					
FY02																																																					
FY03																																																					
IC																																																					
TOTAL																																																					

P3A		INDIVIDUAL MODIFICATION												FEBRUARY 1997															
MODIFICATION TITLE:		DIRECT-T0 SAILORS																											
MODELS OF SYSTEM AFFECTED:																													
DESCRIPTION/JUSTIFICATION:		Integrated Radio Frequency Distribution System required for shipwide transmission of command information, training, and entertainment television program																											
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		FY96																											
		TO TO																											
		COMP COMP																											
		QTY COST QTY COST																											
FINANCIAL PLAN (IN MILLIONS)																													
<i>RDT&E</i>														0 0															
<i>PROCUREMENT</i>														0 0															
QUANTITY		5	4	4	4	2	1	1	1	1	126			148	0														
INSTALLATION KITS														0 0															
INSTALLATION KITS NONRECURRING														0 0															
EQUIPMENT		5	0.990	4	0.948	4	0.995	4	1.035	2	0.538	1	0.280	1	0.291	1	0.302	126	37.800	148	43.179								
EQUIPMENT NONRECURRING														0 0															
ENGINEERING CHANGE ORDERS														0 0															
DATA														0 0															
TRAINING EQUIPMENT														0 0															
SUPPORT EQUIPMENT														0 0															
OTHER														0 0															
INTERIM CONTRACTOR SUPPORT														0 0															
<u>INSTALLATION OF HARDWARE</u>																													
FY96 EQUIPMENT & PRIOR		5	0.012													5	0.012												
FY97 EQUIPMENT				3	0.017	1	0.006													4	0.023								
FY98 EQUIPMENT						3	0.017	1	0.007													4	0.024						
FY99 EQUIPMENT								4	0.026													4	0.026						
FY00 EQUIPMENT										2	0.015													2	0.015				
FY01 EQUIPMENT												1	0.007													1	0.007		
FY02 EQUIPMENT														1	0.008													1	0.008
FY03 EQUIPMENT														1	0.009													1	0.009
TO COMPLETE																126	1.260	126	1.260										
TOTAL INSTALLATION COST		0.012	0.017	0.023	0.033	0.015	0.007	0.008	0.009	1.260	148	1.384																	
TOTAL PROCUREMENT COST		0.990	0.948	0.995	1.035	0.538	0.280	0.291	0.302	37.800	43.179																		
TOTAL COST		1.002	0.965	1.018	1.068	0.553	0.287	0.299	0.311	39.060	44.563																		
METHOD OF IMPLEMENTATION: AIT (NAVMECIACEN/FSD)		ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 0-2 Months																											
CONTRACT DATE:		PRIOR YEAR: N/A CURRENT YEAR: Jan-97; BUDGET YEAR: Jan-98 BUDGET YEAR 2: Jan-98																											
PRODUCTION DELIVER DATE:		PRIOR YEAR: N/A CURRENT YEAR: Feb-97; BUDGET YEAR: Feb-98 BUDGET YEAR 2: Feb-98																											
<u>INSTALLATION SCHEDULE:</u>																													
INPUT =====>		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		IC		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		1,2,3,4											
FY 96 & PRIOR		2,1,1,1																		5									
FY 97				0,1,1,1																3									
FY 98						1,1,1,1														4									
FY 99								1,2,1,1												5									
FY 00										0,1,1,0										2									
FY 01												0,1,0,0								1									
FY 02														0,1,0,0						1									
FY 03																0,1,0,0				1									
TO COMPLETE																		0,0,126,0		126									
TOTAL																				148									
OUTPUT =====>		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		IC		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		1,2,3,4											
FY 96 & PRIOR		2,1,1,1																		5									
FY 97				0,1,1,1																3									
FY 98						1,1,1,1														4									
FY 99								1,1,2,1												5									
FY 00										0,0,1,1										2									
FY 01												0,0,1,0								1									
FY 02														0,0,1,0						1									
FY 03																0,0,1,0				1									
TO COMPLETE																		0,0,0,126		126									
TOTAL																				148									

MODIFICATION TITLE: Television-Direct to Sailors-(TV-DTS)

MODELS OF SYSTEMS AFFECTED:

Feb-97

DESCRIPTION/JUSTIFICATION: Procurement and installation 1.2 meter C-band satellite transceivers and enclosed stabilized antenna terminals.

Note: Fy98 installation funding includes advanced material and planning.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment					110	6.0	110	6.0											220	12.0
Equipment Nonrecurring																			0	0.0
Engineering Change Orders																			0	0.0
Data																			0	0.0
Training Equipment																			0	0.0
Support Equipment																			0	0.0
Other																			0	0.0
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Eqpt																			0	0.0
FY97 Eqpt																			0	0.0
FY98 Eqpt					90	6.0													90	6.0
FY99 Eqpt							130	5.9											130	5.9
FY00 Eqpt																			0	0.0
FY01 Eqpt																			0	0.0
FY02 Eqpt																			0	0.0
FY03 Eqpt																			0	0.0
FY TC Eqpt																			0	0.0
Total Installation Cost	0	0.0	0	0.0	90	6.0	130	5.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	220	11.9
Total Procurement Cost	0.0		0.0		12.0		11.9		0.0		0.0		0.0		0.0		0.0		0	23.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES:

FY 191: FY 1998 10/97 FY 1999 10/98

DELIVERY DATE:

FY 191: FY 1998 12/97 FY 1999 12/98

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

INPUT

30 30 30 32 33 32 33

OUTPUT

20 30 30 32 32 33 32 11

	FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INSTALLATION SCHEDULE:														

INPUT

220

OUTPUT

220

P-1 SHOPPING LIST

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CLASSIFICATION: UNCLASSIFIED

REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B							DATE	FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN, BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE ARMED FORCES RADIO AND TELEVISION (82K0)				
ITEM/PROJECT UNIT	TOTAL IO / REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY 97 PROGRAM FUNDS	PLANNED 98 BUDGET YEARS PROCUREMENT	BALANCE	PHASING RATIONALE
K0014								
SITE CCTV (Upgrade)	196	13	63	76	54	66	0	Procurements through FY98 Procurements through FY98 Procurement starts FY99 Procurement starts FY99 Procurement starts FY99
AN/UXQ-66 (SITE 501)	7	2	3	5	1	1	0	
SITE 2000/200	40	0	0	0	0	0	40	
SITE 2000/300	79	0	0	0	0	0	79	
SITE 2000/400	33	0	0	0	0	0	33	
SITE 2000/500	5	0	0	0	0	0	5	
K0015								
AFSTRS SRS	213	0	213	213	0	0	0	Prototype
DS	1	0	0	0	1	0	0	
K0016								
SAES	154	0	0	32	17	17	88	OUTYEARS
K0017								
IRFDS	148	2	3	5	4	4	135	OUTYEARS
MEMO ENTRIES								
COST CODE:								
ITEM #1 SITE CCTV (Upgrade)	ITEM #2 (SITE 501)	ITEM #3 SITE 2000/200			ITEM #4 SITE 2000/300		ITEM #5 SITE 2000/400	
CG 22 DDG 26	CV/CVN 7	SSN 30	AO 5		LHA 4			
FFG 31 SSBN 18		SSBN 10	CG 23		LHD 7			
AGF 2 LPD 5			DD 20		AOE 7			
AOE 6 LHA 4			DDG 31		LSD 10			
LCC 2 LHD 5					LPD 5			
LPH 2 SSN 40								
DD 24 LSD 9								
SUBTOTAL 196	SUBTOTAL 7	SUBTOTAL 40	SUBTOTAL 79		SUBTOTAL 33			
ITEM #6 SITE 2000/500	ITEM #7 AFSTRS SRS	ITEM #8 SAES			ITEM #9 IRFDS			
CV/CVN 5	AD 2 CGN 4 LPH 3	CG 27	LHD 8	CG 24 LHA 5				
	AE 5 CV/CVN 11 LSD 10	AGF 2	CV/CVN 11	AGF 2 CV/CVN 11				
	AGF 2 DD 31 TRNG 5	AO 5	DD 29	AO 5 DD 29				
	AO 5 DDG 26 USMEF 1	AOE 8	DDG 31	AOE 8 DDG 30				
	AOE 8 FFG 43	LCC 2	LHA 5	LSD 16 LCC 2				
	AOR 2 LCC 2	LPD 9	LSD 15	LHD 8 LPD 6				
	ARS 2 LHA 5	LPH 2		LPH 2				
	AS 5 LHD 5							
	CG 25 LPD 11							
SUBTOTAL 5	SUBTOTAL 213	SUBTOTAL 154		SUBTOTAL 148				

UNCLASSIFIED
CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							C. P-1 ITEM NOMENCLATURE: ARMED FORCES RADIO & TV Television-Direct to Sailors (TV-DTS) 0		
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE
cost code Television- Direct to S	220	0	0	0	0	110	110	0	Complete
	0							0	
	0							0	
	0							0	
	0							0	
	0							0	
MEMO ENTERED									
ITEM #1 cost code TV-DTS hull/locati qty hull/location Ships 218 ISEA and 2	qty								
ITEM #2 cost code hull/location	qty								
ITEM #3 cost code hull/location	qty								
TOTAL I/O 220				TOTAL I/O 0				TOTAL I/O 0	
ITEM #4 cost code item hull/locati qty hull/location	qty								
ITEM #5 cost code hull/location	qty								
ITEM #6 cost code hull/location	qty								
TOTAL I/O 0				TOTAL I/O 0				TOTAL I/O 0	

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P-1 SHOPPING LIST

Exhibit P-23B

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UNCLASSIFIED
CLASSIFICATION

Exhibit P-40, Budget Item Justification						Date February 1997		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Other Procurement, NAVY/1810/BA-2/BLI#2676						P-1 Line Item Nomenclature Strategic Platform Support Equipment (82P1)		
Program Element for Code B Items:		Other Related Program Elements						
Cost (In Millions)	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Procurement Quantity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(Other) PIMCS	N/A	\$23.9	N/A	N/A	N/A	N/A	N/A	N/A
Gross Cost	\$9.8	\$3.4	\$7.5	\$27.2	\$32.5	\$20.8	\$16.2	\$16.7
Total Procurement Cost	\$9.8	\$27.4	\$7.5	\$27.2	\$32.5	\$20.8	\$16.2	\$16.7
<p>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 three programs: 1) Sustaining Capability, 2) Obsolete Equipment Replacement (OER) and 3) Common Capability.</p> <p>SUSTAINING CAPABILITY PROGRAMS - Funding of technical effort to continue to operationally support current hardware/software configurations in use on SSBN 726 Class Submarines. Effort would also include changes to TRIDENT shore based facilities such as TRIREFFAC.</p> <p>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.</p> <p>COMMON CAPABILITY PROGRAM - Funding of technical efforts to support changes onboard TRIDENT or in conjunction with other fleet programs. Goal is to reduce number of hardware/software configurations in use on both SSBN 726 Class Submarines and within the fleet in general.</p> <p>INSTALLATION (ELECTRONICS) - Provides funding for electronic equipment installation resulting from OER, Sustaining, or Common Capability Programs.</p>								

Exhibit P-40, Budget Item Justification		Date February 1997
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Other Procurement, NAVY/1810/BA-2/BLI#2676		P-1 Line Item Nomenclature Strategic Platform Support Equipment (82P1)
Program Element for Code B Items:	Other Related Program Elements	
<p>MACHINERY CONTROL SYSTEM - Funds are required for the development, procurement and installation of an electronic upgrade of the existing Machinery Control System on selected Surface Combatants of the CG 47/DD 63/DDG993 classes of ships. The first step prototypes at the AEGIS Land Based Engineering Site (LBES) AT NSWCCDSES in Philadelphia, PA, for systems to be installed on these ships. The upgrade must be engineered such that it can be installed on all three classes. The second phase will be the procurement and shipboard installation.</p>		

Exhibit P-5 Cost Analysis (Page 1) (FOR OSD REVIEW ONLY)						Weapon System		Date: February 1997			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number						ID Code		P-1 Line Item Nomenclature (82P1)			
Other Procurement, NAVY/1810/BA-2/BLI#2676						P1200		Strategic Platform Support Equipment			
WBS COST ELEMENTS Cost (In Millions) (Tailor to System/Item Rqmts)	Quantity	ID Code	PYs Total Cost	PY FY1996 Unit Cost	PY FY1996 Total Cost	CY FY1997 Unit Cost	CY FY1997 Total Cost	BY1 FY1998 Unit Cost	BY1 FY1998 Total Cost	BY2 FY1999 Unit Cost	BY2 FY1999 Total Cost
FY 1996											
P1220					2.814						
P1221					1.675						
P1222					5.343						
P1INS					0.000						
P1MCS					0.000						
FY 1997											
P1220							0.806				
P1221							2.305				
P1222							0.168				
P1INS							0.190				
P1MCS							23.946				
FY 1998											
P1220									0.000		
P1221									6.267		
P1222									0.000		
P1INS									1.232		
P1MCS									0.000		
FY 1999											
P1220											2.539
P1221											20.178
P1222											2.498
P1INS											1.990
P1MCS											0.000
Total					9.832		27.415		7.499		27.205

Exhibit P-5 Cost Analysis (Page 1) (FOR OSD REVIEW ONLY)					Weapon System			Date: February 1997			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number							ID Code	P-1 Line Item Nomenclature (82P1)			
Other Procurement, NAVY/1810/BA-2/BLI#2676							P1220	Strategic Platform Support Equipment Sustaining Capability Program			
WBS COST ELEMENTS Cost (In Millions) (Tailor to System/Item Rqmts)	Quantity	ID Code	PYs Total Cost	PY FY1996 Unit Cost	PY FY1996 Total Cost	CY FY1997 Unit Cost	CY FY1997 Total Cost	BY1 FY1998 Unit Cost	BY1 FY1998 Total Cost	BY2 FY1999 Unit Cost	BY2 FY1999 Total Cost
FY 1996											
MANTIS *	6	A		0.371	2.228						
OK542 Level Wind Upgrade	1	A		0.124	0.124						
OK542 TA Cable Data PKG	1	A		0.139	0.139						
OK542 Pressure Compensator	1	A		0.099	0.099						
OK542 Pressure Reducing Valve	1	A		0.224	0.224						
FY 1997											
MS Class Transient	1	A				0.806	0.806				
FY 1998											
NONE	0							0.000	0.000		
FY 1999											
Towed Array Handling System	1	A								2.269	2.269
DEAC Replacement	1	A								0.270	0.270
Total					2.814		.806		.000		2.539

(*Average unit cost for MANTIS Category would be 371.3K for 2228K total).

Exhibit P-5 Cost Analysis (Page 1) (FOR OSD REVIEW ONLY)						Weapon System		Date: February 1997			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number						ID Code		P-1 Line Item Nomenclature (82P1)			
Other Procurement, NAVY/1810/BA-2/BLI#2676						P1221		Strategic Platform Support Equipment Obsolete Equipment Replacement (OER)			
WBS COST ELEMENTS Cost (In Millions) (Tailor to System/Item Rqmts)	Quantity	ID Code	PYs Total Cost	PY FY1996 Unit Cost	PY FY1996 Total Cost	CY FY1997 Unit Cost	CY FY1997 Total Cost	BY1 FY1998 Unit Cost	BY1 FY1998 Total Cost	BY2 FY1999 Unit Cost	BY2 FY1999 Total Cost
FY 1996											
DEAC OER DPS/MS Workstation	2	A		0.118	0.236						
DEAC OER	1	A		0.242	0.242						
IRR Lab @ NUWC NPT	1	A		0.650	0.650						
MS Workstation	2	A		0.100	0.200						
AN/BQQ-22A (EC15) on 5 QE2 Hull	1	A		0.132	0.132						
AN/BQQ-22A (EC15) on Q-6 Hulls	1	A		0.078	0.078						
BRR-6 Scuttle Removal	1	A		0.080	0.080						
Torpedo Tube Interlock	1	A		0.040	0.040						
Torpedo Tube Stop Mech.	1	A		0.017	0.017						
FY 1997											
DEAC Replacement	1	A				1.474	1.474				
MS Workstation	1	A				0.831	0.831				
FY 1998											
DEAC Replacement	1	A						3.961	3.961		
MS Workstation	1	A						1.844	1.844		
MSDC Replacement	1	A						0.462	0.462		
FY 1999											
MS Workstation	1	A								0.858	0.858
MSDC Replacement	1	A								10.169	10.169
TA MPP	1	A								2.597	2.597
Fiber Optic Network	1	A								5.073	5.073
AN/WLR-8 Digital Display Unit	1	A								1.352	1.352
AN/WLR-8 Raymond Tape Replacement	1	A								0.129	0.129
Total					1.675		2.305		6.267		20.178

Exhibit P-5 Cost Analysis (Page 1) (FOR OSD REVIEW ONLY)					Weapon System			Date: February 1997				
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number							ID Code	P-1 Line Item Nomenclature (82P1)				
Other Procurement, NAVY/1810/BA-2/BLI#2676							P1222	Strategic Platform Support Equipment Common Capability Program				
WBS COST ELEMENTS Cost (In Millions) (Tailor to System/Item Rqmts)	Quantity	ID Code	PYs Total Cost	PY FY1996 Unit Cost	PY FY1996 Total Cost	CY FY1997 Unit Cost	CY FY1997 Total Cost	BY1 FY1998 Unit Cost	BY1 FY1998 Total Cost	BY2 FY1999 Unit Cost	BY2 FY1999 Total Cost	
FY 1996												
Revision Testing 5.6	1	A		3.049	3.049							
Bus Analyzer	1	A		0.150	0.150							
Per 8J Mod 3 (EHF SATCOM)	1	A		0.192	0.192							
EHF Waveguide Sweep Test Equipment	1	A		0.171	0.171							
IRR Transition	1	A		0.250	0.250							
EHF SATCOM for GPTE	1	A		0.053	0.053							
Tactical Data Recorder	1	A		0.065	0.065							
EHF SATCOM Trainer	1	A		0.300	0.300							
OK-542/BQ Tow Pt. Cable Test Box	1	A		0.055	0.055							
OK-542 Control & Indicator Unit	1	A		0.357	0.357							
DAMA Modification	1	A		0.150	0.150							
8J Mod 3 (EHF SATCOM) *	4	A		0.137	0.551							
FY 1997												
8J Mod 3 Periscope	1	A				0.033	0.033					
MSDC Replacement OER	1	A				0.135	0.135					
FY 1998												
NONE	0							0.000	0.000			
FY 1999												
Per 8J Mod 3 (EHF SATCOM)	2	A								0.150	0.300	
TLCSF Revision Testing	1	A								2.198	2.198	
Total					5.343		0.168		0.000		2.498	

Exhibit P-5a, Procurement History and Planning (Page 1)				Weapon System			DATE: February 1997			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number							P-1 Line Item Nomenclature (82P1)			
Other Procurement, Navy/1810/BA-2/BLI#2676							Strategic Platform Support Equipment P1220 Sustaining Capability Program			
WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Date of First Delivery	Specs Available Now?	Date Revisions Available
Past Year (or last yr of proc)										
FY-1996										
MANTIS *	6	.371	NAVSEA		PO/FP	NUWC NPT /Newport, RI	4/96	5/96	YES	N/A
OK542 Level Wind Upgrade	1	.124	NAVSEA		PO/FP	NSWC Crane /Crane, IN	5/96	6/96	YES	N/A
OK542 TA Cable Data PKG	1	.139	NAVSEA		PO/FP	NSWC Crane /Crane, IN	5/96	6/96	YES	N/A
OK542 Pressure Compensator	1	.099	NAVSEA		PO/FP	NSWC Crane /Crane, IN	5/96	6/96	YES	N/A
OK542 Pressure Reducing Valve	1	.224	NAVSEA		PO/FP	NSWC Crane /Crane, IN	5/96	6/96	YES	N/A
FY-1997										
MS Class Transient	1	.806	NAVSEA		PO/FP	NSWC CARD/Bethesda, MD	12/96	4/97	YES	N/A
FY-1998										
NONE										
FY-1999										
Towed Array Handling System	1	2.269	NAVSEA		PO/FP	NSWC Crane /Crane, IN	12/98	4/99	NO	N/A
DEAC Replacement	1	.270	NAVSEA		PO/FP	NUWC NPT /Newport, RI	12/98	5/99	NO	N/A

(*Average unit cost for MANTIS Category would be 371.3K for 2228K total).

Exhibit P-5a, Procurement History and Planning (Page 1)				Weapon System				DATE: February 1997			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number							P-1 Line Item Nomenclature (82P1)				
Other Procurement, Navy/1810/BA-2/BLI#2676							Strategic Platform Support Equipment P1221 Obsolete Equipment Replacement				
WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Date of First Delivery	Specs Available Now?	Date Revisions Available	
Past Year (or last yr of proc)											
FY-1996											
DEAC OER DPS/MS Workstation	2	.118	NAVSEA		PO/FP	NUWC NPT /Newport, RI	2/96	3/96	YES	N/A	
DEAC OER	1	.242	NAVSEA		PO/FP	EB/GD DIV / Groton, CT	6/96	7/96	YES	N/A	
IRR Lab @ NUWC NPT	1	.650	NAVSEA		PO/FP	NUWC NPT /Newport, RI	3/96	4/96	YES	N/A	
MS ADS Workstation *	2	.100	NAVSEA		PO/FP	NUWC NPT /Newport, RI	11/96	12/96	YES	N/A	
AN/BQQ-22A (EC15) on 5 QE2 Hull	1	.132	NAVSEA		PO/FP	Lockheed Martin/Manassas, VA	2/97	5/97	YES	N/A	
AN/BQQ-22A (EC15) on Q-6 Hulls	1	.078	NAVSEA		PO/FP	Lockheed Martin/Manassas, VA	2/97	5/97	YES	N/A	
BRR-6 Scuttle Removal	1	.080	NAVSEA		PO/FP	EB/GD DIV / Groton, CT	5/97	9/97	YES	N/A	
Torpedo Tube Interlock	1	.040	NAVSEA		PO/FP	EB/GD DIV / Groton, CT	5/97	9/97	YES	N/A	
Torpedo Tube Stop Mech.	1	.017	NAVSEA		PO/FP	EB/GD DIV / Groton, CT	5/97	9/97	YES	N/A	
FY-1997											
DEAC Replacement **	1	1.474	NAVSEA		PO/FP	NUWC NPT/Newport, RI	12/96	2/97	YES	N/A	
MS ADS Workstation	1	.831	NAVSEA		PO/FP	NSWC CARD/ Bethesda, MD	12/96	2/97	YES	N/A	

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*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.

Exhibit P-5a, Procurement History and Planning

**DEAC Replacement program will replace the existing OJ-172 (V) Input/Output console, and support additional TRIDENT functions. Funding controls are based on phased engineering change processes, prototype and hardware procurements, and testing costs, and can not be level funded.

Exhibit P-5a, Procurement History and Planning (Page 1)				Weapon System				DATE: February 1997		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number							P-1 Line Item Nomenclature (82P1)			
Other Procurement, Navy/1810/BA-2/BLI#2676							Strategic Platform Support Equipment P1222 Common Capability Program			
WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Date of First Delivery	Specs Available Now?	Date Revisions Available
Past Year (or last yr of proc)										
FY-1996										
Revision Testing 5.6	1	3.049	NAVSEA		PO/FP	NUWC NPT /Newport, RI	4/96	5/96	YES	N/A
Bus Analyzer	1	.150	NAVSEA		PO/FP	NUWC NPT /Newport, RI	7/96	8/96	YES	N/A
Per 8J Mod 3 (EHF SATCOM)	1	.192	NAVSEA		PO/FP	NUWC CD /Philadelphia, PA	7/96	8/96	YES	N/A
EHF Waveguide Sweep Test Equip	1	.171	NAVSEA		PO/FP	NWAD CORONA/ Seal Beach, CA	4/96	5/96	YES	N/A
IRR Transition	1	.250	NAVSEA		PO/FP	SPAWAR / Arlington, VA	7/96	9/96	YES	N/A
EHF SATCOM for GPTE	1	.053	NAVSEA		PO/FP	NWAD CORONA/ Seal Beach, CA	8/96	9/96	YES	N/A
Tactical Data Recorder	1	.065	NAVSEA		PO/FP	NSWC CARD /Bethesda, MD	8/96	9/96	YES	N/A
EHF SATCOM Trainer	1	.300	NAVSEA		PO/FP	NAWC SD /Orlando, FL	8/96	9/96	YES	N/A
OK-542/BQ Tow Pt. Cable Test Box	1	.055	NAVSEA		PO/FP	NSWC CRANE /Crane, IN	8/96	9/96	YES	N/A
OK-542 Control & Indicator Unit	1	.357	NAVSEA		PO/FP	NSWC CRANE /Crane, IN	4/96	5/96	YES	N/A
DAMA Modification	1	.150	NAVSEA		PO/FP	NSWC CARD/Philadelphia, PA	8/96	12/96	YES	N/A
8J Mod 3 (EHF SATCOM) *	4	.137	NAVSEA		PO/FP	NSWC CARD/Philadelphia, PA	2/97	4/97	YES	N/A
FY-1997										
8J Mod 3 Periscope	1	.033	NAVSEA		PO/FP	NSWC CARD /Bethesda, MD	5/97	7/97	YES	N/A
MSDC Replacement OER	1	.135	NAVSEA		PO/FP	NSWC CARD /Bethesda, MD	5/97	7/97	YES	N/A
FY-1998										
NONE										
FY-1999										
Per 8J Mod 3 (EHF SATCOM)	2	.150	NAVSEA		PO/FP	NSWC CARD/Philadelphia, PA	12/98	4/99	NO	N/A
TLCFSF Revision Testing	1	2.198	NAVSEA		PO/FP	NUWC NPT /Newport, RI	2/99	6/99	NO	N/A

P-1 Shopping List - Item No 77

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Exhibit P-5a, Procurement History and Planning

(*Average unit cost for PER 8J/MOD3 (EHF SATCOM) Category would be 137.75K for 551K total).

Exhibit P-5a, Procurement History and Planning (Page 1)				Weapon System				DATE: February 1997			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Other Procurement, Navy/1810/BA-2/BLI#2676							P-1 Line Item Nomenclature (82P1) Strategic Platform Support Equipment P1INS Installation				
WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Date of First Delivery	Specs Available Now?	Date Revisions Available	
Past Year (or last yr of proc)											
FY-1996											
NONE											
FY-1997											
BQQ-5E 7001 on 5 QE2 Hulls	1	.190	NAVSEA		PO/FP	GD/EB DIV / Groton, CT	1/97	4/97	YES	N/A	
FY-1998											
MS Workstation Install	1	.232	NAVSEA		PO/FP	GD/EB DIV / Groton, CT	12/97	4/98	YES	N/A	
6 inch Countermeasure LCP	1	1.000	NAVSEA		PO/FP	TRIDENT Refit Fac./Kings Bay	12/97	5/98	YES	N/A	
FY-1999											
6 inch Countermeasure LCP	2	.995	NAVSEA		PO/FP	TRIDENT Refit Fac./Kings Bay	12/98	4/99	NO	N/A	

Exhibit P-5a, Procurement History and Planning (Page 1)				Weapon System				DATE: February 1997			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Other Procurement, Navy/1810/BA-2/BLI#2676							P-1 Line Item Nomenclature (82P1) Strategic Platform Support Equipment P1MCS Machinery Control System				
WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Date of First Delivery	Specs Available Now?	Date Revisions Available	
Past Year (or last yr of proc)											
FY-1996											
NONE											
FY-1997											
COTS Ship Control Sys for Surface	1	23.946	NAVSEA		PO/FP	Unknown	Unknown	Unknown		N/A	
FY-1998											
NONE											
FY-1999											
NONE											

Strategic Platform Support Equipment / 82P1

MODELS OF SYSTEMS AFFECTED: TRIDENT Sonar (Replaces AN/BQQ-5E (V) BQQ-6 Towed Array Processing Subsystem

TYPE MODIFICATION: Obsolete Equipment Replacement (OER)

MODIFICATION TITLE: Towed Array Multi-Purpose Processor (TA MPP) (ARCI)

DESCRIPTION/JUSTIFICATION: TA MPP replaces obsolete equipment with a COTS based open system architecture with increased acoustic advantage

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: OPEVAL = 12/97

PROJECT UNIT: P1221 Obsolete Equipment Replacement (OER)

FINANCIAL PLAN: (TOA, \$ in Millions)

	Prior Yrs		PY-1 FY1995		PY FY1996		CY FY1997		BY1 FY1998		BY2 FY1999		BY2+1 FY2000		BY2+2 FY2001		BY2+3 FY2002		BY2+4 FY2003		TC To Complete		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E								1.50		1.06		1.50		0.51		1.00								0	5.57
PROC																									
Inst Kit NR																								0	0.00
A Kit																								0	0.00
Comp A																								0	0.00
Comp B																								0	0.00
Comp C																								0	0.00
Eqpt NR																								0	0.00
Eqpt											1	2.60	1	2.64			2	5.61	3	8.67	7	21.10	14	40.62	
Eqpt A																								0	0.00
Eqpt B																								0	0.00
ECOs																								0	0.00
Data																								0	0.00
Training Eq												1	2.06	1	2.12									2	4.18
SE																								0	0.00
Other																								0	0.00
Other																								0	0.00
Other																								0	0.00
ICS																								0	0.00
Install Cost																								0	0.00
Total Proc	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	2.60	2	4.70	1	2.12	2	5.61	3	8.67	7	21.10	16	44.80	

Strategic Platform Support Equipment / 82P1

MODELS OF SYSTEMS AFFECTED: TRIDENT Sonar (Replaces AN/BQQ-5E (V) BQQ-6 Towed Array Processing Subsystem)

MODIFICATION TITLE: Towed Array Multi-Purpose Processor (TA MPP) (ARCI)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Engineered Overhauls / ERPs

ADMINISTRATIVE LEADTIME: 12 Months

Production Time: 12 Months

CONTRACT DATES:

Prior Year:

Budget Year 1:

Budget Year 2:

DELIVERY DATE:

Prior Year: 06/98

Budget Year 1:

Budget Year 2:

(\$ in Millions)

Cost:	Prior Years		PY-1 FY1995		PY FY1996		CY FY1997		BY1 FY1998		BY2 FY1999		BY2+1 FY2000		BY2+2 FY2001		BY2+3 FY2002		BY2+4 FY2003		TC To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
FY 96 & Prior																										
FY 97 Equipment																									0	0.00
FY 98 Equipment																									0	0.00
FY 99 Equipment																										
FY 00 Equipment																										
FY 01 Equipment																										
FY 02 Equipment																										
FY 03 Equipment																										
To Complete																										
Total Installation Cost	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	13.76	2	14.25	1	0.36	2	2.62	10	14.05	16	45.04		

P-1 Shopping List - Item No 77

Page No 16

Note #1 Priced to support TA MPP/OK-542A TLTAHS/CCS MK2 Block 1C
Rev. 6.3 CCS Hardware Installation cost with EOH overhead during D5 Shipyard Conversion Period.

Exhibit P-3a, Individual Modification

Strategic Platform Support Equipment / 82P1

Installation Schedule

	PY	CY				BY1				BY2				BY2+1				BY2+2				BY2+3 etc.				TC	Total
	FY1996	FY 1997				FY1998				FY1999				FY2000				FY2001				FY2002+etc.					
		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																											
FY96 & Pr																											0
FY97																											
FY98																											0
FY99														0	0	1	0										1
FY00																		0	1	1	0						2
FY01																						0	0	1	0		1
FY02																						1	1	0	0		2
FY03																										3	3
TC																										7	7
Total In																											16
	PY	CY				BY1				BY2				BY2+1				BY2+2				BY2+3 etc.				TC	Total
	FY1996	FY 1997				FY1998				FY1999				FY2000				FY2001				FY2002+etc.					
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Out																											
FY96 & Pr																											0
FY97																											
FY98																											0
FY99																		0	0	1	0						1
FY00																		0	0	0	1	0	0	1	0		2
FY01																						0	0	0	1		1
FY02																						0	0	1	1		2
FY03																										3	3
TC																										7	7
Total Out																											16

Exhibit P-3a, Individual Modification

Strategic Platform Support Equipment / 82P1

February 1997

MODELS OF SYSTEMS AFFECTED: Various

TYPE MODIFICATION: Obsolete Equipment Replacement (OER)

MODIFICATION TITLE: Installation of OER and Common Capabilities (SSN/SSBN) Modifications on OHIO Class submarines

DESCRIPTION/JUSTIFICATION: Various

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: OPEVAL = N/A

FINANCIAL PLAN: (TOA, \$ in Millions)

	Prior Yrs		PY-1 FY1995		PY FY1996		CY FY1997		BY1 FY1998		BY2 FY1999		BY2+1 FY2000		BY2+2 FY2001		BY2+3 FY2002		BY2+4 FY2003		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																								0	0.00
PROC	See Note #1 Below																								
Inst Kit NR																								0	0.00
A Kit																								0	0.00
Comp A																								0	0.00
Comp B																								0	0.00
Comp C																								0	0.00
Eqpt NR																								0	0.00
Eqpt	#1	2.80	#1	0.00	#1	0.00	#1	0.00	#1	2.71	#1	10.17	#1	6.40	#1	0.00	#1	1.28	#1	0.00	#1	0.00		23.36	
Eqpt A																								0	0.00
Eqpt B																								0	0.00
ECOs																								0	0.00
Data																								0	0.00
Training Eq																								0	0.00
SE																								0	0.00
Other																								0	0.00
Other																								0	0.00
Other																								0	0.00
ICS																								0	0.00
Install Cost																								0	0.00
Total Proc	0	2.80	0	0.00	0	0.00	0	0.00	0	2.71	0	10.17	0	6.40	0	0.00	0	1.28	0	0.00	0	0.00	0	23.36	

Note #1 The quantity of Modifications being installed vary. This exhibit covers the installation requirements for the entire program minus TA MPP installation. Due to many separate requirements being installed, it is not possible to differentiate quantities.

Strategic Platform Support Equipment / 82P1

MODELS OF SYSTEMS AFFECTED: Various

INSTALLATION INFORMATION:

MODIFICATION TITLE: Installation of OER Modifications on OHIO Class Submarines

METHOD OF IMPLEMENTATION: Various

ADMINISTRATIVE LEADTIME: Various

PRODUCTION LEADTIME: Various

CONTRACT DATES: Prior Year:

Budget Year 1:

Budget Year 2:

DELIVERY DATE: Prior Year:

Budget Year 1:

Budget Year 2:

(\$ in Millions)

Cost:	Prior Years		PY-1 FY1995		PY FY1996		CY FY1997		BY1 FY1998		BY2 FY1999		BY2+1 FY2000		BY2+2 FY2001		BY2+3 FY2002		BY2+4 FY2003		TC To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
	FY 96 & Prior	See Note #1 Below						0	0.19		0	0	1.23	0	1.99	0	3.29	0	2.81	0	3.90	0	0.43	0	0.00	0
FY 97 Equipment																									0	0.00
FY 98 Equipment									0.60																0	0.60
FY 99 Equipment													0.29	0.81											0	1.10
FY 00 Equipment																	0.25								0	0.25
FY 01 Equipment																									0	0.00
FY 02 Equipment																	0.65		0.43						0	1.08
FY 03 Equipment																									0	0.00
To Complete																									0	0.00
																									0	0.00
Total Installation Cost	0	0.00	0	0.00	0	0.00	0	0.19	0	1.23	0	1.99	0	3.29	0	2.81	0	3.90	0	0.43	0	0.00	0	0	0	13.84

P-1 Shopping List - Item No 77

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Exhibit P-3a, Individual Modification

Note #1 The Quantity of Modifications being installed vary. This exhibit covers the installation requirements for the entire program minus TA MPP installations. Due to many separate requirements being installed, it is not possible to differentiate quantities.

Strategic Platform Support Equipment / 82P1

Installation Schedule

	PY	CY				BY1				BY2				BY2+1				BY2+2				BY2+3 etc.				TC	Total				
	FY1996	FY 1997				FY1998				FY1999				FY2000				FY2001				FY2002+etc.									
		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		See Note #1 Below																													
FY96 & Pr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY97																															
FY98																															0
FY99																															0
FY00																															0
FY01																															0
FY02																															0
FY03																															0
TC																															
Total In																															0
	PY	CY				BY1				BY2				BY2+1				BY2+2				BY2+3 etc.				TC	Total				
	FY1996	FY 1997				FY1998				FY1999				FY2000				FY2001				FY2002+etc.									
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
Out																															
FY96 & Pr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY97																															
FY98																															0
FY99																															0
FY00																															0
FY01																															0
FY02																															0
FY03																															0
TC																															
Total Out																															0

Note #1 The Quantity of Modifications being installed vary. This exhibit covers the installation requirements for the entire program minus TA MPP installations. Due to many separate requirements being installed, it is not possible to differentiate quantities. **Exhibit P-3a, Individual Modification**

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET						DATE			
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY						BLI: 2760 OTHER SPAWAR TRNG. EQUIP. 52DF / 82XX			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
QUANTITY									
COST (in millions)	\$1.0	\$1.6	\$3.6	\$3.3	\$3.6	\$3.3	\$3.4	\$3.4	
SPAWAR	FY96 0	FY97 0	FY98 \$2.6	FY99 \$2.2	FY00 \$3.6	FY01 \$3.3	FY02 \$3.4	FY03 \$3.4	
<p>PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS: Enhanced Naval Wargaming System (ENWGS). Prior to FY 1996, ENWGS funding was provided under BA7, LI 8210 (CAP). ENWGS is the only Navy recognized naval wargaming system. ENWGS supports wargaming for CINCLANTFLT, CINCPACFLT, Fleet Commanders, Battle Group Commanders, the Naval War College, and tactical training courses conducted at the Tactical Training Groups (Atlantic and Pacific) and the Expeditionary Warfare Training Groups. 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 replace obsolete workstations.</p> <p>FY96 budget procurement: Equipment for automatic data processing labs at two intelligence schoolhouses. The program consists of government/commercial off-the-shelf computer hardware and software to be used to train the intelligence personnel in word processing, graphic reproducing, message formatting and other skills necessary to accomplish jobs assigned ashore and at sea. Continue replacement of obsolete workstation at ENWGS sites.</p> <p>FY97-99 budget procurement: Continued procurement of equipment to replace obsolete workstations for ENWGS sites. There are no installation costs associated with FY97 and outyear hardware.</p>									
NAVSEA	FY96 0	FY97 0	FY98 \$2.6	FY99 \$2.2	FY00 \$3.6	FY01 \$3.3	FY02 \$3.4	FY03 \$3.4	
<p>The employment of naval forces in a multi-dimensional warfare environment is a complex operational problem. To counter the threat expected in hostile environments,</p>									

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ITEM NO. PAGE NO.
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Exhibit P-40

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET (Continuation)	DATE Feb-97																		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY	P-1 ITEM NOMENCLATURE BLI: 2760 OTHER SPAWAR TRNG. EQUIP. 52DF / 82XX																		
<p>naval officer training must be provided for all mission areas on a real-time basis at the Battle Force/Group level. This training must focus on tactical decision making tactics development/evaluation, and operational planning/execution. Shore-based classroom training and at-sea exercises have historically satisfied the Battle Group tactical training requirement. However, the effectiveness of this approach to training was reduced by the lack of a real-time decision-making environment during shore-based training and the reduction in number and scope of at-sea exercises. Training and modeling Systems (TMS) encompasses the requirement analysis and software development associated with the Navy's Modeling and Simulation (M&S) efforts Maritime Development Agent (DA) function as part of the Joint Simulation System (JSIMS). Funding for JSIMS begins FY00.</p> <p>MODELING & SIMULATION (M&S)</p> <p>Funds procure the shore-based equipment/site for development of the Navy's High Level Architecture (HLA) for modeling and simulation incorporating open system standards utilizing best commercial practices. This architecture will provide the framework to guide the development and migration/evolution of modeling and simulation efforts for research, development, and acquisition; test and evaluation; doctrine development and evaluation; logistics; training and education; and mission/material readiness assessment. This effort will act as the backbone for multi-functional modeling and simulation efforts for the Navy.</p> <p>FY 98 & 99 provides funding to initiate the stand up of the M&S development, validation, and life cycle support site.</p> <p style="text-align: center;">MODIFICATION SUMMARY (\$M)</p> <p>Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">EQUIPMENT</th> <th style="text-align: center;">FY96</th> <th style="text-align: center;">FY97</th> <th style="text-align: center;">FY98</th> <th style="text-align: center;">FY99</th> <th style="text-align: center;">FY00</th> <th style="text-align: center;">FY01</th> <th style="text-align: center;">FY02</th> <th style="text-align: center;">FY03</th> </tr> </thead> <tbody> <tr> <td>ENWGS</td> <td style="text-align: center;">\$1.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	ENWGS	\$1.0							
EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03											
ENWGS	\$1.0																		

enter classification here
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS							DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					BL 2760 OTHER SPAWAR TRAINING EQUIPMENT 52DF/82XX					
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
	SPAWAR									
DF001	INTELLIGENCE TRAINING EQUIP	A	VAR	50						
DF002	ENWGS	A	VAR	921	VAR	1,557	VAR	947	VAR	1,066
DF776	ENWGS INSTALLATION (NON-FM	A	VAR	77						
	NAVSEA									
XX001	MODELING & SIMULATION	A					VAR	2,622	VAR	2,222
	TOTAL PROGRAM			1,048		1,557		3,569		3,288

UNCLASSIFIED

MODIFICATION TITLE: ENWGS
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

ENWGS is a mission critical computer resource utilized for war planning training. ENWGS is the only Navy recognized distributive naval wargaming system. The system supports warring for CINCLANT, CINCPACFLT, Fleet Commanders, Battle Group Commanders, Naval War College and tactical training courses conducted at the Tactical Training Groups (Atlantic and Pacific) and the Expeditionary Warfare Training Groups. 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 replace obsolete workstations. There are no installation costs associated with FY 97 and outyears.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits	VAR	0.9																			
Installation Kits Nonrecurring																					
Equipment																				38	0.9
Equipment Nonrecurring																					
Engineering change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Eqpt	38	0.1																			
FY 97 EQUIP																					
FY 98 EQUIP																					
FY 99 EQUIP																					
FY 00 EQUIP																					
FY 01 EQUIP																					
FY 02 EQUIP																					
FY 03 EQUIP																					
FY TC EQUIP																					
TOTAL INSTALLATION COSTS		0.1																		38	0.9
TOTAL PROCUREMENT COSTS		1.0																			

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: N/A PROCUREMENT LEADTIME: N/A

CONTRACT DATES:	FY 1997:					FY 1998:					FY 1999:											
DELIVERY DATES:	FY 1997:					FY 1998:					FY 1999:											
INSTALLATION SCHEDULE:	PY																					
INPUT	38																					
OUTPUT	38																					
INSTALLATION SCHEDULE:																						
INPUT																						38
OUTPUT																						38

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2 COMMUNICATION AND ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT (82MB) LI:2762			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (In Millions)	\$11.4	\$27.8	\$24.5	\$33.8	\$50.6	\$33.7	\$40.4	\$32.9

The equipment procured under the Other Training Equipment for NAVSEA line supports various types of Communication and Electronic training requirements: Procures 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, Computer Improved Instructors Training Aid, Ship Characteristic Demonstrators/Models, Ship Handling System, and the Authoring Instructional Materials (AIM) System. Supports training support equipment requirements developed by the Chief of Naval Education and Training (CNET), and approved by CNO.

(MB032) SUSTAINING TECHNICAL TRAINING EQUIPMENT

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.

(MB040) BATTLE FORCE TACTICAL TRAINING (BFTT)

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.

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40 (continuation)		DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2 COMMUNICATION AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT	LI:2762
<p>In FY 96 the projected BFTT Baseline 1 procurement consists of one full BFTT System for the CV 67, DD 963, LSD 48, and partial on LSD 42, CG 72 and DDG 57. It also includes a training data link capability for Little Creek completes FCTCLANT Phase 2, procures 7431 boards, 5 NAVSIM Units, and initiates PACNORWEST capability. Additionally, 1 RESS System was refurbished for the CV 67.</p> <p>In FY 97 the projected BFTT Baseline 1 procurement consists of one full BFTT System for the CVN 70 ,CG 68, DDG 55, DDG 64, LHA 2, LSD 51, LSD 42 (Completion), CG 72 (Completion) and DDG 52 (Completion), LSD 44, LSD 49, FCTCPAC Phase 2 and completion of PACNORWEST. It also includes a partial MUTTS and BFTT System for, Pearl Harbor, Yokoska, and Sasebo and BFTT Scenario Generation Systems for ATGPAC, ATGMIDPAC, and ATGWESTPAC. Additionally, 4 rehosted ACTS, 14 shipboard Radio Frequency/intermediate Frequency (RF/IF) Stimulators and 3 RESS RF Stimulator Systems will be procured.</p> <p>In FY 98 the projected BFTT Baseline procurement consists of one full BFTT System for,CG 61, CG 62, CG 69, DDG 65, DDG 67, DDG 68 . Additionally, 9 rehosted ACTS, 29 shipboard RF/IF Stimulators, 4 CSTS RF/Digital Stimulators, and 1 Mobile Combat System Trainer Upgrade will be procured.</p> <p>In FY 99 the projected BFTT Baseline procurement consists of one full BFTT System for, CG 60, CG 66, CG 73, DDG 51, DDG 53, DDG 59, DDG 66, DDG 70, DDG 71, DDG 72, DDG 74, DDG 76, DDG 77, DDG 78. Additionally, 14 rehosted ACTS, 25 shipboard RF/IF Stimulators, 4 CSTS RF/Digital Stimulators, 3 TASWIT systems, and 1 Mobile Combat System Trainer upgrade.</p> <p><u>(MB041) SUBMARINE BATTLE FORCE TACTICAL TRAINING (BFTT)</u></p> <p>This line procures the submarine-unique requirements to support the BFTT system. FY 98 funds will provide engineering services for software to implement the BFTT interface for submarines, and Engineering Production Model (EPM) support equipment for submarines. Baseline procurement will also provide submarine training data link capability to the BFTT system.</p> <p>FY 99 funds provide for purchase of three sets of BFTT hardware for submarines.</p>		

CLASSIFICATION:

UNCLASSIFIED

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WEAPONS SYSTEM COST ANALYSIS EXHIBIT (P-5)		A. Appropriation/Budget Activity Title/No.		B. Weapon Model Series/ Popular Name		C. Manufacturer Plant City/St. Loc		DATE: February 1997	
		BA-2 COMMUNICATION AND ELECTRONIC EQUIPMENT		OTHER TRAINING EQUIPMENT		VARIOUS			
WEAPONS SYSTEM COST ELEMENTS	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY 1996		FY 1997		FY 1998		FY 1999	
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
<u>EXPEDITIONARY WARFARE (N85)</u>									
MB040		Battle Force Tactical Training (BFTT)	0		560		23		2,365
<u>SURFACE WARFARE (N86)</u>									
MB032		Surface Sustaining/TTE	0		0		200		191
MB040		Battle Force Tactical Training (BFTT)	11,398		25,445		20,739		27,072
<u>SUBMARINE WARFARE (N87)</u>									
MB041		Submarine BFTT	0		0		2,617		931
MB044		Training Support Equipment/ Sub	0		1,738		927		3,183
		Integrated Undersea Surveillance Sys	(0)		(144)		(349)		(270)
		Computer Imprvd, Instr. Trng. Aid	(0)		(336)		(250)		(350)
		Minor Training Support Equipment	(0)		(331)		(200)		(267)
		TAC III/IV/ OBT DS	(0)		(927)		(128)		(1,678)
		VESUB	(0)		(0)		(0)	1	(618)
<u>MANPOWER/TRAINING (N7)</u>									
MB043		Training Support Equipment	0		8		23		10
		Authoring Instructural Material (AIM)	(0)		(8)		(23)		(10)
		Subtotal (N85/N86)	11,398		26,005		20,962		29,628
		Subtotal (N87)	0		1,738		3,544		4,114
		Subtotal (N7)	0		8		23		10
		TOTAL	11,398		27,751		24,529		33,752

P-1 SHOPPING LIST

ITEM NO.

PAGE NO.

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OPN BA-2: COMMUNICATIONS & ELECTRONIC EQUIP				C. P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT						
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MB040 FY 1996										
PACNORWEST P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/94	06/96	MULTIPLE	500,000.0	NO	YES	06/96
FCTCLANT (PH 2) P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	VARIOUS	06/96	MULTIPLE	365,000.0	YES	NO	
743I HARDWARE PROCUREMENT	H. PACKARD ROCKVILLE, MD	FFP (IDIQ)	NISMC WASH, D.C.	01/95	08/96	15	20,000.0	YES	NO	
CV 67 COMPLETE P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/96	06/96	MULTIPLE	1,561,813.0	YES	NO	
CV 67 RESS REFURB/INSTALL	REPUBLIC ELEC HAUPPAUGE, NY	CPFF	PHD/NSWC, CA	03/96	06/96	1	400,000.0	YES	NO	
DD 963 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/96	09/96	MULTIPLE	1,461,000.0	YES	NO	
LSD 42 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/96	06/96	1	291,500.0	YES	NO	
LSD 48 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/96	06/96	1	1,178,000.0	YES	NO	
CG 72 PROCUREMENT	VARIOUS	VARIOUS	PHD/NSWC, CA	08/96	11/96	1	878,000.0	YES	NO	
DDG 57 PROCUREMENT	VARIOUS	VARIOUS	PHD/NSWC, CA	08/96	11/96	1	878,000.0	YES	NO	
LITTLE CREEK P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	04/96	07/96	1	200,000.0	YES	NO	
D. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OPN BA-2: COMMUNICATIONS & ELECTRONIC EQUIP				C. P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT						
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MB040 FY 1996										
ICDs ,IGDs, SIDs	SYSCON ARL, VA	CPFF	NAVSEA ARL, VA	02/96	04/96	MULTIPLE	800,000.0	YES	NO	
ILS & SPARES	VARIOUS	VARIOUS	PHD/NSWC, CA	03/96	04/96	MULTIPLE	1,434,687.0	YES	NO	
PROCUREMENT ENGINEERING	COMPTEK FED SYS ARL, VA	CPFF	NAVSEA ARL, VA	03/96	03/96	MULTIPLE	750,000.0	N/A	N/A	
NAVSIM	AAI CORP. HUNT VALLEY, MD	CPFF	NAWC/TSD ORLANDO, FL	03/96	09/96	5	80,000.0	YES	NO	
MB044 FY 1996*										
IUSS	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
CIITA	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
TSE	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
TACII/IV / OBT DS	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
D. REMARKS										
*NOTE: FY96 funds provided from 87YP LI: 8081										

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OPN BA-2: COMMUNICATIONS & ELECTRONIC EQUIP				C. P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT						
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MB040 FY 1997										
PACNORWEST P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/94	06/97	MULTIPLE	400,000.0	YES	NO	
FCTCPAC (PH 2) P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	VARIOUS	06/97	MULTIPLE	425,000.0	YES	NO	
CVN 70 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/97	06/97	MULTIPLE	1,389,000.0	YES	NO	
CG 68 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/97	06/97	MULTIPLE	1,163,300.0	YES	NO	
DDG 55 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/97	06/97	MULTIPLE	1,453,000.0	YES	NO	
LHA 2 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	04/97	07/97	MULTIPLE	1,683,200.0	YES	NO	
LSD 51 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/97	09/97	MULTIPLE	937,800.0	YES	NO	
LSD 44 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/97	09/97	MULTIPLE	937,800.0	YES	NO	
LSD 49 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/97	09/97	MULTIPLE	937,800.0	YES	NO	
DD 64 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/97	09/97	MULTIPLE	1,453,000.0	YES	NO	
D. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OPN BA-2: COMMUNICATIONS & ELECTRONIC EQUIP				C. P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT						
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MB040 FY 1997										
CG 72	VARIOUS	VARIOUS	PHD/NSWC, CA	03/97	06/97	MULTIPLE	375,300.0	YES	NO	
DDG 52	VARIOUS	VARIOUS	PHD/NSWC, CA	03/97	06/97	MULTIPLE	375,300.0	YES	NO	
LSD 42 FP&1	VARIOUS	VARIOUS	PHD/NSWC, CA	04/97	07/97	MULTIPLE	646,300.0	YES	NO	
MUTTS	VARIOUS	VARIOUS	PHD/NSWC, CA	05/97	07/97	MULTIPLE	250,000.0	YES	NO	
ILS & SPARES	VARIOUS	VARIOUS	PHD/NSWC, CA	03/97	04/97	MULTIPLE	1,443,075.0	YES	NO	
PROCUREMENT ENGINEERING	VARIOUS	VARIOUS	NAVSEA ARL, VA	01/97	01/97	MULTIPLE	1,059,998.0	N/A	N/A	
REHOSTED ACTS (4)	VARIOUS	VARIOUS	PHD/NSWC,CA	02/97	06/97	4	150,000.0	YES	NO	
STIMULATOR (14) P&I	TBD	CPIF	NAVSEA ARL, VA	11/96	07/97	14	474,437.5	YES	NO	
RESS STIM (3) R&I	MPD TECH HAUPPAUGE, NY	CPFF	PHD/NSWC, CA	02/97	05/97	3	400,000.0	YES	NO	
PEARL HARBOR BFTT P&I	VARIOUS	VARIOUS	PHD/NSWC,CA	05/97	07/97	MULTIPLE	750,000.0	YES	NO	
D. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OPN BA-2: COMMUNICATIONS & ELECTRONIC EQUIP				C. P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT						
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MB040 FY 1997										
YOKOSUKA BFTT P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/97	08/97	MULTIPLE	850,000.0	YES	NO	
SASEBO BFTT P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	07/97	09/97	MULTIPLE	850,000.0	YES	NO	
ATG SYSTEMS P&i	VARIOUS	VARIOUS	PHD/NSWC,CA	06/97	08/97	3	50,000.0	YES	NO	
MB044 IUSS	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
CIITA	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
TSE	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
TACII/IV / OBTS DS	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
D. REMARKS										

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OPN BA-2: COMMUNICATIONS & ELECTRONIC EQUIP				C. P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT						
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MB040 FY 1998										
CG 61	VARIOUS	VARIOUS	PHD/NSWC, CA	04/98	07/98	MULTIPLE	1,163,350.0	YES	NO	
CG 62	VARIOUS	VARIOUS	PHD/NSWC, CA	04/98	07/98	MULTIPLE	1,163,350.0	YES	NO	
CG 69 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/98	06/98	MULTIPLE	1,163,350.0	YES	NO	
DDG 65 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/98	06/98	MULTIPLE	1,163,350.0	YES	NO	
DDG 67 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	04/98	07/98	MULTIPLE	1,163,350.0	YES	NO	
DDG 68 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	04/98	07/98	MULTIPLE	1,163,350.0	YES	NO	
ILS/SPARES REHOSTED ACTS (9)	VARIOUS	VARIOUS	PHD/NSWC, CA	01/98	04/98	MULTIPLE	1,106,000.0	YES	NO	
STIMULATOR (29) P&I	TBD	CPIF	NAVSEA ARL, VA	02/98	06/98	9	150,000.0	YES'	NO	
CSTS STIM (4) P&I	LITTON DSD	CPIF	PHD/NSWC, CA	11/97	05/98	29	292,416.7	YES	NO	
MCST (20B5)	OCEAN SPRINGS MS AAI, CORP. HUNT VALLEY, MD	CPIF	PHD/NSWC, CA	02/98	07/98	4	486,454.0	YES	NO	
MB044										
IUSS	VARIOUS	VARIOUS	NAWC/TSD	3/98	9/98	1	900,000.0	YES	NO	
CIITA	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
TSE	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
ACUU/IV / OBT DS	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
D. REMARKS										

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE		
								February 1997		
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE						
OPN BA-2: COMMUNICATIONS & ELECTRONIC EQUIP				OTHER TRAINING EQUIPMENT						
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MB040 FY 1999										
CG 60 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/99	06/99	MULTIPLE	1,163,300.0	YES	NO	
CG 66 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/99	06/99	MULTIPLE	1,163,300.0	YES	NO	
CG 73 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/99	06/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 51 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/99	06/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 53 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/99	06/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 59 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/99	06/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 66 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	03/99	06/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 70 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	04/99	07/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 71 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	04/99	07/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 72 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/99	09/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 74 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/99	09/99	MULTIPLE	1,163,300.0	YES	NO	
DD 76 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/99	09/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 77 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	06/99	09/99	MULTIPLE	1,163,300.0	YES	NO	
DDG 78 P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	04/99	07/99	MULTIPLE	1,163,300.0	YES	NO	
D. REMARKS										
DD Form 2446-1, JUL 87										
P-1 SHOPPING LIST										
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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY								C. P-1 ITEM NOMENCLATURE		
OPN BA-2: COMMUNICATIONS & ELECTRONIC EQUIP				OTHER TRAINING EQUIPMENT						
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MB040 FY 1999										
ILS/SPARES REHOSTD ACTS (14)	VARIOUS	VARIOUS	PHD/NSWC, CA	03/99	04/99	MULTIPLE	956,157.5	YES	NO	
STIMULATOR (25) P&I	VARIOUS	VARIOUS	PHD/NSWC, CA	02/99	06/99	14	150,000.0	YES	NO	
CSTS STIM (4) P&I	TBD	CPIF	NAVSEA ARL, VA	11/98	07/99	25	285,785.7	YES	NO	
TASWIT (3) P&I	LITTON DSD OCEAN SPRINGS	CPIF	PHD/NSWC, CA	02/99	07/99	4	370,750.0	YES	NO	
MCST (20B4)	VARIOUS AAI, CORP.	VARIOUS	NAVSEA ARL, VA	11/98	04/99	3	289,000.0	YES	NO	
MB044	HUNT VALLEY, MD	CPFF	NAWC/TSD ORLANDO, FL	03/99	09/99	1	600,000.0	YES	NO	
ISSU	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
CIITA	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
TSE	VARIOUS	VARIOUS	NAWC/TSD	VARIOUS	VARIOUS	MULTIPLE		YES	NO	
TACII/IV OBT DS VESUB	VARIOUS TBD	VARIOUS C/FPP	NAWC/TSD	VARIOUS 03/99	VARIOUS 09/00	MULTIPLE 1	618.0	YES NO	NO N/A	
D. REMARKS										

UNCLASSIFIED
 MODIFICATION OF WEAPON SYSTEM
 MODIFICATION TITLE:
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION:

82MB - MB002 AN/SPA-25 RADAR REPEATERS
 N/A
 To support the AN/SPA-25 Radar Improvement Program by modernizing the current AN/SPA-25 Technical Training Equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN:(\$ IN MILLIONS)	FY95 & Prior		FY96		FY97		FY98		FY99		FY00		COMPLETE		TO TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$

RDT&E																
PROCUREMENT																
Kit Quantity																
Installation Kits																
Installation Kit Nonrecurring																
Equipment	18	\$1.851													18	\$1.851
Equipment Nonrecurring																
Engineering Change Orders																
Data																
Training Equipment																
Support Equipment																
Other																
Interim Cont'r Support																
Installation of Hdwe																
FY95 & Prior	18	\$0.208													18	\$0.208
FY96																
FY97																
FY98																
FY99																
FY00																
FY01																
TO COMPLETE																
Total Installation Cost	18	\$0.208													18	\$0.208
Total Procurement Cost															18	\$2.056

METHOD OF IMPLEMENTATION:

CONTRACT DATE:	Prior Yrs:	5/94		Current Year:		Budget Year 1:		Budget Year 2:		Budget Year 2:		To		Total
		7/95		Current Year:		Budget Year 1:		Budget Year 2:		Budget Year 2:		Complete		
DELIVERY DATE:		FY95 & Prior	FY96	FY97	FY98	FY99	FY00							
		1	2	3	4	1	2	3	4	1	2	3	4	
INSTALLATION SCHEDULE:														
INPUT		18												18
OUTPUT		18												18

CLASSIFICATION:

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REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B	DATE February 1997
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APPROPRIATION/BUDGET ACTIVITY
 OPN BA-2: COMMUNICATIONS & ELECTRONIC EQUIPMENT

ITEM/PROJECT UNIT	TOTAL IO / REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 97 PROGRAM FUNDS	PLANNED BUDGET YEARS PROCUREMENT	BALANCE	PHASING RATIONALE
Battle Force Tactical Training System							The quantity of platforms being procured/installed, the myriad of systems being integrated, and the assets (ships and funding) availability, would make it infeasible to procure all systems by FY97.
- Ship Systems	167	2	6	9	69	81	
- Shore Site Systems	11	0	7	2	2	0	
Stimulators / Simulators							
- Ship	347	0	0	21	202	124	
- Shore	10	0	0	0	10	0	

ITEM #1:	ITEM #2:			
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P-1 SHOPPING LIST

CLASSIFICATION:

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SIMULATOR AND TRAINING DEVICE JUSTIFICATION (\$000)							DATE			
Appropriation P-1 Line Item 2762		Weapon System (if applicable) N/A			Equipment Nomenclature Other Training Equipment			PE 0804731N		
Fin Plan	Prior Years	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TOTAL
Quantity	n/a	n/a	n/a	n/a	var	var	var	var	var	var
Proc	\$0	\$0	\$1,738	\$927	\$3,183	\$1,652	\$4,087	\$8,275	\$4,186	\$24,048
RDT&E										
O&S										
TRAINING SYSTEMS DESCRIPTION:										
<p>This line item provides for the procurement of minor training aids and devices and logistic support equipment for Naval Air Warfare Center Training Systems Division (formerly the Naval Training Systems Center (NTSC)) programs to ensure that trained personnel are supplied to the fleet. The minor training aids and devices include a variety of training equipments (with a per unit value of less than \$900K) for surface and submarine schools. Representative devices include but are not limited to: Ship Characteristic Demonstrators/Models, CTR/CTT Morse Code Trainers, ESM Radar Signal Simulators, Graphic Displays, etc.</p> <p>This line also provides for the procurement of the Authoring Instructional Materials (AIM) System for surface schools. AIM is a computer based system that supports the development and maintenance of instructional materials and provides for the systematic support and management of the overall curriculum development process to ensure that the fleet is supplied with effectively trained personnel.</p>										
		Item No. 79	Page No. 14		EXHIBIT 43A P-43 Simulator & Training Device Justification					

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET							DATE:	
P-40							FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
Other Procurement, Navy / BA2 Communications & Electronic Equipment					MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM			
					42MJ			281500
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$1.5	\$4.1	\$9.7	\$15.0	\$11.8	\$12.5	\$12.7	\$13.0
DESCRIPTION:								
<p>Marine Air Traffic Control & Landing System (MATCALs) is a fully automated all weather expeditionary Air Traffic Control System that provides automatic landing for suitably equipped aircraft and automated precision landing information, in the form of Instrument Landing System (ILS) or Ground Controlled Approach (GCA) to accommodate other aircraft. MATCALs satisfies the operational requirement set forth by Specific Operational Requirement (SOR) 34-22 of 12 July 1973. MATCALs is also comprised of other visual and navigational aids, ATC systems and ancillary equipment. ORD 341-88-93 of 1 Sep 93 also applies.</p> <p>MATCALs, integrated with other Marine Air Command and Control Systems and federal agencies, provides the ability to project air combat power throughout the Amphibious Operational Area (AOA) without regard to the effects of weather. Air traffic control and landing automation reduces air controllers air traffic handling and management time, allowing more time for mission response and task accomplishment. Thus, it supports a required increase to aircraft sorties rates and directly contributes to extending 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) interfacing by means of automated transfer.</p> <p>MATCALs has three primary subsystems: (1) Air Traffic Control (ATC) Subsystem consisting of an AN/TPS-73 Airport Surveillance Radar, and various peripheral equipment. (2) All-Weather Landing Subsystem consisting of an AN/TPN-22 Precision Approach Landing Radar, AN/UYK-44 computer and peripheral equipment, and (3) The Control and Communications Subsystem (AN/TSQ-131(V)) with a Communications Control Group (CCG), radios, computer software, multi mode displays and peripherals. Other related MATCALs systems are AN/TSQ-120 Towers, AN/TRN-44 Tacan, the Remote Landing Site Tower (RLST) and other related 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 Aviation Ground Support Element 29 Palms, CA; 1 for operational contingencies/ISEA Test Bed at San Diego, CA; 2 for NATTC Memphis, TN; and 1 for the ACLS Test Bed, Patuxent River, MD.</p> <p>FY96 funding procured 8 AN/UYQ-42 Upgrades, various maintainability/reliability improvements and related installation.</p> <p>FY97 funding procures 4 RLSTs and 8 AN/UYQ-42 Upgrades, various maintainability/reliability improvements and related installation.</p> <p>FY98 funding procures 1 AN/TPN-22 Upgrade, 1 Radar Link, 4 Differential GPS systems, 7 RLSTs, 34 Havequick Radio Upgrades, 10 AN/UYQ-42 Upgrades, various maintainability/reliability improvements and related installation.</p> <p>FY99 funding procures 5 AN/TPN-22 Upgrades, 5 Radar Links, 6 Differential GPS systems, 95 Havequick Radio Upgrades, 5 AN/TSQ-120 Upgrades, 17 SINCARS and provides production support, training, maintainability/reliability improvements and installation of MATCALs systems.</p>								
INSTALLATION AGENT: NCCOSC								
Facilities that are to receive the equipment: Marine Corps air traffic control facilities, expeditionary airfields, and remote landing sites.								

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS									DATE:	
P-5									FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD					
Other Procurement, Navy / BA2 Communications & Electronic Equipment					MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM					
					42MJ					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
MJ425	AN/TPN-22 UPGRADE	N/A					1	925	5	3,876
MJ426	RADAR LINK	A				1	305	5	1,444	
MJ427	MAINT/RELIABILITY IMPRV	N/A	VAR	875	VAR	499	VAR	670	VAR	1,591
MJ428	DIFFERENTIAL GPS	N/A				4	540	6	846	
MJ429	AN/TRC-131 REPL (RLST)	A			4	2,893	7	5,400		
MJ431	HAVEQUICK RADIO UPGRADE	N/A					34	1,122	95	3,135
MJ437	AN/UYQ-42 UPGRADE	N/A	8	443	8	374	10	429		
MJ439	AN/TSQ-120 UPGRADE	N/A							5	2,785
MJ440	SINCGARS	A							17	708
MJ800	INTEGRATED LOGISTICS SUPPORT					94	50			100
MJ830	PRODUCTION ENGINEERING					71	104			116
MJ860	ACCEPTANCE, TEST & EVALUATION					100	30			50
MJ900	NON-FMP INSTALLATION			206		15	112			250
MJ990	INITIAL TRAINING			21		20	39			60
				1,545		4,066		9,726		14,961

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CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE FEBRUARY 1997	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications & Electronic Equipment				C. P-1 ITEM NOMENCLATURE MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM				SUBHEAD 42MJ		
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (\$000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MJ425 AN/TPN-22 UPGRADE FY-98 FY-99	TBD TBD	CP OPTION	NAVAIR NAVAIR	Jan-98 Jan-99	Jun-99 Dec-99	1 5	\$925.0 \$775.2	NO NO	NO NO	
MJ426 RADAR LINK FY-98 FY-99	TBD TBD	CP OPTION	NAVAIR NAVAIR	Feb-98 Nov-98	Feb-99 Nov-99	1 5	\$305.0 \$288.8	NO NO	NO NO	
MJ428 DIFFERENTIAL GPS FY-98 FY-99	TBD TBD	CP OPTION	NAVAIR NAVAIR	Feb-98 Nov-98	Feb-99 Dec-99	4 6	\$135.0 \$141.0	NO NO	NO NO	
MJ429 RLST FY-97 FY-98	SNC, Spark, NV SNC, Spark, NV	OPTION OPTION	NAVAIR NAVAIR	Jan-97 Nov-97	Sep-97 Jun-98	4 7	\$723.3 \$771.4	YES YES	NO NO	
MJ431 HAVEQUICK RADIO UPGRADE FY-98 FY-99	TBD TBD	CP OPTION	NAVAIR NAVAIR	Dec-97 Dec-98	Dec-98 Sep-99	34 95	\$33.0 \$33.0	YES YES	NO NO	
MJ437 AN/UYQ-42 UPGRADE FY-96 FY-97 FY-98	UNISYS, ST PAUL MN LORAL, ST PAUL MN LORAL, ST PAUL MN	OPTION OPTION OPTION	NCCOSC SD NCCOSC SD NCCOSC SD	Nov-95 Nov-96 Nov-97	Mar-96 Dec-96 Dec-97	8 8 10	\$55.4 \$46.8 \$42.9	YES YES YES	NO NO NO	
MJ439 AN/TSQ-120 UPGRADE FY-99	TBD	CP	NAVAIR	Feb-99	Feb-00	5	\$557.0	NO	NO	
MJ440 SINGARS FY-99	TBD	CP	NAVAIR	Apr-98	Nov-99	17	\$41.6	NO	NO	

D. REMARKS

Note: Unit cost variance for MJ425 is due to non-recurring costs of initial procurements. Unit cost variance for MJ437 is due to procurement of ILS data in FY96.

CLASSIFICATION:

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MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)							DATE FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA2 Communications & Electronic Equipment					P-1 ITEM NOMENCLATURE MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
AN/TPN-30 MOD (SHORE)	0.121								0.121
AN/TPN-22 UPGRADE				0.010	0.020	0.025	0.017	0.014	0.086
RADAR LINK				0.005	0.020	0.025	0.016	0.020	0.086
DIFFERENTIAL GPS				0.030	0.117	0.105			0.252
RSLT (SHORE)	0.055		0.102	0.189					0.346
HAVEQUICK RADIO UPGRADE				0.016	0.056	0.068	0.036		0.176
AN/UYQ-42 UPGRADE (SHORE)	0.030	0.015	0.010						0.055
AN/TSQ-120 UPGRADE					0.020	0.039	0.025	0.010	0.094
SINGGARS					0.002	0.004	0.003	0.005	0.014
JPALS *								0.030	0.030
TOTAL	0.206	0.015	0.112	0.250	0.235	0.266	0.097	0.079	1.260

P-1 SHOPPING LIST

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CLASSIFICATION:

UNCLASSIFIED

* P3a exhibits FY00 new start modifications are not included

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/TPN-30 MODS (MJ413)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL				
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1		2	3	4	1
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT				Var														
																	TOTAL OUTPUT				Var														

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION																			
P3A																			
MODIFICATION TITLE: AN/TPN-22 UPGRADE (MJ425)																			
MODELS OF SYSTEM AFFECTED: Expeditionary airfields and at remote-area landing sites.																			
DESCRIPTION/JUSTIFICATION: The Marine Air Traffic control & Landing System program provides systems and equipment that provides the Fleet Marine Forces with an all-weather means of providing for the safe and expeditious flow of air traffic at and around expeditionary airfields and at remote-area landing sites. The MATCALs program also provides systems and equipment required for both developmental/operational testing and for training of Marine technicians and operators.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production																			
FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (\$ IN MILLIONS)</u>																			
<i>RDT&E</i>																			
<i>PROCUREMENT</i>																			
INSTALLATION KITS																			
INSTALLATION KITS (UNIT COST)																			
INSTALLATION KITS NONRECURRING																			
EQUIPMENT																			
EQUIPMENT NONRECURRING																			
ENGINEERING CHANGE ORDERS																			
DATA																			
TRAINING EQUIPMENT																			
SUPPORT EQUIPMENT																			
OTHER																			
INTERIM CONTRACTOR SUPPORT																			
<u>INSTALLATION OF HARDWARE</u>																			
FY 1996 EQUIPMENT & PRIOR																			
FY 1997 EQUIPMENT																			
FY 1998 EQUIPMENT																			
FY 1999 EQUIPMENT																			
FY 2000 EQUIPMENT																			
FY 2001 EQUIPMENT																			
FY 2002 EQUIPMENT																			
FY 2003 EQUIPMENT																			
TO COMPLETE																			
TOTAL INSTALLATION COST																			
TOTAL PROCUREMENT COST																			
TOTAL COST																			
METHOD OF IMPLEMENTATION: AIT																			
CONTRACT DATE: FY 1997: N/A																			
PRODUCTION DELIVER DATE: FY 1997: N/A																			
ADMINISTRATIVE LEADTIME: 4																			
PRODUCTION LEADTIME: 17																			
FY 1998: Jan-98																			
FY 1999: Jan-99																			
FY 1998: Jun-99																			
FY 1999: Dec-99																			
P-3A																			

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/TPN-22 UPGRADE (MJ425)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	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	1
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	3
FY 2003	0	0	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	1	0	3
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																										17					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	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	1
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
FY 2002	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	1	0	0	0	0	3
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																										17					

P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION																			
P3A																			
MODIFICATION TITLE: RADAR LINK (MJ426)																			
MODELS OF SYSTEM AFFECTED: Expeditionary airfields and at remote-area landing sites																			
DESCRIPTION/JUSTIFICATION: The Marine Air Traffic control & Landing System program provides systems and equipment that provides the Fleet Marine Forces with an all-weather means of providing for the safe and expeditious flow of air traffic at and around expeditionary airfields and at remote-area landing sites. The MATCAL program also provides systems and equipment required for both developmental/operational testing and for training of Marine technicians and operators.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production																			
FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																			
<i>RDT&E</i>																			
<i>PROCUREMENT</i>																			
INSTALLATION KITS																			
INSTALLATION KITS (UNIT COST)																			
INSTALLATION KITS NONRECURRING																			
EQUIPMENT																			
EQUIPMENT NONRECURRING																			
ENGINEERING CHANGE ORDERS																			
DATA																			
TRAINING EQUIPMENT																			
SUPPORT EQUIPMENT																			
OTHER																			
INTERIM CONTRACTOR SUPPORT																			
<u>INSTALLATION OF HARDWARE</u>																			
FY 1996 EQUIPMENT & PRIOR																			
FY 1997 EQUIPMENT																			
FY 1998 EQUIPMENT																			
FY 1999 EQUIPMENT																			
FY 2000 EQUIPMENT																			
FY 2001 EQUIPMENT																			
FY 2002 EQUIPMENT																			
FY 2003 EQUIPMENT																			
TO COMPLETE																			
TOTAL INSTALLATION COST																			
TOTAL PROCUREMENT COST																			
TOTAL COST																			
METHOD OF IMPLEMENTATION: AIT																			
CONTRACT DATE: FY 1997: N/A																			
PRODUCTION DELIVER DATE: FY 1997: N/A																			
ADMINISTRATIVE LEADTIME: 5																			
PRODUCTION LEADTIME: 12																			
FY 1998: Feb-98																			
FY 1998: Feb-99																			
FY 1999: Nov-98																			
FY 1999: Nov-99																			
P-3A																			

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: RADAR LINK (MJ426)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	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	1
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	3
FY 2003	0	0	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	1	0	3
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																										17					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	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	1
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
FY 2002	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	1	0	0	0	0	3
FY 2003	0	0	0	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	1	3
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																										17					

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: DIFFERENTIALS GPS (MJ428)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	7
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																										17					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3	0	0	0	0	0	0	0	0	0	7
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																										17					

P-3A

CLASSIFICATION: UNCLASSIFIED

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

MODIFICATION TITLE: **AN/TRC-131 RESPL (RLST) (MJ429)**

INSTALLATION SCHEDULE:

INPUT ==>>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
FY 1997	0	0	0	0	1	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	4
FY 1998	0	0	0	0	0	0	0	1	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									14						

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
FY 1997	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
FY 1998	0	0	0	0	0	0	0	0	0	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									14						

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: HAVEQUICK RADIO UPGRADE (MJ431)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0	0	0	0	0	132
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																										357					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	25	30	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	20	35	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	30	30	12	0	0	0	0	0	0	0	0	0	0	132
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																										357					

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION																					
P3A																					
MODIFICATION TITLE: AN/UYQ-42 UPGRADE (MJ437)																					
MODELS OF SYSTEM AFFECTED: Expeditionary airfields and at remote-area landing sites.																					
DESCRIPTION/JUSTIFICATION: The Marine Air Traffic control & Landing System program provides systems and equipment that provide the Fleet Marine Forces with an all-weather means of providing for the safe and expeditious flow of air traffic at and around expeditionary airfields and at remote-area landing sites. The MATCALs program also provides systems and equipment required for both developmental/operational testing and for training of Marine technicians and operators.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: In Production																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (\$ IN MILLIONS)</u>																					
<i>RDT&E</i>																					
<i>PROCUREMENT</i>																					
INSTALLATION KITS																					
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING																					
EQUIPMENT																					
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR																					
FY 1997 EQUIPMENT																					
FY 1998 EQUIPMENT																					
FY 1999 EQUIPMENT																					
FY 2000 EQUIPMENT																					
FY 2001 EQUIPMENT																					
FY 2002 EQUIPMENT																					
FY 2003 EQUIPMENT																					
TO COMPLETE																					
TOTAL INSTALLATION COST																					
TOTAL PROCUREMENT COST																					
TOTAL COST																					
METHOD OF IMPLEMENTATION:																					
CONTRACT DATE:																					
PRODUCTION DELIVER DATE:																					
ADMINISTRATIVE LEADTIME: 1																					
PRODUCTION LEADTIME: 1																					
FY 1997: Nov-96																					
FY 1997: Dec-96																					
FY 1998: Nov-97																					
FY 1998: Dec-97																					
FY 1999: N/A																					
FY 1999: N/A																					

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/UYQ-42 UPGRADE (MJ437)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	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	0	0	0	0	0	16
FY 1997	0	2	2	2	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	8
FY 1998	0	0	0	0	0	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																										34					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	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	0	0	0	0	0	16
FY 1997	0	2	2	2	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	8
FY 1998	0	0	0	0	0	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																										34					

P-3A

CLASSIFICATION: UNCLASSIFIED

		INDIVIDUAL MODIFICATION																			
P3A																					
MODIFICATION TITLE:		AN/TSQ-120 (MJ439)																			
MODELS OF SYSTEM AFFECTED:		Expeditionary airfields and at remote-area landing sites.																			
DESCRIPTION/JUSTIFICATION:		The Marine Air Traffic control & Landing System program provides systems and equipment that provide the Fleet Marine Forces with an all-weather means of providing for the safe and expeditious flow of air traffic at and around expeditionary airfields and at remote-area landing sites. The MATCALs program also provides systems and equipment required for both developmental/operational testing and for training of Marine technicians and operators.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		In Production																			
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (\$ IN MILLIONS)</u>																					
<i>RDT&E</i>																				0	0.000
<u>PROCUREMENT</u>																					
INSTALLATION KITS																				0	0.000
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING																					0.000
EQUIPMENT						5 2.785		4 2.174		5 3.094		3 2.410								17	10.463
EQUIPMENT NONRECURRING																					0.000
ENGINEERING CHANGE ORDERS																					0.000
DATA																					0.000
TRAINING EQUIPMENT																					0.000
SUPPORT EQUIPMENT																					0.000
OTHER																					0.000
INTERIM CONTRACTOR SUPPORT																					0.000
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR																				0	0.000
FY 1997 EQUIPMENT																				0	0.000
FY 1998 EQUIPMENT																				0	0.000
FY 1999 EQUIPMENT								3 0.020		2 0.011										5	0.031
FY 2000 EQUIPMENT										4 0.022										4	0.022
FY 2001 EQUIPMENT										1 0.006		4 0.020								5	0.026
FY 2002 EQUIPMENT												1 0.005		2 0.010						3	0.015
FY 2003 EQUIPMENT																				0	0.000
TO COMPLETE																				0	0.000
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	0	0.000	3	0.020	7	0.039	5	0.025	2	0.010	0	0.000	17	0.094
TOTAL PROCUREMENT COST		0	0.000	0	0.000	0	0.000	5	2.785	4	2.194	5	3.133	3	2.435	0	0.010	0	0.000	17	10.557
TOTAL COST		0.000		0.000		0.000		2.785		2.194		3.133		2.435		0.010		0.000		10.557	
METHOD OF IMPLEMENTATION		AIT								ADMINISTRATIVE LEADTIME: 5		PRODUCTION LEADTIME: 12									
CONTRACT DATE:		FY 1997:		N/A		FY 1998:		N/A		FY 1999:		Feb-99									
PRODUCTION DELIVER DATE:		FY 1997:		N/A		FY 1998:		N/A		FY 1999:		Feb-00									

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/TSQ-120 (MJ439)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	2	0	0	0	0	0	0	0	5
FY 2002	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	2	0	0	0	0	3
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									17						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	0	2	2	0	0	0	0	0	0	0	5
FY 2002	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	2	0	0	0	0	3
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									17						

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: SINGGARS (MJ440)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	17
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	17
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	17
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119	119
TOTAL INPUT																										204					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	17
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119	119
TOTAL OUTPUT																										204					

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy /BA2 Comm & Electronics Equipment								B. P-1 ITEM NOMENCLATURE AN/TPN-22 UPGRADE MATCAL5								C. DATE FEBRUARY 1997				LATER			
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001					FY 2002		
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ACTIVE FORCE INVENTORY (P)																1		1	2	1	1							
SCHOOLS/OTHER TRAINING (P)																												
OTHER (P)																												
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4	5	6	6	6	6	6	6	6	6	6	6	6	6
ASSETS ON HAND (BP)																												
DELIVERY FY 96 (P)																												
FY 96 & PRIOR (P)																												
FY 97 (P)																												
FY 98 (P)								A				1																
FY 99 (P)											A			1	2	1	1											
(P)																												
(P)																												
(P)																												
(P)																												
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	1	1	2	4	5	6	6	6	6	6	6	6	6	6	6	6	6	6
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	1	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/1 /96				FY 99 & PRIOR UNDELIVERED				UNFUNDED							
	1. APPN OPN				17				0				0				6				11							
	2. APPN -																											
	3. PROCUREMENT LEADTIME				ADMIN 4				INITIAL ORDER 17				REORDER 11															

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P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy /BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM AN/TPN-22 UPGRADI							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
						Beauford SC	1			NRAD	1	Okinawa Japa	1	NRAD	1
												Iwakuni Japa	1		

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy /BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM AN/TNP-22 UPGRADI							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
Bogue Field NC	1														
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Comm & Electronics Equipment								B. P-1 ITEM NOMENCLATURE RADAR LINK MATCALs								C. DATE FEBRUARY 1997				LATER								
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001					FY 2002							
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		1	2	3	4				
ACTIVE FORCE INVENTORY (P)															1			1	2	1	1												
SCHOOLS/OTHER TRAINING (P)																																	
OTHER (P)																																	
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	1	1	1	2	4	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0
ASSETS ON HAND (BP)																																	
DELIVERY FY 96 (P)																																	
FY 96 & PRIOR (P)																																	
FY 97 (P)																																	
FY 98 (P)								A			1																						
FY 99 (P)									A				1	2	1	1																	
(P)																																	
(P)																																	
(P)																																	
(P)																																	
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	1	1	1	2	4	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	1	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 /1 /96				FY 99 & PRIOR UNDELIVERED				UNFUNDED												
	1. APPN OPN				17				0				0				6				11												
	2. APPN -																																
	3. PROCUREMENT LEADTIME				ADMIN 5				INITIAL ORDER 12				REORDER 12																				

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P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM RADAR LINK							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
				NRAD	1					Beauford SC	1	Iwakuni JA Futenma JA	1 1	Bogue Field NC	1

P-1 SHOPPING LIST

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CLASSIFICATION:

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / 2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM RADAR LINK							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
EI Toro CA	1														
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Comm & Electronics Equipment								B. P-1 ITEM NOMENCLATURE DIFFERENTIAL GPS MATCALs								C. DATE FEBRUARY 1997				LATER				
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)												2		3	3	2													
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	2	2	5	8	10	10	10	10	10	10	10	10	10	10	10	10	10	0
ASSETS ON HAND (BP)																													
DELIVERY FY 96 (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)						A				1	1	1	1																
FY 99 (P)									A				1	3	2														
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	1	2	3	5	8	10	10	10	10	10	10	10	10	10	10	10	10	10	10	0
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	1	2	1	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 / 1/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN								17				0				0				10				7				
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN				INITIAL ORDER				REORDER																
				5				12				13																	

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P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO 80 PAGE NO 6F

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy /BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM DIFFERENTIAL GPS							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
						NRAD	2			El Toro CA	1	MA-11	1	NRAD	2
										Tustin CA	1	NAS RJB TX	1		
										New River NC	1	NAS Willow Grove PA	1		

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Comm & Electronics Equipment									B. P-1 ITEM NOMENCLATURE RLST/TRC-131 REPL MATCAL5								C. DATE FEBRUARY 1997				LATER			
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)		1	1		1	1	1	1	2	1	2	2																	
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	1	2	2	3	4	5	6	8	9	11	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	0
ASSETS ON HAND (BP)																													
DELIVERY FY 96 (P)																													
FY 96 & PRIOR (P)	1	1																											
FY 97 (P)		A		1	1	1	1																						
FY 98 (P)				A		1	2		1	1	2																		
FY 99 (P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	1	2	2	3	4	5	7	9	10	11	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	0
QTY OVER (+) OR SHORT (-)	1	1	0	1	1	1	2	3	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 / 1 /96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN -				14				1				0				13				0								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 4				INITIAL ORDER 8				REORDER 7																

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P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO 80 PAGE NO 6H

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy /BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM RLST/TRC-131 REPL							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
		NRAD	1	NRAD	1			NRAD	1	NRAD	1	NRAD	1	NRAD	1
FY 1999								FY 2000							
NRAD	2	NRAD	1	NRAD	2	NRAD	2								

P-1 SHOPPING LIST

CLASSIFICATION:

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TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Comm & Electronics Equipment								B. P-1 ITEM NOMENCLATURE HAVEQUICK RADIO UPGRADE MATCALs								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)										17	17		25	30	40														
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	17	34	34	59	89	129	129	129	129	129	129	129	129	129	129	129	129	129	129	0
ASSETS ON HAND (BP)																													
DELIVERY FY 96 (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)								A			34																		
FY 99 (P)										A		95																	
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	34	34	34	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	0
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	34	17	0	95	70	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 / 1 /96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN -				357				0				0				129				228								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 3				INITIAL ORDER 12				REORDER 9																

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P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / 2								P-1 ITEM NOMENCLATURE/PROJECT UNIT MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
		NRAD	17	NRAD	17			Futenma JA	10	Beauford SC	30	Bogue Field	40		
								Iwakuni JA	10			NC			
								Camp Pendleto	5						
								CA							

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CLASSIFICATION:

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CLASSIFICATION:

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TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Comm & Electronics Equipment								B. P-1 ITEM NOMENCLATURE UYQ-42 UPGRADE MATCALs								C. DATE FEBRUARY 1997				LATER								
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001					FY 2002							
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)	2	2	2	2	4	4	2																										
SCHOOLS/OTHER TRAINING (P)																																	
OTHER (P)																																	
TOTAL PHASED REQ (C)	2	4	6	8	12	16	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	0
ASSETS ON HAND (BP)																																	
DELIVERY FY 96 (P)																																	
FY 96 & PRIOR (P)																																	
FY 97 (P)	A 2	2	2	2																													
FY 98 (P)					A 4	4	2																										
FY 99 (P)																																	
(P)																																	
(P)																																	
(P)																																	
(P)																																	
TOTAL ASSETS (C)	2	4	6	8	12	16	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	0
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 / 1 /96				FY 99 & PRIOR UNDELIVERED				UNFUNDED												
	1. APPN -				34				16				0				18				0												
	2. APPN -																																
	3. PROCUREMENT LEADTIME				ADMIN 2				INITIAL ORDER 1				REORDER 1																				

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P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM UYQ-42 UPGRADE							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
NRAD	2	NRAD	2	NRAD	2	NRAD	2	NRAD	4	NRAD	4	NRAD	2		
FY 1999								FY 2000							

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CLASSIFICATION:

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TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Comm & Electronics Equipment								B. P-1 ITEM NOMENCLATURE SINGGARS MATCAL5								C. DATE FEBRUARY 1997				LATER				
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002								
	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)															17														
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	17	17	17	17	17	17	17	0
ASSETS ON HAND (BP)																													
DELIVERY FY 96 (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)											A				17														
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	0	0	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	0
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	0	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 / 1 /96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN -				204				0				0				17				187								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 2				INITIAL ORDER 12				REORDER 6																

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TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Comm & Electronics Equipment								B. P-1 ITEM NOMENCLATURE AN/TSQ-120 UPGRADE MATCALs								C. DATE FEBRUARY 1997				LATER				
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001					FY 2002			
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY (P)																			1	2	2								
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	5	5	5	5	5	5	5	0
ASSETS ON HAND (BP)																													
DELIVERY FY 96 (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)											A						2	2	1										
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	5	5	5	5	5	5	5	5	5	5	5	5	5	0
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 / 1 /96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN -				17				0				0				5				12								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 5				INITIAL ORDER 12				REORDER 9																

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CLASSIFICATION:

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy /BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM AN/TSQ-120 UPGRADI							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
Bogue Field NC NRAD	1 1														
FY 2003								FY 2004							

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BUDGET ITEM JUSTIFICATION SHEET					DATE:			
P-40					FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
Other Procurement, Navy / BA-2: Communications and Electronics Equipment					Shipboard Air Traffic Control (SATC) 283100			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$6.5	\$13.2	\$3.0	\$12.3	\$11.9	\$12.3	\$12.7	\$12.9
<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.</p> <p>Funding in FY96 through FY99 provides for procurement and installation of the following:</p> <p>FY96 funds the installation of AN/SPN-43 modification kits, Amphibious Air Traffic Control (AATC)-Direct Altitude and Readout(DAIR) systems, Carrier Air Traffic Control Center(CATCC) to AATC-DAIR F/C kits and AN/SPN-43C upgrades.</p> <p>FY97 funds the procurement of one AATC-DAIR system, three CATCC to AATC (F/C) kits, various AN/SPN-43 modification kits, and associated installation efforts including AN/SPN-43C upgrade.</p> <p>FY98 funds the procurement of various AN/SPN-43 modification kits and installation of AN/SPN-43C upgrades, CATCC to AATC-DAIR F/C kits, AN/TPX-42 AATC DAIR, and AN/SPN-43C upgrades.</p> <p>FY99 funds the procurement of various CATCC to AATC (F/C) kits, various AN/SPN-43 modification kits, and installation of AN/SPN-43C upgrades, AN/TPX-42 AATC DAIR, CATCC to AATC-DAIR F/C kits, and AN/SPN-43C upgrades.</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. Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>								

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WEAPONS SYSTEM COST ANALYSIS								DATE: FEBRUARY 1997			
P-5								P-1 ITEM NOMENCLATURE/SUBHEAD			
APPROPRIATION/BUDGET ACTIVITY				Other Procurement, Navy / BA-2: Communications and Electronics Equipment							
								Shipboard Air Traffic Control (SATC)			
								42MP			
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
MP023	AN/SPN-43 MOD KITS	N/A			VAR	425			VAR	1,767	
MP040	AATC-DAIR SYSTEM AN/TPX-42(V) 13	A			1	3,630					
MP042	CATCC TO AATC F/C KITS	N/A			3	3,711			VAR	5,500	
MP800	INTEGRATED LOGISTICS SUPPORT	N/A				120		35		100	
MP830	PRODUCTION ENGINEERING SUPPORT	N/A				489		99		120	
MP840	QUALITY ASSURANCE	N/A				20		20		60	
MP900	NON-FMP INSTALLATION	N/A		707		115		237		1,193	
MP910	FMP INSTALLATION	N/A		5,787		4,645		2,255		3,069	
MP920	DESIGN SERVICE AGENT	N/A						325		481	
				6,494		13,155		2,971		12,290	

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE	
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE				SUBHEAD		
Other Procurement, Navy / BA-2: Communications and Electronics Equipment				Shipboard Air Traffic Control (SATC)				42MP		
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQD	IF YES WHEN AVAILABLE
MP040 AATC-DAIR System (AN/TPX-42(V) 12/13) FY94 FY97	TELEPHONICS TELEPHONICS FARMINGDALE, NY	SS/FFP	NAWCAD St. Inigoes	3/94	4/96	1	\$3,806	YES	NO	
		SS/FFP	NAWCAD St. Inigoes	11/96	11/98	1	\$3,630	YES	NO	
MP042 CATCC to AATC-DAIR F/C Kits FY95 FY97	TELEPHONICS TELEPHONICS FARMINGDALE, NY	SS/FFP	NAWCAD St. Inigoes	8/95	12/97	2	\$1,485	YES	NO	
		SS/FFP	NAWCAD St. Inigoes	11/96	2/99	3	\$1,237	YES	NO	
D. REMARKS										
UNIT COST FOR AATC-DAIR SYSTEM IS SHIP CONFIGURATION DEPENDENT.										

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MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)							DATE FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA-2: Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE Shipboard Air Traffic Control (SATC)				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
AN/SPN-43 MOD KITS	0.288	0.115	0.237	1.193	0.972	1.969	1.236	1.250	7.260
AN/TPX-42 AATC-DAIR	1.458	1.914	0.068	1.380					4.820
CATTC TO AATC F/C KITS	0.947		0.281	0.607	0.630	1.228	1.228	1.194	6.115
AN/SPN-43C UPGRADE	3.801	2.731	2.231	1.563	0.777				11.103
TOTAL	6.494	4.760	2.817	4.743	2.379	3.197	2.464	2.444	29.298

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P3A INDIVIDUAL MODIFICATION																					
MODIFICATION TITLE: <u>AN/SPN-43 MODIFICATION KITS</u>																					
MODELS OF SYSTEM AFFECTED: <u>CVs, CVNs, LHDs, LHAs, LPHs, and selected shore sites.</u>																					
DESCRIPTION/JUSTIFICATION: <u>R&M improvements and dual channel upgrade to ATC Search Surveillance Radar.</u>																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: <u>N/A</u>																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																					
<u>RDT&E</u>																					
0 0.000																					
<u>PROCUREMENT</u>																					
INSTALLATION KITS Var 0.400 Var 0.425 Var 1.767 Var 2.347 Var 1.390 Var 1.884 Var 1.885 Var 10.098																					
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING 0.000																					
EQUIPMENT 0 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																					
INTERIM CONTRACTOR SUPPORT 0.000																					
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR (Var Kits) Var 0.388 Var 0.115 Var 0.503																					
FY 1997 EQUIPMENT (Var Kits) Var 0.237 Var 0.237																					
FY 1998 EQUIPMENT (Var Kits) Var 1.193 Var 1.193																					
FY 1999 EQUIPMENT (Var Kits) Var 0.972 Var 0.972																					
FY 2000 EQUIPMENT (Var Kits) Var 1.969 Var 1.969																					
FY 2001 EQUIPMENT (Var Kits) Var 1.236 Var 1.236																					
FY 2002 EQUIPMENT (Var Kits) Var 1.250 Var 1.250																					
FY 2003 EQUIPMENT (Var Kits) Var 1.000 Var 1.000																					
TO COMPLETE 0 0.000																					
TOTAL INSTALLATION COST 0 0.388 0 0.115 0 0.237 0 1.193 0 0.972 0 1.969 0 1.236 0 1.250 0 1.000 Var 8.360																					
TOTAL PROCUREMENT COST Var 0.788 Var 0.540 Var 0.237 Var 2.960 Var 3.319 Var 3.359 Var 3.120 Var 3.135 0 1.000 Var 18.458																					
TOTAL COST 0.788 0.540 0.237 2.960 3.319 3.359 3.120 3.135 1.000 18.458																					
METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: Various PRODUCTION LEADTIME: Various																					
CONTRACT DATE: FY 1997: Various FY 1998: Various FY 1999: Various																					
PRODUCTION DELIVER DATE: FY 1997: Various FY 1998: Various FY 1999: Various																					
Note: No individual kit exceeds 2 million dollars.																					

MODIFICATION TITLE: AN/SPN-43 MODIFICATION KITS

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT Var

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																					
MODIFICATION TITLE:		AATC-DAIR SYSTEM AN/TPX-42(V)13																					
MODELS OF SYSTEM AFFECTED:		CVNs, LHDs, and LHAs																					
DESCRIPTION/JUSTIFICATION:		Interogator used to control air traffic on L-class ships to support the increased air traffic density due to deployment of the AV-8B.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		Full Production 1/90																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<u>FINANCIAL PLAN (IN MILLIONS)</u>																							
<u>RDT&E</u>		1	4.800																	1	4.800		
<u>PROCUREMENT</u>																							
INSTALLATION KITS																					0.000		
INSTALLATION KITS (UNIT COST)																					0.000		
INSTALLATION KITS NONRECURRING																					0.000		
EQUIPMENT		4	15.000	1	3.630															5	18.630		
EQUIPMENT NONRECURRING																					0.000		
ENGINEERING CHANGE ORDERS																					0.000		
DATA																					0.000		
TRAINING EQUIPMENT																					0.000		
SUPPORT EQUIPMENT																					0.000		
OTHER																					0.000		
INTERIM CONTRACTOR SUPPORT																					0.000		
<u>INSTALLATION OF HARDWARE</u>																							
FY 1996 EQUIPMENT & PRIOR (4 Units)		3	6.743	1	1.914															4	8.657		
FY 1997 EQUIPMENT (1 Units)						AP	0.068	1	1.380											1	1.448		
FY 1998 EQUIPMENT																				0	0.000		
FY 1999 EQUIPMENT																				0	0.000		
FY 2000 EQUIPMENT																				0	0.000		
FY 2001 EQUIPMENT																				0	0.000		
FY 2002 EQUIPMENT																				0	0.000		
FY 2003 EQUIPMENT																				0	0.000		
TO COMPLETE																				0	0.000		
TOTAL INSTALLATION COST		3	6.743	1	1.914	0	0.068	1	1.380	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	5	10.105		
TOTAL PROCUREMENT COST		4	21.743	1	5.544	0	0.068	0	1.380	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	5	28.735		
TOTAL COST			26.543		5.544		0.068		1.380		0.000		0.000		0.000		0.000		0.000		33.535		
METHOD OF IMPLEMENTATION: FMP								ADMINISTRATIVE LEADTIME: 2						PRODUCTION LEADTIME: 25						AP=Advance Planning \$			
CONTRACT DATE:		FY 1997: 11/96				FY 1998: N/A				FY 1999: N/A													
PRODUCTION DELIVER DATE:		FY 1997: 11/98				FY 1998: N/A				FY 1999: N/A													

P-3A

CLASSIFICATION: UNCLASSIFIED

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

MODIFICATION TITLE: AATC-DAIR SYSTEM AN/TPX-42(V)13

INSTALLATION SCHEDULE:

INPUT ==>	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		
FY 1996 & Prior	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	4
FY 1997	0	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	1
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									5						
OUTPUT ==>	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		
FY 1996 & Prior	3	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	4
FY 1997	0	0	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	1
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									5						

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **CATCC TO AATC F/C KITS**

MODELS OF SYSTEM AFFECTED: **CVs & CVNs**

DESCRIPTION/JUSTIFICATION: Backfit CV/CVN with improvements from AATC-DAIR. The quantities are described as various starting in FY99. Prior to this just CATCC to AATC were being procured and installed without the Advanced Display System (AN/UYQ-70) ECP. In FY 99 and out kits with ADS are being procured and in some instances just the ADS upgrades are being procured. This cannot simply be described in even numerical quantities of kits, thus the various designation.

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

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$

FINANCIAL PLAN (IN MILLIONS)

RD&E																				0	0.000
PROCUREMENT																					
INSTALLATION KITS	10	8.900	3	3.711			Var	5.500	Var	6.900	Var	7.370	Var	6.900	Var	6.102				13	45.383
INSTALLATION KITS (UNIT COST)				1.237																	
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																					0.000

INSTALLATION OF HARDWARE

FY 1996 EQUIPMENT & PRIOR (10 Kits)	8	2.183			1	0.281	1	0.304												10	2.768
FY 1997 EQUIPMENT (3 Kits)							1	0.303	2	0.630										3	0.933
FY 1998 EQUIPMENT																				0	0.000
FY 1999 EQUIPMENT										Var	1.228									Var	1.228
FY 2000 EQUIPMENT												Var	1.228							Var	1.228
FY 2001 EQUIPMENT														Var	1.194					Var	1.194
FY 2002 EQUIPMENT																Var	1.000			Var	1.000
FY 2003 EQUIPMENT																Var	1.000			Var	1.000
TO COMPLETE																				0	0.000
TOTAL INSTALLATION COST	8	2.183	0	0.000	1	0.281	2	0.607	2	0.630	0	1.228	0	1.228	0	1.194	0	2.000	13	9.351	
TOTAL PROCUREMENT COST	10	11.083	3	3.711	0	0.281	Var	6.107	Var	7.530	Var	8.598	Var	8.128	Var	7.296	0	2.000	13	54.734	
TOTAL COST		11.083		3.711		0.281		6.107		7.530		8.598		8.128		7.296		2.000		54.734	

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 2

PRODUCTION LEADTIME: 27

CONTRACT DATE: FY 1997: 11/96

FY 1998: N/A

FY 1999: Various

PRODUCTION DELIVER DATE: FY 1997: 2/99

FY 1998: N/A

FY 1999: Various

Note: No individual kit exceeds 2 million dollars.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: CATCC TO AATC F/C KITS

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	8	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 1997	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																										13					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	8	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 1997	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	3
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																										13					

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																				
MODIFICATION TITLE:		AN/SPN-43C RADAR SET UPGRADE																				
MODELS OF SYSTEM AFFECTED:		CVs, CVNs, LHds, LHAs, and selected shore sites.																				
DESCRIPTION/JUSTIFICATION:		R & M improvement and provides increased operational capability. Solid state mod to the AN/SPN-43 Surveillance Radar.																				
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		TC		TOTAL		
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RD&E</i>																					0	0.000
<i>PROCUREMENT</i>																						
INSTALLATION KITS		28	28.200																		28	28.200
INSTALLATION KITS (UNIT COST)																						
INSTALLATION KITS NONRECURRING																						0.000
EQUIPMENT																					0	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
INTERIM CONTRACTOR SUPPORT																						0.000
<u>INSTALLATION OF HARDWARE</u>																						
FY 1996 EQUIPMENT & PRIOR (28 Kits)		12	8.643	4	2.627	3	2.176	2	1.530	1	0.777							6	4.800	28	20.553	
AP Breakout		AP	0.880	AP	0.104	AP	0.055	AP	0.033													1.072
FY 1997 EQUIPMENT																					0	0.000
FY 1998 EQUIPMENT																					0	0.000
FY 1999 EQUIPMENT																					0	0.000
FY 2000 EQUIPMENT																					0	0.000
FY 2001 EQUIPMENT																					0	0.000
FY 2002 EQUIPMENT																					0	0.000
FY 2003 EQUIPMENT																					0	0.000
TO COMPLETE																					0	0.000
TOTAL INSTALLATION COST		12	9.523	4	2.731	3	2.231	2	1.563	1	0.777	0	0.000	0	0.000	0	0.000	6	4.800	28	21.625	
TOTAL PROCUREMENT COST		28	37.723	0	2.731	0	2.231	0	1.563	0	0.777	0	0.000	0	0.000	0	0.000	0	4.800	0	49.825	
TOTAL COST			37.723		2.731		2.231		1.563		0.777		0.000		0.000		0.000		4.800		49.825	
METHOD OF IMPLEMENTATION: AIT																						
CONTRACT DATE:		FY 1997:	N/A			FY 1998:	N/A			FY 1999:	N/A											
PRODUCTION DELIVER DATE:		FY 1997:	N/A			FY 1998:	N/A			FY 1999:	N/A											

P-3A

CLASSIFICATION: UNCLASSIFIED

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

MODIFICATION TITLE: **AN/SPN-43C RADAR SET UPGRADE**

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	28	0	0	0	0	0	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
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									28						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	12	1	2	1	0	2	0	1	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	28
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									28						

P-3A

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2 Communications and Electronics Equipment									B. P-1 ITEM NOMENCLATURE AN/TPX-42A(V)13 Shipboard Air Traffic Control (SATC)								C. DATE FEBRUARY 1997							
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)				1					1																				
NEW CONSTRUCTION (SCN) (P)				1																									
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ASSETS ON HAND (BP)	1																												
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR SCN (P)				1																									
FY 97 OPN (P)	S								1																				
FY 98 (P)																													
FY 99 (P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	1	1	1	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
QTY OVER (+) OR SHORT (-)	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS BASED ON OVERHAUL SCHEDULES DATED MAY 1996 FOR CVN BASED ON OVERHAUL SCHEDULES DATED APR 1996 FOR LHA Reorder time reduced by use of BOA and ordering through field activity.	E. RQMT (QTY)								TOTAL RQMT				INSTALLED		ON HAND AS OF 10/01/96		FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - SCN								9				8		0		1				0								
	2. APPN - OPN								5				3		1		1				0								
	3. PROCUREMENT LEADTIME								ADMIN				INITIAL ORDER		REORDER														
								1				25		24															

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2: Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT Shipboard Air Traffic Control (SATC)							
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		
FY 1997								FY 1998							
						LHA-4	1								
						CVN-76 (SCN)	1								
FY 1999								FY 2000							
						LHA-1	1								

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE CATTG TO AATC F/C KITS Shipboard Air Traffic Control (SATC)								C. DATE FEBRUARY 1997				LATER								
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001					FY 2002							
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)					1						1	1						2															
NEW CONSTRUCTION (SCN) (P)																																	
SCHOOLS/OTHER TRAINING (P)																																	
OTHER (P)																																	
TOTAL PHASED REQ (C)	0	0	0	0	1	1	1	1	1	1	2	3	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
ASSETS ON HAND (BP)	0																																
DELIVERY FY 96 & PRIOR (P)					1				1																								
FY 96 & PRIOR (P)																																	
FY 97 (P)	S										2	1																					
FY 98 (P)																																	
FY 99 (P)																																	
(P)																																	
(P)																																	
(P)																																	
(P)																																	
(P)																																	
TOTAL ASSETS (C)	0	0	0	0	1	1	1	1	2	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	1	3	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS BASED ON OVERHAUL SCHEDULES DATED MAY 1996 for CV/CVN BASED ON OVERHAUL SCHEDULES DATED APR 1996 for LHA	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED												
	1. APPN - OPN				10				8				0				2				0												
	2. APPN -																																
	3. PROCUREMENT LEADTIME				ADMIN				INITIAL ORDER				REORDER																				
				1				28				28																					

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CLASSIFICATION:

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CLASSIFICATION:

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A										DATE FEBRUARY 1997							
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2: Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT Shipboard Air Traffic Control (SATC)									
1ST QTR				2ND QTR		3RD QTR		4TH QTR		CATTIC TO ATTC F/C KITS				MP042			
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	E.I./L	QTY
FY 1997								FY 1998									
								LHA-4	1								
FY 1999								FY 2000									
				CVN-72	1	CVN-69	1			CVN-70	1						
										CVN-71	1						

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CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE AN/SPN-43C RADAR SET UPG Shipboard Air Traffic Control (SATC)								C. DATE FEBRUARY 1997				LATER							
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002							
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
ACTIVE FORCE INVENTORY (P)		1	2	1		2		1			1		1			1											11					
NEW CONSTRUCTION (SCN) (P)																																
SCHOOLS/OTHER TRAINING (P)																																
OTHER (P)																																
TOTAL PHASED REQ (C)		1	3	4	4	6	6	7	7	7	8	8	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	21				
ASSETS ON HAND (BP)		21																														
DELIVERY FY 96 & PRIOR (P)																																
FY 96 & PRIOR OPN (P)																																
FY 97 (P)																																
FY 98 (P)																																
FY 99 (P)																																
(P)																																
(P)																																
(P)																																
TOTAL ASSETS (C)		21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21					
QTY OVER (+) OR SHORT (-)		20	18	17	17	15	15	14	14	14	13	13	12	12	11	11	11	11	11	11	11	11	11	11	11	11	0					
D. REMARKS					E. RQMT (QTY)								TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED			
BASED ON OVERHAUL SCHEDULES DATED MAY 1996 FOR CV/CVN BASED ON OVERHAUL SCHEDULES DATED APR 1996 FOR LHA/LHD					1. APPN - OPN								28				12				16				0				0			
					2. APPN -																											
					3. PROCUREMENT LEADTIME								ADMIN				INITIAL ORDER				REORDER											

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2: Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT Shipboard Air Traffic Control (SATC) AN/SPN-43C RADAR SET UP MP023							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
LHA-3	1	CVN-65	1	CV-63	1			CV-64	1			CVN-73	1		
		CVN-70	1					LHD-4	1						
FY 1999								FY 2000							
						CVN-69	1			CVN-71	1				
						LHD-2	1								

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BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE Automatic Carrier Landing System (ACLS) 283200			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$5.1	\$15.7	\$13.2	\$12.9	\$12.9	\$12.8	\$12.5	\$13.0
<p>DESCRIPTION:</p> <p>The Automatic Carrier Landing System (ACLS) provides the primary precision electronic guidance for landing aircraft on CVs, CVNs, LHAs, LHDs, and at selected Naval air stations in all weather conditions. Many of the equipments and components in the system have been in continuous use twenty or more years. This program funds planned maintainability, reliability, and supportability improvements to existing equipment and components as well as replacements for those items that can no longer be maintained or supported.</p> <p>Due to design engineering and maintenance deficiencies, age, and length of time in service use, the AN/SPN-42A landing system is being replaced with the AN/SPN-46(V).</p> <p>FY96 Begins the procurement of a "Down-sized" AN/SPN-46(V) for use on amphibious assault ships and various AN/SPN-42/46 Mod Kits, and associated installation efforts.</p> <p>FY97 Continues the procurement of a smaller version of the AN/SPN-46(V), the AN/SPN-41 Independent Landing Monitor (ILM), various AN/SPN-42/46 Mod Kits, and associated installation efforts.</p> <p>FY98 Continues the procurement of a smaller version of the AN/SPN-46, the AN/SPN-41 ILM, Moving Target Detection for the AN/SPN-46 and various other AN/SPN-42/46 Mod Kits, and associate installation efforts.</p> <p>FY99 Continues the procurement of a smaller version of the AN/SPN-46, the AN/SPN-41 ILM, Moving Target Detection for the AN/SPN-46 and various other AN/SPN-42/46 Mod Kits, and associate installation efforts.</p> <p>Installing agent: Shipyards and alteration installation teams Ships or facilities to receive the equipment: CV/CVNs, LHD/LHAs, software support activity (NAWCAD, St Inigoes), selected shore sites and training site.</p> <p>Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS								DATE:			
P-5								FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD							
Other Procurement, Navy / BA2 - Communications and Electronics Equipment				<p style="text-align: center;">Automatic Carrier Landing System (ACLS)</p> <p style="text-align: right;">42PN</p>							
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
PN403	AN/SPN-46(V)	A			1	4,319	1	4,414	1	4,511	
PN404	AN/SPN-41 IND LANDING MONITOR (ILM)	A			1	2,266	1	2,315	1	2,366	
PN408	AN/SPN-42/46 MOD KITS	N/A	VAR	219	VAR	3,480	VAR	1,852	VAR	1,880	
PN800	INTEGRATED LOGISTICS SUPPORT	N/A		15		40		84		83	
PN830	PRODUCTION ENGINEERING SUPPORT	N/A		105		215		80		78	
PN840	QUALITY ASSURANCE	N/A		20		21		10		10	
PN900	NON-FMP INSTALLATION	N/A		317		3,397		2,521		3,374	
PN910	FMP INSTALLATION	N/A		1,854		1,920		1,626		495	
PN920	DESIGN SERVICE AGENT	N/A						298		124	
PN999	BELOW THRESHOLD REPROGRAMMINGS	N/A		2,618							
				5,148		15,658		13,200		12,921	

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CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE FEBRUARY 1997	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipment				C. P-1 ITEM NOMENCLATURE Automatic Carrier Landing System (ACLS)				SUBHEAD 42PN		
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
PN403 AN/SPN-46(V)										
FY97	TDS Wilmington	SS/FFP	NAVAIR	6/97	9/98	1	4,319.0	YES	NO	
FY98	TDS Wilmington	OPTION	NAVAIR	1/98	3/99	1	4,414.0	YES	NO	
FY99	TDS Wilmington	OPTION	NAVAIR	1/99	3/00	1	4,511.0	YES	NO	
PN404 AN/SPN-41 ILM										
FY97	NAWCAD St. Inigoes	PX	NAVAIR	2/97	9/97	1	2,266.0	YES	NO	
FY98	NAWCAD St. Inigoes	PX	NAVAIR	1/98	8/98	1	2,315.0	YES	NO	
FY99	NAWCAD St. Inigoes	PX	NAVAIR	1/99	8/99	1	2,366.0	YES	NO	
D. REMARKS										
Unit cost of AN/SPN-46 is hull dependent.										

CLASSIFICATION:

UNCLASSIFIED

MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)							DATE FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE Automatic Carrier Landing System (ACLS)				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
AN/SPN-46(V)	0.765	1.920							2.685
AN/SPN-46(V) Down-sized		1.229	2.150	1.400	1.000	1.350	1.000	1.420	9.549
AN/SPN-41	0.330	1.230	1.350	1.400	1.000	1.350	1.000	1.419	9.079
AN/SPN-42/46 MOD	1.076	0.938	0.945	1.193	2.798	1.390	0.814	0.826	9.980
TOTAL	2.171	5.317	4.445	3.993	4.798	4.090	2.814	3.665	31.293

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CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																					
MODIFICATION TITLE:		AN/SPN-46(V) Automatic Carrier Landing System (ACLS)																					
MODELS OF SYSTEM AFFECTED:		CVs/CVNs, & selected shore sites.																					
DESCRIPTION/JUSTIFICATION:		Provide safe reliable final guidance for CV/CVN based aircraft in all weather conditions.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																							
<i>RDT&E</i>																				0	0.000		
<i>PROCUREMENT</i>																							
INSTALLATION KITS		6	51.500																			6	51.500
INSTALLATION KITS (UNIT COST)																					0.000		
INSTALLATION KITS NONRECURRING																					0.000		
EQUIPMENT																				0	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		
INTERIM CONTRACTOR SUPPORT																					0.000		
<i>INSTALLATION OF HARDWARE</i>																							
FY 1996 EQUIPMENT & PRIOR (6 Kits)		5	11.515	1	1.920															6	13.435		
FY 1997 EQUIPMENT																				0	0.000		
FY 1998 EQUIPMENT																				0	0.000		
FY 1999 EQUIPMENT																				0	0.000		
FY 2000 EQUIPMENT																				0	0.000		
FY 2001 EQUIPMENT																				0	0.000		
FY 2002 EQUIPMENT																				0	0.000		
FY 2003 EQUIPMENT																				0	0.000		
TO COMPLETE																				0	0.000		
TOTAL INSTALLATION COST		5	11.515	1	1.920	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	6	13.435		
TOTAL PROCUREMENT COST		6	63.015	0	1.920	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	6	64.935		
TOTAL COST		63.015		1.920		0.000		0.000		0.000		0.000		0.000		0.000		0.000		64.935			
METHOD OF IMPLEMENTATION: AIT						ADMINISTRATIVE LEADTIME: 5				PRODUCTION LEADTIME: 15													
CONTRACT DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A																	
PRODUCTION DELIVER DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A																	

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CLASSIFICATION: UNCLASSIFIED

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

MODIFICATION TITLE: AN/SPN-46(V) Automatic Carrier Landing System (ACLS)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	5	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	6
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									6						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	5	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	6
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									6						

P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION																						
P3A																						
MODIFICATION TITLE: AN/SPN-46(V) "DOWN-SIZED" Automatic Carrier Landing System (ACLS)																						
MODELS OF SYSTEM AFFECTED: LHAs, LHDs, & selected shore sites.																						
DESCRIPTION/JUSTIFICATION: Provide safe reliable final guidance for LHA/LHD based aircraft in all weather conditions.																						
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A																						
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																						
<i>RD&E</i>																						
<i>PROCUREMENT</i>																						
INSTALLATION KITS		1	11.319	1	4.319	1	4.414	1	4.511	1	4.610	1	4.712	1	4.815	1	4.921	4	20.790	12	64.411	
INSTALLATION KITS (UNIT COST)					4.319		4.414		4.511		4.610		4.712		4.815		4.921					
INSTALLATION KITS NONRECURRING EQUIPMENT																					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	
INTERIM CONTRACTOR SUPPORT																					0.000	
INSTALLATION OF HARDWARE																						
FY 1996 EQUIPMENT & PRIOR (1 Kit)		AP	0.350	LLP	1.229	1	0.600													1	2.179	
FY 1997 EQUIPMENT (1 Kit)						1	0.800														1	0.800
FY 1998 EQUIPMENT (1 Kit)								1	0.250												1	0.250
FY 1999 EQUIPMENT (1 Kit)						LLP	0.750	LLP	0.400	1	0.600										1	1.750
FY 2000 EQUIPMENT (1 Kit)								LLP	0.750	LLP	0.400	1	0.600								1	1.750
FY 2001 EQUIPMENT (1 Kit)												LLP	0.750	1	1.000						1	1.750
FY 2002 EQUIPMENT (1 Kit)															1	0.270					1	0.270
FY 2003 EQUIPMENT (1 Kit)															LLP	1.150	1	0.600		1	1.750	
TO COMPLETE (4 Kits)																	4	6.264		4	6.264	
TOTAL INSTALLATION COST		0	0.350	0	1.229	2	2.150	1	1.400	1	1.000	1	1.350	1	1.000	1	1.420	5	6.864	12	16.763	
TOTAL PROCUREMENT COST		1	11.669	1	5.548	1	10.978	1	5.911	1	5.610	1	6.062	1	5.815	1	6.341	4	27.654	12	81.174	
TOTAL COST			11.669		5.548		10.978		5.911		5.610		6.062		5.815		6.341		27.654		81.174	
METHOD OF IMPLEMENTATION: AIT																	ADMINISTRATIVE LEADTIME: 9		PRODUCTION LEADTIME: 15			
CONTRACT DATE:		FY 1997: 6/97				FY 1998: 1/98				FY 1999: 1/99												
PRODUCTION DELIVER DATE:		FY 1997: 9/98				FY 1998: 3/99				FY 1999: 3/00												
LLP=Long Lead Procurement		To Complete =		LHA-2		LHA-3		LHA-4		LHD-5												

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**
 MODIFICATION TITLE: **AN/SPN-46(V) "DOWN-SIZED" Automatic Carrier Landing System (ACLS)**

INSTALLATION SCHEDULE:

INPUT ==>	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		
FY 1996 & Prior	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	1
FY 1997	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
FY 1998	0	0	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	1
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
FY 2002	0	0	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	0	0	1
FY 2003	0	0	0	0	0	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
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
TOTAL INPUT																									12						
OUTPUT ==>	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		
FY 1996 & Prior	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	1
FY 1997	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
FY 1998	0	0	0	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	1
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
FY 2002	0	0	0	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	0	1
FY 2003	0	0	0	0	0	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
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
TOTAL OUTPUT																									12						

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		AN/SPN-41 Independent Landing Monitor																			
MODELS OF SYSTEM AFFECTED:		CVs, CVNs, LHDs, & selected shore sites																			
DESCRIPTION/JUSTIFICATION:		Provides independent landing monitor for carrier and amphibious classes.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																			
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																					
<i>RDT&E</i>																				0	0.000
<u>PROCUREMENT</u>																					
INSTALLATION KITS		14	35.200	1	2.266	1	2.315	1	2.366	1	2.418	1	2.471	1	2.526	1	2.581			21	52.143
INSTALLATION KITS (UNIT COST)					2.266		2.315		2.366		2.418		2.471		2.526		2.581				
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																					0.000
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR (14 Kits)		11	25.402																	11	25.402
FY 1997 EQUIPMENT (1 Kit)				LLP	1.230	1	0.600													1	1.830
FY 1998 EQUIPMENT (1 Kit)								1	0.250											1	0.250
FY 1999 EQUIPMENT (1 Kit)						LLP	0.750	LLP	0.400	1	0.600									1	1.750
FY 2000 EQUIPMENT (1 Kit)								LLP	0.750	LLP	0.400	1	0.600							1	1.750
FY 2001 EQUIPMENT (1 Kit)												LLP	0.750	1	1.000					1	1.750
FY 2002 EQUIPMENT (1 Kit)																1	0.269			1	0.269
FY 2003 EQUIPMENT (1 Kit)																LLP	1.150	1	0.600	1	1.750
TO COMPLETE (2 Kits)																		3	5.250	3	5.250
<u>TOTAL INSTALLATION COST</u>		11	25.402	0	1.230	1	1.350	1	1.400	1	1.000	1	1.350	1	1.000	1	1.419	4	5.850	21	40.001
<u>TOTAL PROCUREMENT COST</u>		14	60.602	1	3.496	1	3.665	1	3.766	1	3.418	1	3.821	1	3.526	1	4.000	0	5.850	21	92.144
<u>TOTAL COST</u>			60.602		3.496		3.665		3.766		3.418		3.821		3.526		4.000		5.850		92.144
METHOD OF IMPLEMENTATION: AIT																					
CONTRACT DATE:		FY 1997: 1/97				ADMINISTRATIVE LEADTIME: 4				PRODUCTION LEADTIME: 7				FY 1999: 1/99							
PRODUCTION DELIVER DATE:		FY 1997: 8/97				FY 1998: 1/98				FY 1998: 8/98				FY 1999: 8/99							
LLP = Long Lead Procurement		To Complete =		LHA-2 LHA-3 LHA-4																	

P-3A

CLASSIFICATION: UNCLASSIFIED

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

MODIFICATION TITLE: AN/SPN-41 Independent Landing Monitor

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	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
FY 1997	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	1
FY 1998	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
FY 1999	0	0	0	0	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	1
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
FY 2002	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	0	0	0	0	1
FY 2003	0	0	0	0	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	1
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									21						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
FY 1997	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	1
FY 1998	0	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	1
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
FY 2002	0	0	0	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	0	1
FY 2003	0	0	0	0	0	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
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
TOTAL OUTPUT																									21						

P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION																										
P3A																										
MODIFICATION TITLE: AN/SPN-42/46 Modification Kits																										
MODELS OF SYSTEM AFFECTED: CVs, CVNs, and selected shore sites.																										
DESCRIPTION/JUSTIFICATION: R & M improvements to Automatic Carrier Landing Systems																										
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A																										
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL						
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$					
FINANCIAL PLAN (IN MILLIONS)																										
<i>RDT&E</i>																										
<i>PROCUREMENT</i>																										
INSTALLATION KITS		Var	0.890	Var	3.480	Var	1.852	Var	1.880	Var	0.868	Var	1.403	Var	2.170	Var	1.508			Var	14.051					
INSTALLATION KIT (UNIT COST)																					0.000					
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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					
INTERIM CONTRACTOR SUPPORT																					0.000					
INSTALLATION OF HARDWARE																										
FY 1996 EQUIPMENT & PRIOR (Var Kits)		Var	1.076																		Var	1.076				
FY 1997 EQUIPMENT (Var Kits)				Var	0.938																	Var	0.938			
FY 1998 EQUIPMENT (Var Kits)						Var	0.945															Var	0.945			
FY 1999 EQUIPMENT (Var Kits)								Var	1.193													Var	1.193			
FY 2000 EQUIPMENT (Var Kits)										Var	2.798											Var	2.798			
FY 2001 EQUIPMENT (Var Kits)												Var	1.390									Var	1.390			
FY 2002 EQUIPMENT (Var Kits)														Var	0.814							Var	0.814			
FY 2003 EQUIPMENT (Var Kits)																Var	0.826					Var	0.826			
TO COMPLETE (Var Kits)																		Var	1.400			Var	1.400			
TOTAL INSTALLATION COST		0	1.076	0	0.938	0	0.945	0	1.193	0	2.798	0	1.390	0	0.814	0	0.826	0	1.400		Var	11.380				
TOTAL PROCUREMENT COST		Var	1.966	Var	4.418	Var	2.797	Var	3.073	Var	3.666	Var	2.793	Var	2.984	Var	2.334	0	1.400		Var	25.431				
TOTAL COST			1.966		4.418		2.797		3.073		3.666		2.793		2.984		2.334		1.400			25.431				
METHOD OF IMPLEMENTATION: AIT																	ADMINISTRATIVE LEADTIME: Various					PRODUCTION LEADTIME: Various				
CONTRACT DATE: FY 1997: Various																	FY 1998: Various					FY 1999: Various				
PRODUCTION DELIVER DATE: FY 1997: Various																	FY 1998: Various					FY 1999: Various				
Note: No individual kit exceeds 2 million dollars.																										

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/SPN-42/46 Modification Kits

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									Var						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	Var	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									Var						

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE AN/SPN-46(V) Automatic Carrier Landing System (ACLS)								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)			1																										
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ASSETS ON HAND (10/1/95) (BP)																													
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)			1																										
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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	0	0	0
D. REMARKS Based on overhaul schedule dated May 1996	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN OPN				6				5				0				1				0								
	2. APPN SCN				7				7				0				0				0								
	3. PROCUREMENT LEADTIME				ADMIN				5				INITIAL ORDER				24				REORDER				14				

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P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997					
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT Automatic Carrier Landing System (ACLS)									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		AN/SPN-46 (V)		2ND QTR		3RD QTR		4TH QTR		PN403	
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	E.I./L	QTY
FY 1997								FY 1998									
				CVN-71	1												
FY 1999								FY 2000									

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE AN/SPN-46(V) Down-sized Automatic Carrier Landing System (ACLS)								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)						1		1			1				1														
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	1	1	2	2	2	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
ASSETS ON HAND (10/1/95) (BP)																													
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)			1																										
FY 97 (P)		S						1																					
FY 98 (P)						S					1																		
FY 99 (P)										S					1														
(P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	1	1	1	1	1	2	2	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
QTY OVER (+) OR SHORT (-)	0	0	1	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS Based on overhaul schedule dated April 1996 for LHA & LHD					E. RQMT (QTY)								TOTAL RQMT		INSTALLED		ON HAND AS OF 10/01/96		FY 99 & PRIOR UNDELIVERED		UNFUNDED								
					1. APPN OPN								12		0		0		4		8								
					2. APPN -																								
					3. PROCUREMENT LEADTIME								ADMIN		INITIAL ORDER		REORDER												
													9		15		15												

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P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997							
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT Automatic Carrier Landing System (ACLS)											
1ST QTR		2ND QTR		3RD QTR		4TH QTR		AN/SPN-46 (V) Down-sized		PN403		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	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998											
										LHD-3	1					LHD-6	1		
FY 1999								FY 2000											
				NATTC PENSACOLA	1									LHA-5	1				

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CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23				A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment										B. P-1 ITEM NOMENCLATURE AN/SPN-41 Automatic Carrier Landing System (ACLS)								C. DATE FEBRUARY 1997							
				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER	
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
ACTIVE FORCE INVENTORY (P)						1	1		1			1		1				1											
SCHOOLS/OTHER TRAINING (P)												1																	
OTHER (P)																													
TOTAL PHASED REQ (C)				0	0	1	2	2	3	3	3	5	5	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7
ASSETS ON HAND (10/1/95) SCN LHD-5 (BP)				1																									
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)																													
FY 97 OPN LHD-3 (P)					A		1																						
FY 97 SCN LHD-6 (P)					A		1																						
FY 98 OPN ISEA (P)									A		1																		
FY 98 SCN LHD-7 (P)									A			1																	
FY 98 SCN CVN-76 (P)													A		1														
FY 99 OPN LHA-5 (P)													A						1										
TOTAL ASSETS (C)				1	1	1	3	3	3	3	4	5	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
QTY OVER (+) OR SHORT (-)				1	1	0	1	1	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS Based on overhaul schedule dated May 1996				E. RQMT (QTY)										TOTAL RQMT		INSTALLED		ON HAND AS OF 10/01/96		FY 99 & PRIOR UNDELIVERED		UNFUNDED							
				1. APPN OPN										21		14		0		3		4							
				2. APPN SCN										8		4		1		3		0							
				3. PROCUREMENT LEADTIME										ADMIN		INITIAL ORDER		REORDER											
														4		7		7											

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CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipmen								P-1 ITEM NOMENCLATURE/PROJECT UNIT Automatic Carrier Landing System (ACLS)							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		AN/SPN-41 1ST QTR		PN404 2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
				LHD-5 (SCN)	1	LHD-6 (SCN)	1			LHD-3	1				
FY 1999								FY 2000							
ISEA	1			CVN-76 (SCN)	1							LHA-5	1		
LHD-7 (SCN)	1														

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CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 97			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE NATIONAL AIRSPACE SYSTEM (NAS) 284000			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$0.0	\$0.0	\$2.2	\$28.9	\$37.7	\$38.5	\$62.2	\$40.1
<p>DESCRIPTION:</p> <p>The National Airspace System 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 Core Program.</p> <p>The Air Force is DOD lead activity for the Joint Acquisition Program. The Joint Program Office (JPO) is located at Hanscom AFB, MA.</p> <p>FY98 provides funding to procure: 8 DoD Common Consoles.</p> <p>FY99 provides funding to procure: 22 DoD Common Consoles; 3 Radars; 1 Tower Automation; and 4 Automation Systems.</p> <p>Installing Agent: Alteration Installation Teams (AIT) When installation to be made: N/A Activities to receive equipment: Navy Core National Airspace System (NAS) sites</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS								DATE:		
P-5								FEBRUARY 97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD						
Other Procurement, Navy / BA2 - Communications and Electronics Equipment				NATIONAL AIRSPACE SYSTEM (NAS)						42XX
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
XX010	DOD COMMON CONSOLES	B					8	1,200	22	3,373
XX020	MILITARY AIR SPACE MANAGEMENT SYS. (MAMS)	B								2,066
XX030	RADARS	B							3	14,116
XX040	TOWER AUTOMATION	B							1	409
XX050	AUTOMATION SYSTEMS	B							4	6,132
XX800	INTEGRATED LOGISTICS SUPPORT	N/A						328		668
XX830	PRODUCTION ENGINEERING	N/A						711		2,092
NAS R&D ENTIRELY FUNDED BY AIR FORCE										
				0		0		2,239		28,856

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE FEBRUARY 97	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipment				C. P-1 ITEM NOMENCLATURE NATIONAL AIRSPACE SYSTEM (NAS)				SUBHEAD 42XX		
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
XX010 DOD COMMON CONSOLES										
FY 98	TBD	FFP Option	FAA	4/98	4/00	8	150.0	YES	NO	
FY 99	TBD	FFP Option	FAA	12/98	12/00	22	153.3	YES	NO	
XX030 RADARS										
FY 99	TBD	FFP Option	AIR FORCE	12/98	12/00	3	4,705.3	YES	NO	
XX040 TOWER AUTOMATION										
FY 99	TBD	FFP	NAVAIR	2/99	7/00	1	408.8	NO (3/98)		
XX050 AUTOMATION SYSTEM										
FY 99	TBD	FFP Option	FAA	1/99	11/00	4	1,533.0	YES	NO	
D. REMARKS										

CLASSIFICATION:

UNCLASSIFIED

MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)					DATE FEBRUARY 97				
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE NATIONAL AIRSPACE SYSTEM (NAS)				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
XX010 DOD COMMON CONSOLES						0.320	0.655	0.502	1.477
XX030 RADARS					0.627	1.388	1.745	1.728	5.488
XX040 TOWER AUTOMATION						0.320	0.655	0.502	1.477
XX050 AUTOMATION					0.719	2.669	2.851	3.288	9.527
TOTAL	0.0	0.0	0.0	0.0	1.346	4.697	5.906	6.020	17.969

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CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																				
MODIFICATION TITLE:		DOD COMMON CONSOLES																				
MODELS OF SYSTEM AFFECTED:		NAS																				
DESCRIPTION/JUSTIFICATION: The DOD Common Console 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 consoles 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 (June 1998)																				
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<u>RDT&E</u>																				0	0.000	
<u>PROCUREMENT</u>																						
INSTALLATION KITS				8	1.200	22	3.373	45	7.050	55	8.807	34	5.564	15	2.509			179	28.503			
INSTALLATION KITS (UNIT COST)					0.150		0.153		0.157		0.160		0.164		0.167							
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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	
INTERIM CONTRACTOR SUPPORT																					0.000	
<u>INSTALLATION OF HARDWARE</u>																						
FY 1996 EQUIPMENT & PRIOR																				0	0.000	
FY 1997 EQUIPMENT																				0	0.000	
FY 1998 EQUIPMENT (8 Kits)																				8	0.080	
FY 1999 EQUIPMENT (22 Kits)																				22	0.240	
FY 2000 EQUIPMENT (45 Kits)																				45	0.655	
FY 2001 EQUIPMENT (55 Kits)																				55	0.673	
FY 2002 EQUIPMENT (34 Kits)																				34	0.684	
FY 2003 EQUIPMENT (15 Kits)																				15	0.171	
TO COMPLETE																				0	0.000	
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	30	0.320	45	0.655	43	0.502	61	1.026	179	2.503	
TOTAL PROCUREMENT COST		0	0.000	0	0.000	8	1.200	22	3.373	45	7.050	55	9.127	34	6.219	15	3.011	0	1.026	179	31.006	
TOTAL COST			0.000		0.000	1.200	3.373	7.050	9.127	6.219	3.011	1.026									31.006	
METHOD OF IMPLEMENTATION: AIT																			ADMINISTRATIVE LEADTIME: 6		PRODUCTION LEADTIME: 24	
CONTRACT DATE:		FY 1997:		NA		FY 1998:		04/98		FY 1999:		12/98										
PRODUCTION DELIVER DATE:		FY 1997:		NA		FY 1998:		04/00		FY 1999:		12/00										

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CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: DOD COMMON CONSOLES

INSTALLATION SCHEDULE:

INPUT ==>>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	11	17	0	0	0	0	0	0	0	0	0	0	45
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	12	18	12	0	0	0	0	0	55
FY 2002	0	0	0	0	0	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	0	0	0	34	34
FY 2003	0	0	0	0	0	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	0	0	0	15	15
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT																										179									
OUTPUT ==>	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL				
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	10	11	17	0	0	0	0	0	0	0	0	0	45
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	12	18	12	0	0	0	12	55
FY 2002	0	0	0	0	0	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	0	0	0	34	34
FY 2003	0	0	0	0	0	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	0	0	0	15	15
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT																										179									

P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION																					
P3A																					
MODIFICATION TITLE: RADARS																					
MODELS OF SYSTEM AFFECTED: NAS																					
DESCRIPTION/JUSTIFICATION: The Digital Airport Surveillance Radar 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 equipment and comply with the joint DOD/FAA modernization program agreements.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MILESTONE III (June 1998)																					
FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&E</u>																					
<u>PROCUREMENT</u>																					
INSTALLATION KITS																					
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING																					
EQUIPMENT																					
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR																					
FY 1997 EQUIPMENT																					
FY 1998 EQUIPMENT																					
FY 1999 EQUIPMENT (3 Kits)																					
FY 2000 EQUIPMENT (4 Kits)																					
FY 2001 EQUIPMENT (3 Kits)																					
FY 2002 EQUIPMENT (7 Kits)																					
FY 2003 EQUIPMENT																					
FY 2003 EQUIPMENT (5 Kits)																					
TO COMPLETE																					
TO COMPLETE (1 Kit)																					
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	0	0.000	0	0.627	3	1.388	4	1.745	3	1.728	10	4.267	20	9.755
TOTAL PROCUREMENT COST		0	0.000	0	0.000	0	0.000	3	14.116	4	19.862	3	16.132	7	40.041	5	27.494	1	9.534	23	127.179
TOTAL COST			0.000		0.000		0.000		14.116		19.862		16.132		40.041		27.494		9.534		127.179
METHOD OF IMPLEMENTATION: AIT																					
CONTRACT DATE: FY 1997: NA FY 1998: NA FY 1999: 12/98																					
PRODUCTION DELIVER DATE: FY 1997: NA FY 1998: NA FY 1999: 12/00																					
ADMINISTRATIVE LEADTIME: 2																					
PRODUCTION LEADTIME: 24																					
3 Radar units procured in FY02 are to be installed as turnkey systems (included with the procurement cost) and are not reflected in the installations costs in the TC column.																					

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE:

RADARS

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
FY 2001	0	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	1	0	0	0	0	0	0	0	3
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
FY 2003	0	0	0	0	0	0	0	0	0	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	5
TO COMPLETE	0	0	0	0	0	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				
TOTAL INPUT																											23								
OUTPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4
FY 2001	0	0	0	0	0	0	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	1	0	3
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
FY 2003	0	0	0	0	0	0	0	0	0	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	5
TO COMPLETE	0	0	0	0	0	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				
TOTAL OUTPUT																											20								

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		TOWER AUTOMATION																			
MODELS OF SYSTEM AFFECTED:		NAS																			
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 (June 1998)																			
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																					
<u>RDT&E</u>																				0	0.000
<u>PROCUREMENT</u>																				0	0.000
INSTALLATION KITS																				0	0.000
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING																					0.000
EQUIPMENT						1	0.409	3	1.253	4	1.708	3	1.309	4	1.784	2	0.912	17		7.375	
EQUIPMENT NONRECURRING																					0.000
ENGINEERING CHANGE ORDERS																					0.000
DATA																					0.000
TRAINING EQUIPMENT																					0.000
SUPPORT EQUIPMENT																					0.000
OTHER																					0.000
INTERIM CONTRACTOR SUPPORT																					0.000
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR																				0	0.000
FY 1997 EQUIPMENT																				0	0.000
FY 1998 EQUIPMENT																				0	0.000
FY 1999 EQUIPMENT (1 Unit)																					1 0.080
FY 2000 EQUIPMENT (3 Units)																					3 0.240
FY 2001 EQUIPMENT (4 Units)																					4 0.655
FY 2002 EQUIPMENT (3 Units)																					3 0.502
FY 2003 EQUIPMENT (4 Units)																					4 0.684
TO COMPLETE (2 Units)																					2 0.349
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	4	0.320	4	0.655	3	0.502	6	1.033	17	2.510
TOTAL PROCUREMENT COST		0	0.000	0	0.000	0	0.000	1	0.409	3	1.253	4	2.028	3	1.964	4	2.286	2	1.945	17	9.884
TOTAL COST			0.000		0.000		0.000		0.409		1.253		2.028		1.964		2.286		1.945		9.884
METHOD OF IMPLEMENTATION: AIT																		ADMINISTRATIVE LEADTIME: 4		PRODUCTION LEADTIME: 17	
CONTRACT DATE:		FY 1997:		NA		FY 1998:		NA		FY 1999:		02/99									
PRODUCTION DELIVER DATE:		FY 1997:		NA		FY 1998:		NA		FY 1999:		07/00									

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: TOWER AUTOMATION

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	4
FY 2002	0	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	1	0	0	3
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
TO COMPLETE	0	0	0	0	0	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	2
TOTAL INPUT																										17					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	4
FY 2002	0	0	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	1	0	3
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
TO COMPLETE	0	0	0	0	0	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	2
TOTAL OUTPUT																										17					

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																															
MODIFICATION TITLE:		AUTOMATION SYSTEMS																															
MODELS OF SYSTEM AFFECTED:		NAS																															
DESCRIPTION/JUSTIFICATION:		The Automation System 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 Automation System 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 (June 1998)																															
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL													
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$												
<u>FINANCIAL PLAN (IN MILLIONS)</u>																																	
<u>RDT&E</u>																				0	0.000												
<u>PROCUREMENT</u>																				0	0.000												
INSTALLATION KITS																				0	0.000												
INSTALLATION KITS (UNIT COST)																																	
INSTALLATION KITS NONRECURRING																					0.000												
EQUIPMENT																				4	6.132	4	6.267	4	6.405	4	6.545	1	1.672	17	27.021		
EQUIPMENT NONRECURRING																															0.000		
ENGINEERING CHANGE ORDERS																															0.000		
DATA																														0.000			
TRAINING EQUIPMENT																														0.000			
SUPPORT EQUIPMENT																														0.000			
OTHER																														0.000			
INTERIM CONTRACTOR SUPPORT																														0.000			
<u>INSTALLATION OF HARDWARE</u>																																	
FY 1996 EQUIPMENT & PRIOR																				0	0.000												
FY 1997 EQUIPMENT																				0	0.000												
FY 1998 EQUIPMENT																				0	0.000												
FY 1999 EQUIPMENT (4 Units)																						AP	0.719	4	0.961							4	1.680
FY 2000 EQUIPMENT (4 Units)																								AP	1.708	4	1.640					4	3.348
FY 2001 EQUIPMENT (4 Units)																									AP	1.211	3	1.504	1	0.513	4	3.228	
FY 2002 EQUIPMENT (4 Units)																										AP	1.784	4	2.051	4	3.835		
FY 2003 EQUIPMENT																												AP	0.456	0	0.456		
FY 2003 EQUIPMENT (1 Unit)																												1	0.524	1	0.524		
TO COMPLETE																														0	0.000		
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	0	0.000	0	0.719	4	2.669	4	2.851	3	3.288	6	3.544	17	13.071												
TOTAL PROCUREMENT COST		0	0.000	0	0.000	0	0.000	4	6.132	4	6.986	4	9.074	4	9.396	1	4.960	0	3.544	17	40.092												
TOTAL COST			0.000		0.000		0.000		6.132		6.986		9.074		9.396		4.960		3.544		40.092												
METHOD OF IMPLEMENTATION: AIT																																	
CONTRACT DATE:		FY 1997: NA		ADMINISTRATIVE LEADTIME: 3				PRODUCTION LEADTIME: 22																									
PRODUCTION DELIVER DATE:		FY 1997: NA		FY 1998: NA		FY 1999: NA		FY 1999: 01/99																									
		FY 1997: NA		FY 1998: NA		FY 1999: NA		FY 1999: 11/00																									

P-3A

MODIFICATION TITLE: AUTOMATION SYSTEMS

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	4
FY 2001	0	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	1	0	1	0	4
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
FY 2003	0	0	0	0	0	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
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																										17					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	4
FY 2001	0	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	1	0	1	4
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
FY 2003	0	0	0	0	0	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
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																										17					

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE DOD Common Consoles NATIONAL AIRSPACE SYSTEM (NAS)								C. DATE FEBRUARY 97				LATER				
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002								
	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)																													
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	26	30	30	30	30	30	30	30	30	30	30	30
ASSETS ON HAND (BP)	0																												
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																8													
FY 99 (P)																				18				4					
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	26	30	30	30	30	30	30	30	30	30	30	30	30
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	18	4	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 /01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				179				0				0				30				149								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 3				INITIAL ORDER 24				REORDER 24																

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 97			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT NATIONAL AIRSPACE SYSTEM (NAS) DOD Common Consoles XX010							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
NATTC Pensacola	8	NATTC Pensacola	18	NATTC Pensacola	4										
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE RADARS NATIONAL AIRSPACE SYSTEM (NAS)								C. DATE FEBRUARY 97				LATER								
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001					FY 2002							
					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)																																
SCHOOLS/OTHER TRAINING	(P)																																
OTHER	(P)																																
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3	3	3	3	3	3	3	3	3	3
ASSETS ON HAND	(BP)	0																															
DELIVERY FY 96 & PRIOR	(P)																																
FY 96 & PRIOR	(P)																																
FY 97	(P)																																
FY 98	(P)																																
FY 99	(P)																																
	(P)																																
	(P)																																
	(P)																																
	(P)																																
	(P)																																
TOTAL ASSETS	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED												
	1. APPN - OPN				23				0				0				3				20												
	2. APPN -																																
	3. PROCUREMENT LEADTIME				ADMIN				INITIAL ORDER				REORDER																				
								2				24				24																	

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 97			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT NATIONAL AIRSPACE SYSTEM (NAS) RADARS XX030							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
NATTC Pensacola	2			NATTC Pensacola	1										
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE TOWER AUTOMATION NATIONAL AIRSPACE SYSTEM (NAS)								C. DATE FEBRUARY 97				LATER								
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001					FY 2002							
					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)																																	
SCHOOLS/OTHER TRAINING (P)																					1												
OTHER (P)																																	
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
ASSETS ON HAND (BP)	0																																
DELIVERY FY 96 & PRIOR (P)																																	
FY 96 & PRIOR (P)																																	
FY 97 (P)																																	
FY 98 (P)																																	
FY 99 (P)																					1												
(P)																																	
(P)																																	
(P)																																	
(P)																																	
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 /01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED												
	1. APPN - OPN				17				0				0				1				16												
	2. APPN -																																
	3. PROCUREMENT LEADTIME				ADMIN 4				INITIAL ORDER 17				REORDER 11																				

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 97			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT NATIONAL AIRSPACE SYSTEM (NAS) TOWER AUTOMATION XX040							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
NATTC	1														
Pensacola															
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE AUTOMATION SYSTEMS NATIONAL AIRSPACE SYSTEM (NAS)								C. DATE FEBRUARY 97								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)																													
SCHOOLS/OTHER TRAINING (P)																	2	1	1										
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	4	4	4	4	4	4	4	4	4	4
ASSETS ON HAND (BP)	0																												
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)																	3	1											
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	4	4	4	4	4	4	4	4	4	4	4
QTY OVER (+) OR SHORT (-)	0	0	0	0	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
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10 /01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				17				0				0				4				13								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN				INITIAL ORDER				REORDER																
				3				22				22																	

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 97			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT NATIONAL AIRSPACE SYSTEM (NAS) AUTOMATION XX050							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
NATTC Pensacola	2	NATTC Pensacola	1	NATTC Pensacola	1										
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE TACTICAL AIR NAVIGATION (TACAN) 284300			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$0.1	\$2.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<p>DESCRIPTION:</p> <p>Tactical Air Navigation (TACAN), a short distance navigation equipment, is the primary navigation system used by Naval aircraft and the only system available for many tactical aircraft. The TACAN system is in use throughout the world. The U.S. Navy electronic navigation policy (as contained in JCS Master Navigation Plan NICS-004-90 of 8 January 90) states that the Navy will have a continuing requirement to perform the TACAN function, ashore through 2000 and afloat until a suitable replacement is developed. The requirement determinations are based on an inventory objective for replacement of obsolete equipments and ships availability.</p> <p>Critical maintenance difficulties have arisen on existing TACAN equipments and replacements are required as soon as possible if Naval aircraft are to continue to employ this navigation aid. Current equipment in use is over thirty years old and parts availability has become critical.</p> <p>FY 96 and FY 97 will provide for installation of various TACAN equipments (AN/URN-25 Beacon Transmitters and Antenna OE-273A/URN) and various field change kits to replace obsolete units and/or correct critical maintenance difficulties.</p> <p>Installing Agent: Shipyard When installation to be made: ROH/RAV/SRA Ship types to receive equipment: Auxiliaries, CG/CGN, CV/CVN, DD, DDG, LPD, LHA, LSD, LCC, FFG, FMA/TRNG, USCG</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS									DATE:	
P-5									FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD					
Other Procurement, Navy / BA2 - Communications and Electronics Equipment					TACTICAL AIR NAVIGATION (TACAN)				42TH	
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
TH900	INSTALLATION OF EQUIPMENT (NONFMP)	N/A		58		284				
TH910	INSTALLATION OF EQUIPMENT (FMP)	N/A				1,937				
	TOTAL									
				58		2,221		0		0

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)							DATE FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE TACTICAL AIR NAVIGATION (TACAN)				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
TACAN F/C & ECPS	0.058	0.284							0.342
AN/URN-25		1.812							1.812
OE-273A(V)/URN		0.125							0.125
TOTAL	0.058	2.221	0.000	0.000	0.000	0.000	0.000	0.000	2.279

P-1 SHOPPING LIST

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PAGE NO. 3

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

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

MODIFICATION TITLE: **TACAN FIELD CHANGES & PRODUCT IMPROVEMENT (ECPS)**

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Var

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOT/ Var
P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION

P3A

MODIFICATION TITLE: AN/URN-25 BEACON TRANSMITTERS

MODELS OF SYSTEM AFFECTED: [DD963, DD993, and LSD 36 Classes](#)

DESCRIPTION/JUSTIFICATION: Installation of AN/URN-25 Beacon Transmitters procured prior to FY 90 to replace obsolete equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																				
<i>RDT&E</i>																			0	0.000
PROCUREMENT																				
INSTALLATION KITS																			0	0.000
INSTALLATION KITS (UNIT COST)																				
INSTALLATION KITS NONRECURRING	25	8.700																	25	8.700
EQUIPMENT																			0	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
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALLATION OF HARDWARE																				
FY 1996 EQUIPMENT & PRIOR (25 Kits)	10	0.800	6	1.812															16	2.612
FY 1997 EQUIPMENT																			0	0.000
FY 1998 EQUIPMENT																			0	0.000
FY 1999 EQUIPMENT																			0	0.000
FY 2000 EQUIPMENT																			0	0.000
FY 2001 EQUIPMENT																			0	0.000
FY 2002 EQUIPMENT																			0	0.000
FY 2003 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000
TOTAL INSTALLATION COST	10	0.800	6	1.812	0	0.000	16	2.612												
TOTAL PROCUREMENT COST	25	9.500	0	1.812	0	0.000	25	11.312												
TOTAL COST		9.500		1.812		0.000		11.312												

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: N/A

PRODUCTION LEADTIME: N/A

CONTRACT DATE:

FY 1997: N/A

FY 1998:

FY 1999:

PRODUCTION DELIVER DATE:

FY 1997: N/A

FY 1998:

FY 1999:

5 Installs in FY 97 are associated with installation of (previously procured) ECP kits and cross-decking costs to LSD-36 class ships.

14 units excess to needs due to decomissionings after procurement, however these units will be kept in a rotatable pool.

P-3A

CLASSIFICATION: UNCLASSIFIED

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

MODIFICATION TITLE: **AN/URN-25 BEACON TRANSMITTERS**

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	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
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									30						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	10	2	2	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	14	30
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									30						

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																							
MODIFICATION TITLE:		ANTENNA OE-273A(V)URN																							
MODELS OF SYSTEM AFFECTED:		LSD 36 Class																							
DESCRIPTION/JUSTIFICATION:		Installation of Antenna group for AN/URN-25 TACAN to replace obsolete equipment.																							
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																							
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL					
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$				
<u>FINANCIAL PLAN (IN MILLIONS)</u>																									
<i>RDT&E</i>																				0	0.000				
<u>PROCUREMENT</u>																									
INSTALLATION KITS		35	2.100																			35	2.100		
INSTALLATION KITS (UNIT COST)																									
INSTALLATION KITS NONRECURRING																					0.000				
EQUIPMENT																				0	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				
INTERIM CONTRACTOR SUPPORT																					0.000				
<u>INSTALLATION OF HARDWARE</u>																									
FY 1996 EQUIPMENT & PRIOR (35 Kits)				5	0.125																			5	0.125
FY 1997 EQUIPMENT																				0	0.000				
FY 1998 EQUIPMENT																				0	0.000				
FY 1999 EQUIPMENT																				0	0.000				
FY 2000 EQUIPMENT																				0	0.000				
FY 2001 EQUIPMENT																				0	0.000				
FY 2002 EQUIPMENT																				0	0.000				
FY 2003 EQUIPMENT																				0	0.000				
TO COMPLETE																				0	0.000				
TOTAL INSTALLATION COST		0	0.000	5	0.125	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	5	0.125				
TOTAL PROCUREMENT COST		35	2.100	0	0.125	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	35	2.225				
TOTAL COST			2.100		0.125		0.000		0.000		0.000		0.000		0.000		0.000		0.000		2.225				
METHOD OF IMPLEMENTATION:		AIT			ADMINISTRATIVE LEADTIME:						PRODUCTION LEADTIME:														
CONTRACT DATE:		FY 1997: N/A			FY 1998: N/A			FY 1999: N/A																	
PRODUCTION DELIVER DATE:		FY 1997: N/A			FY 1998: N/A			FY 1999: N/A																	
NOTE: 27 units excess to needs due to decomissionings after procurement, however these units will be kept in a rotatable pool. 3 units to USCG no install costs per MOA.																									

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: ANTENNA OE-273A(V)URN

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									35						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	0	1	2	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	5
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									5						

P-3A

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE AN/URN 25 BEACON								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)	2	2	1	1																									
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	2	4	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
ASSETS ON HAND (10/1/96) (BP)	1																												
DELIVERY FY 96 & PRIOR OPN (P)																													
FY 97 & PRIOR (P)	1	2	1	1																									
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	2	4	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
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	0	0	0
D. REMARKS FMP OVERHAUL SCHEDULE OF MAY 1996 In FY97 5 units for LSD 36 through 40 include removal, refurbishment, installation of field changes, and reinstallation. 14 Units placed in rotatable pool	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN -				200				185				15				0				0								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN				INITIAL ORDER				REORDER																
				16				18				18																	

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT TACTICAL AIR NAVIGATION (TACAN) TH910 AN/URN 25 BEACON							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
LSD-37	1	LSD-36	1	LSD-40	1	LSD-38	1								
DD-984	1	LSD-39	1												
FY 1999								FY 2000							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE OE-273A(V) TACAN ANTENNA								C. DATE FEBRUARY 1997											
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
ACTIVE FORCE INVENTORY (P)	1	2	1	1																												
USCG (P)		3																														
SCHOOLS/OTHER TRAINING (P)																																
DEPOT/ROTABLE POOL (P)																																
OTHER (P)																																
TOTAL PHASED REQ (C)	1	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8			
ASSETS ON HAND (10/1/96) (BP)	3																															
DELIVERY FY 96 & PRIOR OPN (P)																																
FY 96 & PRIOR (P)	1	2	1	1																												
FY 97 (P)																																
FY 98 (P)																																
FY 99 (P)																																
(P)																																
(P)																																
(P)																																
TOTAL ASSETS (C)	4	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8			
QTY OVER (+) OR SHORT (-)	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			
D. REMARKS FMP OVERHAUL SCHEDULE OF MAY 1966 USCG pays for installation of their 3 units					E. RQMT (QTY)								TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED			
				1. APPN - OPN (NAVY)								191				186				5				0				0				
				2. APPN - OPN (USCG)								24				21				3				0				0				
				3. PROCUREMENT LEADTIME								ADMIN				INITIAL ORDER				REORDER												
												16				18				18												

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT TACTICAL AIR NAVIGATION (TACAN) OE-273A(V) TACAN ANTENNA/ TH910							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
LSD-37	1	WAGB-10*	1	LSD-40	1	LSD-38	1								
		WAGB-11*	1												
		WAGB-20*	1												
		LSD-36	1												
		LSD-39	1												
FY 1999								FY 2000							

P-1 SHOPPING LIST

CLASSIFICATION:

* Coast Guard funds will be used to install antenna.

BUDGET ITEM JUSTIFICATION SHEET					DATE: FEBRUARY 1997			
P-40								
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
Other Procurement, Navy /BA 2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT					AIR STATION SUPPORT EQUIPMENT			
					284500			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$5.9	\$9.5	\$9.5	\$11.6	\$11.3	\$11.6	\$11.7	\$12.0
DESCRIPTION:								
<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). Additionally, NAVAIR has material support responsibility for Air Navigation Aid Systems, Tactical Communications, Mobile Air Traffic Control Equipments, Special Instrumentation Systems, and Ancillary Equipment at Naval and Marine Corps Aviation Shore activities in the continental United States and overseas.</p> <p>FY 96 through FY 99 funds procure or install:</p> <p>(1) Operational Capability Improvement Request (OCIR) Modernization: The OCIR program provides the procurement of numerous relatively Minor Equipment/Instrumentation needed at all Navy/Marine Air Traffic Control facilities. OCIR procurements replace and modernize economically unmaintainable systems and equipments in order to increase Air Traffic Control efficiency and safety.</p> <p>(2) Visual Communications Control Systems (VISCOS) (14) - - The VISCOS is a system of status lights connecting the Radar Air Traffic Controller in the control room with the ATC tower controller. This system allows the transmission of aircraft position, configuration, and landing status (eg. touch and go or full stop) without the need of voice transmission. It is a safety of flight system as the light signals reduce background noise from the tower environment while allowing the radar controller to dedicate his voice communications to the aircraft he is working. Additionally, these visual signals are recorded in digital format on facility tape recorders and provide additional background information in case of an aircraft incident or accident. Only a limited number of Naval/Marine Corps Air Facilities currently have a VISCOS type system and these existing systems are not standardized nor supported by a logistics chain. The new system will standardize all VISCOSs and provide a formalized Logistics Management System. Requirements assessment has determined that all Type III, IV, and V Air Stations require a VISCOS System.</p> <p>(3) UHF/VHF Radios and Antennas provide ground to air communication. New radios, antenna, and antenna cables are required to replace existing aged and deteriorated radios, antennas, and cables. For dependable ground to air communication, replacement of the existing radios and antenna system is imperative.</p> <p>(4) Radar Air Traffic Control Facility /Direct Altitude Readout (RATCF/DAIR) Upgrade - This program upgrades low density (non approach control) air traffic control and identification systems including video mappers, radar processing and radar indicator systems not included in the National Airspace System (NAS) modernization program.</p> <p>(5) Communications Systems Upgrade - Advanced technology switching equipment which replaces existing FSA-58/OJ-314 communications installations. The existing equipment is obsolete and beyond useful service life.</p> <p>(6) Integrated Voice Communications Switching System (IVCSS) - The IVCSS is a Non-Developmental Item (NDI) acquisition developed from a commercially available system to replace the obsolete AN/FSA-52(V) communications switch.</p> <p>(7) Automated Surface Observation System (ASOS) Upgrade - This upgrade will provide an interface between weather observations and air traffic controller positions.</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS								DATE:			
P-5								FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD							
Other Procurement, Navy /BA 2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT				AIR STATION SUPPORT EQUIPMENT				42MR			
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
MR069	ECPS/OCIRS	N/A	VAR	2,012	VAR	425	VAR	532	VAR	1,380	
MR404	UHF/VHF ANTENNA UPGRADE	N/A	VAR	1,200	VAR	1,000	VAR	500			
MR407	UHF/VHF RADIO REPLACEMENT	N/A			VAR	1,789			VAR	2,176	
MR408	COMMUNICATION SYSTEM UPGRADE	N/A			VAR	924	VAR	2,028	VAR	1,778	
MR800	INTEGRATED LOGISTICS SUPPORT	N/A		474		964		750		700	
MR830	PRODUCTION ENGINEERING	N/A		679		1,467		812		904	
MR900	INSTALLATION OF EQUIPMENT (NON-FMP)	N/A		1,494		2,896		4,873		4,618	
				5,859		9,465		9,495		11,556	

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)					DATE FEBRUARY 1997				
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy /BA 2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT					P-1 ITEM NOMENCLATURE AIR STATION SUPPORT EQUIPMENT				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
ECP/OCIR	0.370	0.279	0.494	1.121	1.443	0.079	0.079	0.079	3.944
VISCOM	0.204	0.167							0.371
UHF/VHF ANTENNA UPG	0.558	1.000	1.450						3.008
RATCF/DAIR UPGRADE	0.142	0.480							0.622
ASOS INTERFACE		0.260							0.260
IVCSS	0.220	0.200	0.650	0.350					1.420
COMM SYS UPGRADE		0.210	2.279	2.747	2.949	2.789	2.929	0.621	14.524
UHF/VHF RADIO REPLACEMENT		0.300		0.400	0.400	0.400	0.400	0.400	2.300
TOTAL	1.494	2.896	4.873	4.618	4.792	3.268	3.408	1.100	26.449

P-1 SHOPPING LIST

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CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE: ECP/OCIR																			
MODELS OF SYSTEM AFFECTED: AIR STATION																			
DESCRIPTION/JUSTIFICATION: The OCIR program provides the procurement of numerous relatively minor equipment/instrumentation needed at all Navy and Marine Corps air traffic control facilities. 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																			
FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																			
<i>RDT&E</i>																			
<i>PROCUREMENT</i>																			
INSTALLATION KITS	Var	12.019	Var	0.425	Var	0.532	Var	1.380	Var	1.237	Var	0.377	Var	0.348	Var	1.311		Var	17.629
INSTALLATION KITS (UNIT COST)																			
INSTALLATION KITS NONRECURRING																			0.000
EQUIPMENT																		0	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
INTERIM CONTRACTOR SUPPORT																			0.000
INSTALLATION OF HARDWARE																			
FY 1996 EQUIPMENT & PRIOR (Var Kits)	Var	3.470	Var	0.279														Var	3.749
FY 1997 EQUIPMENT (Var Kits)					Var	0.494													Var
FY 1998 EQUIPMENT (Var Kits)							Var	1.121											Var
FY 1999 EQUIPMENT (Var Kits)									Var	1.443									Var
FY 2000 EQUIPMENT (Var Kits)											Var	0.079							Var
FY 2001 EQUIPMENT (Var Kits)													Var	0.079					Var
FY 2002 EQUIPMENT (Var Kits)															Var	0.079			Var
FY 2003 EQUIPMENT (Var Kits)																	Var	0.160	Var
TO COMPLETE																		0	0.000
TOTAL INSTALLATION COST	0	3.470	0	0.279	0	0.494	0	1.121	0	1.443	0	0.079	0	0.079	0	0.079	0	0.160	0
TOTAL PROCUREMENT COST	Var	15.489	Var	0.704	Var	1.026	Var	2.501	Var	2.680	Var	0.456	Var	0.427	Var	1.390	Var	0.160	Var
TOTAL COST		15.489		0.704		1.026		2.501		2.680		0.456		0.427		1.390		0.160	
METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: Various PRODUCTION LEADTIME: Various																			
CONTRACT DATE: FY 1997: Various FY 1998: Various FY 1999: Various																			
PRODUCTION DELIVER DATE: FY 1997: Various FY 1998: Various FY 1999: Various																			

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE:

ECP/OCIR

INSTALLATION SCHEDULE:

INPUT ==>	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		
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var

TOTAL INPUT

Var

OUTPUT ==>	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		
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var

TOTAL OUTPUT

Var

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																				
MODIFICATION TITLE: VISCOM																						
MODELS OF SYSTEM AFFECTED: AIR STATION																						
DESCRIPTION/JUSTIFICATION: The VISCOM is a system of status lights connecting the radar air traffic controller in the control room with the ATC tower controller. This system allows the transmission of aircraft position, configuration and landing status (eg. touch and go or full stop) without the need for voice transmission. It is a safety of flight system as the light signals reduce background noise from the tower environment while allowing the radar controller to dedicate his voice communications to the aircraft he is working. Additionally, these visual signals are recorded in digital format on facility tape recorders and provide additional background information in case of an aircraft incident or standardize all VISCOMS and provide a formalized logistics management system. Requirements assessment has determined that all Type III, IV, and V air stations require a VISCOM system.																						
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A																						
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<i>RDT&E</i>																					0	0.000
<i>PROCUREMENT</i>																						
INSTALLATION KITS		39	4.500																		39	4.500
INSTALLATION KITS (UNIT COST)																						
INSTALLATION KITS NONRECURRING EQUIPMENT																					0	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
INTERIM CONTRACTOR SUPPORT																						0.000
<u>INSTALLATION OF HARDWARE</u>																						
FY 1996 EQUIPMENT & PRIOR (39 Kits)		33	1.156	6	0.167																39	1.323
FY 1997 EQUIPMENT																					0	0.000
FY 1998 EQUIPMENT																					0	0.000
FY 1999 EQUIPMENT																					0	0.000
FY 2000 EQUIPMENT																					0	0.000
FY 2001 EQUIPMENT																					0	0.000
FY 2002 EQUIPMENT																					0	0.000
FY 2003 EQUIPMENT																					0	0.000
TO COMPLETE																					0	0.000
TOTAL INSTALLATION COST		33	1.156	6	0.167	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	39	1.323	
TOTAL PROCUREMENT COST		39	5.656	0	0.167	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	39	5.823	
TOTAL COST		5.656		0.167		0.000		0.000		0.000		0.000		0.000		0.000		0.000		5.823		
METHOD OF IMPLEMENTATION		AIT		ADMINISTRATIVE LEADTIME:						N/A		PRODUCTION LEADTIME:						N/A				
CONTRACT DATE:		FY 1997: N/A		FY 1998: N/A				FY 1999: N/A														
PRODUCTION DELIVER DATE:		FY 1997: N/A		FY 1998: N/A				FY 1999: N/A														

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE:

VISCOM

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									39						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
FY 1996 & Prior	33	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	0	0	39
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									39						

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: UHF/VHF ANTENNA UPGRADE

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT Var

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		RATCF/DAIR UPGRADE																			
MODELS OF SYSTEM AFFECTED:		AIR STATION																			
DESCRIPTION/JUSTIFICATION:		This program upgrades low density (non approach control) air traffic control and identification systems including video mappers, radar processing and radar indicator systems not included in the National Airspace System (NAS) modernization program.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																			
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																					
<u>RDT&E</u>																				0	0.000
<u>PROCUREMENT</u>																				Var	1.200
INSTALLATION KITS																				Var	1.200
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING																					0.000
EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																					0.000
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR (Var Kits)		Var	0.550	Var	0.480															Var	1.030
FY 1997 EQUIPMENT																				Var	0.000
FY 1998 EQUIPMENT																				0	0.000
FY 1999 EQUIPMENT																				0	0.000
FY 2000 EQUIPMENT																				0	0.000
FY 2001 EQUIPMENT																				0	0.000
FY 2002 EQUIPMENT																				0	0.000
FY 2003 EQUIPMENT																				0	0.000
TO COMPLETE																				0	0.000
TOTAL INSTALLATION COST		0	0.550	0	0.480	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	Var	1.030
TOTAL PROCUREMENT COST		Var	1.750	0	0.480	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	Var	2.230
TOTAL COST			1.750		0.480		0.000		0.000		0.000		0.000		0.000		0.000		0.000		2.230
METHOD OF IMPLEMENTATION		AIT		ADMINISTRATIVE LEADTIME:				Various		PRODUCTION LEADTIME:				Various							
CONTRACT DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various											
PRODUCTION DELIVER DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various											

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: RATCF/DAIR UPGRADE

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									Var						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
& Prior	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		
FY 1996 & Prior	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									Var						
P-3A																															

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																					
MODIFICATION TITLE:		AUTOMATED SURFACE OBSERVATION SYSTEM (ASOS) UPGRADE																					
MODELS OF SYSTEM AFFECTED:		AIR STATION																					
DESCRIPTION/JUSTIFICATION:		ASOS will provide a sensor system for taking weather observations. The Navy must provide an interface between the SOS and the air traffic control position displays.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<u>FINANCIAL PLAN (IN MILLIONS)</u>																							
<u>RDT&E</u>																				0	0.000		
<u>PROCUREMENT</u>																				Var	0.342		
INSTALLATION KITS																				Var	0.342		
INSTLATION KITS (UNIT COST)																							
INSTALLATION KITS NONRECURRING																					0.000		
EQUIPMENT																				0	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		
INTERIM CONTRACTOR SUPPORT																					0.000		
<u>INSTALLATION OF HARDWARE</u>																							
FY 1996 EQUIPMENT & PRIOR (Var Kits)		Var	0.830	Var	0.260															Var	1.090		
FY 1997 EQUIPMENT																				0	0.000		
FY 1998 EQUIPMENT																				0	0.000		
FY 1999 EQUIPMENT																				0	0.000		
FY 2000 EQUIPMENT																				0	0.000		
FY 2001 EQUIPMENT																				0	0.000		
FY 2002 EQUIPMENT																				0	0.000		
FY 2003 EQUIPMENT																				0	0.000		
TO COMPLETE																				0	0.000		
TOTAL INSTALLATION COST		Var	0.830	0	0.260	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	Var	1.090		
TOTAL PROCUREMENT COST		Var	1.172	0	0.260	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	Var	1.432		
TOTAL COST		1.172		0.260		0.000		0.000		0.000		0.000		0.000		0.000		0.000		1.432			
METHOD OF IMPLEMENTATION: AIT																ADMINISTRATIVE LEADTIME:				PRODUCTION LEADTIME:			
CONTRACT DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A		FY 1999: N/A															
PRODUCTION DELIVER DATE:		FY 1997: N/A		FY 1998: N/A		FY 1998: N/A		FY 1998: N/A		FY 1998: N/A		FY 1998: N/A		FY 1998: N/A		FY 1998: N/A		FY 1998: N/A					

P-3A

CLASSIFICATION: UNCLASSIFIED

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

MODIFICATION TITLE: **AUTOMATED SURFACE OBSERVATION SYSTEM (ASOS) UPGRADE**

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																										Var					
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																										Var					

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION																						
P3A																						
MODIFICATION TITLE: <u>IVCSS</u>																						
MODELS OF SYSTEM AFFECTED: <u>AIR STATION</u>																						
DESCRIPTION/JUSTIFICATION: <u>The integrated Voice Communications Switching System (IVCSS) is a Non-developmental Item(NDI) acquisition developed from a commercially available system to replace the obsolete AN/FSA-52 (V) communications switch.</u>																						
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: <u>N/A</u>																						
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<u>RDT&E</u>																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS		Var	7.800																	0	0.000	
INSTALLATION KITS (UNIT COST)																				Var	7.800	
INSTALLATION KITS NONRECURRING																					0.000	
EQUIPMENT																				0	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	
INTERIM CONTRACTOR SUPPORT																					0.000	
<u>INSTALLATION OF HARDWARE</u>																						
FY 1996 EQUIPMENT & PRIOR (Var Kits)		Var	3.920	Var	0.200	Var	0.650	Var	0.350											Var	5.120	
FY 1997 EQUIPMENT																					0	0.000
FY 1998 EQUIPMENT																					0	0.000
FY 1999 EQUIPMENT																					0	0.000
FY 2000 EQUIPMENT																					0	0.000
FY 2001 EQUIPMENT																					0	0.000
FY 2002 EQUIPMENT																					0	0.000
FY 2003 EQUIPMENT																					0	0.000
TO COMPLETE																					0	0.000
TOTAL INSTALLATION COST		Var	3.920	Var	0.200	Var	0.650	Var	0.350	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	Var	5.120	
TOTAL PROCUREMENT COST		Var	11.720	0	0.200	0	0.650	0	0.350	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	Var	12.920	
TOTAL COST			11.720		0.200		0.650		0.350		0.000		0.000		0.000		0.000		0.000		12.920	
METHOD OF IMPLEMENTATION: AIT																	ADMINISTRATIVE LEADTIME: Various		PRODUCTION LEADTIME: Various			
CONTRACT DATE:		FY 1997:	N/A	FY 1998:		N/A	FY 1999:		N/A													
PRODUCTION DELIVER DATE:		FY 1997:	N/A	FY 1998:		N/A	FY 1999:		N/A													

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE:

IVCSS

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT																									Var						
OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	Var	0	0	0	Var	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT																									Var						

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: **COMMUNICATION SYSTEM UPGRADE**

MODELS OF SYSTEM AFFECTED: **AIR STATION**

DESCRIPTION/JUSTIFICATION: Communications Systems Upgrade - Advanced technology switching equipment which replaces existing FSA-58/OJ-314 communications installations. The existing equipment is obsolete and beyond useful service life.

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

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$

FINANCIAL PLAN (IN MILLIONS)

RDT&E																					0	0.000	
PROCUREMENT																							
INSTALLATION KITS			Var	0.924	Var	2.028	Var	1.778	Var	2.298	Var	2.626	Var	3.993								Var	13.647
INSTALLATION KITS (UNIT COST)																							
INSTALLATION KITS NONRECURRING																							0.000
EQUIPMENT																						0	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
INTERIM CONTRACTOR SUPPORT																							0.000

INSTALLATION OF HARDWARE

FY 1996 EQUIPMENT & PRIOR																							Var	0.000	
FY 1997 EQUIPMENT (Var Kits)			Var	0.210	Var	1.000																		Var	1.210
FY 1998 EQUIPMENT (Var Kits)					Var	1.279	Var	1.000																Var	2.279
FY 1999 EQUIPMENT (Var Kits)							Var	1.747	Var	1.000														Var	2.747
FY 2000 EQUIPMENT (Var Kits)									Var	1.949	Var	1.000												Var	2.949
FY 2001 EQUIPMENT (Var Kits)											Var	1.789	Var	1.000										Var	2.789
FY 2002 EQUIPMENT (Var Kits)													Var	1.929										Var	1.929
FY 2003 EQUIPMENT (Var Kits)															Var	0.621							Var	0.621	
TO COMPLETE																							0	0.000	
TOTAL INSTALLATION COST		0.000	Var	0.210	Var	2.279	Var	2.747	Var	2.949	Var	2.789	Var	2.929	Var	0.621	0	0.000	Var				Var	14.524	
TOTAL PROCUREMENT COST		0.000	Var	1.134	Var	4.307	Var	4.525	Var	5.247	Var	5.415	Var	6.922	0	0.621	0	0.000	Var				Var	28.171	
TOTAL COST		0.000		1.134		4.307		4.525		5.247		5.415		6.922		0.621		0.000						28.171	

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: Various PRODUCTION LEADTIME: Various
 CONTRACT DATE: FY 1997: Various FY 1998: Various FY 1999: Various
 PRODUCTION DELIVER DATE: FY 1997: Various FY 1998: Various FY 1999: Various

Note: No individual kit exceeds 2 million dollars.

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: COMMUNICATION SYSTEM UPGRADE

INSTALLATION SCHEDULE:

INPUT ==>	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		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	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		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT Var

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE: <u>UHF/VHF RADIO REPLACEMENT</u>																			
MODELS OF SYSTEM AFFECTED: <u>AIR STATION</u>																			
DESCRIPTION/JUSTIFICATION: UHF/VHF Radios provide ground to air communication. New radios are required to replace existing aged and deteriorated radios. For dependable ground to air communication, replacement of the existing radios is imperative.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: <u>N/A</u>																			
FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																			
<u>RDT&E</u>																			
<u>PROCUREMENT</u>																			
INSTALLATION KITS																			
INSTALLATION KITS (UNIT COST)																			
INSTALLATION KITS NONRECURRING																			
EQUIPMENT																			
EQUIPMENT NONRECURRING																			
ENGINEERING CHANGE ORDERS																			
DATA																			
TRAINING EQUIPMENT																			
SUPPORT EQUIPMENT																			
OTHER																			
INTERIM CONTRACTOR SUPPORT																			
<u>INSTALLATION OF HARDWARE</u>																			
FY 1996 EQUIPMENT & PRIOR																			
FY 1997 EQUIPMENT (Var Kits)																			
FY 1998 EQUIPMENT																			
FY 1999 EQUIPMENT (Var Kits)																			
FY 2000 EQUIPMENT (Var Kits)																			
FY 2001 EQUIPMENT (Var Kits)																			
FY 2002 EQUIPMENT (Var Kits)																			
FY 2003 EQUIPMENT																			
TO COMPLETE																			
TOTAL INSTALLATION COST																			
TOTAL PROCUREMENT COST																			
TOTAL COST																			
METHOD OF IMPLEMENTATION: AIT																			
CONTRACT DATE:																			
PRODUCTION DELIVER DATE:																			
ADMINISTRATIVE LEADTIME: Various																			
PRODUCTION LEADTIME: Various																			
FY 1997: Various																			
FY 1998: Various																			
FY 1999: Various																			
FY 1997: Various																			
FY 1998: Various																			
FY 1999: Various																			
Note: No individual kit exceeds 2 million dollars.																			

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: UHF/VHF RADIO REPLACEMENT

INSTALLATION SCHEDULE:

INPUT ==>>	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			
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 1997	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 1999	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	Var	
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	Var		
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	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			
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 1997	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	Var	
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	Var	
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT Var

P-3A

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / 2								B. P-1 ITEM NOMENCLATURE VISCOM AIR STATION SUPPORT EQUIPM								C. DATE FEBRUARY 1997				LATER				
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002								
	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)	6																												
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
ASSETS ON HAND (BP)	2																												
DELIVERY FY 96 & PRIOR (P)	4																												
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
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	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN OPN				39				33				2				4				0								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN				INITIAL ORDER				REORDER																

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO 85 PAGE NO 5

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / 2								P-1 ITEM NOMENCLATURE/PROJECT UNIT AIR STATION SUPPORT EQUIPMENT MR100 VISCOM							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
NAS:															
FT WORTH	1														
LEMOORE	2														
PT MUGU	1														
OCEANA	1														
NOLF:															
IMPERIAL															
BEACH	1														
FY 1999								FY 2000							

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 85 PAGE NO. 5A

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET							DATE:	
P-40							FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
Other Procurement, Navy / BA2 - Communications and Electronics Equipment					Microwave Landing System (MLS)			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$0.5	\$7.1	\$5.3	\$8.4	\$8.3	\$8.5	\$8.6	\$8.8
DESCRIPTION:								
<p>The Differential Global Positioning System (DGPS) is a joint (DOD/DOT) program. Its goal is the development and acquisition of a common civil/military precision landing system which will overcome the limitations of existing systems. The DGPS will replace the Instrument Landing System (ILS) and Precision Approach Radar (PAR) as a standard civil landing system and will fulfill interservice precision landing system interoperability requirements in the National Airspace System Plan (NASP), the Federal Radio Navigation Plan (FRP), and the Joint Chiefs of Staff (JCS) master navigation plan. DGPS eliminates the errors the Department of Defense induces in signals from an orbiting constellation of 24 GPS satellites by placing a DGPS station at a known, surveyed location. This station corrects the errors in the downlink GPS signal and transmits this information to nearby aircraft. By placing the DGPS station at Naval Air Stations position accuracies can be obtained by onboard aircraft navigation processors that meet the standards required for precision approach and landing operations.</p> <p>FY96 provides funding to: install AN/FPN-63 upgrades procured in prior years.</p> <p>FY97 provides funding to: procure 12 Environmental Shelters for the AN/FPN-63 and procure miscellaneous mission enhancements for selected sites.</p> <p>FY98 provides funding to: procure 10 Environmental Shelters for the AN/FPN-63 and procure miscellaneous mission enhancements for selected sites.</p> <p>FY99 provides funding to: procure 6 Differential Global Positioning Systems; 10 Environmental Shelters for the AN/FPN-63; and procure miscellaneous mission enhancements for selected sites.</p> <p>Installing agent: Naval Command, Control, and Ocean Surveillance Center ISE San Diego, CA 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

WEAPONS SYSTEM COST ANALYSIS									DATE:		
P-5									FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD							
Other Procurement, Navy / BA2 - Communications and Electronics Equipment				Microwave Landing System (MLS) 42X1							
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
X1017	OCIR/ECP				VAR	1,876	VAR	296	VAR	802	
X1018	DIFFERENTIAL GLOBAL POSITIONING SYS								6	3,100	
X1020	ENVIRONMENTAL SHELTERS			12	1,620	10	1,350	10		1,350	
X1800	INTEGRATED LOGISTICS SUPPORT				289		273			453	
X1830	PRODUCTION ENGINEERING				428		523			550	
X1840	QUALITY ASSURANCE				41		47			100	
X1900	INSTALLATION (NON-FMP)			494	2,806		2,822			2,092	
				494		7,060		5,311		8,447	

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE				
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipment									C. P-1 ITEM NOMENCLATURE Microwave Landing System (MLS)			SUBHEAD 42X1	
												Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION
X1018 DGPS FY99	TBD	IPR	FAA	3/99	4/00	6	\$516	NO	YES	2/97			
X1020 ENVIRONMENTAL SHELTERS FY 97 FY 98	TBD	PO	NISE WEST SAN DIEGO	3/97	10/97	12	\$135	YES	NO				
FY 99	TBD	PO	NISE WEST SAN DIEGO	3/98	10/98	10	\$135	YES	NO				
FY 99	TBD	PO	NISE WEST SAN DIEGO	3/99	10/99	10	\$135	YES	NO				
D. REMARKS													

CLASSIFICATION:

UNCLASSIFIED

MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)							DATE FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE Microwave Landing System (MLS)				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
OCIR/ECP				0.202	0.099	0.050	0.088	0.089	0.528
AN/FPN-63	0.494	0.225							0.719
INST LANDING SYSTEM		1.240	1.283	0.050					2.573
DGPS				0.149	1.034	1.220	1.462	1.500	5.365
ENVIRONMENTAL SHELTERS		1.341	1.539	1.691	1.689	0.337			6.597
TOTAL	0.494	2.806	2.822	2.092	2.822	1.607	1.550	1.589	15.782

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 86

PAGE NO. 4

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODIFICATION TITLE: OCIR/ECPs
 MODELS OF SYSTEM AFFECTED: Air Stations
 DESCRIPTION/JUSTIFICATION: The OCIR program provides the procurement of numerous relatively minor equipment/instrumentation needed at all Navy and Marine Corps air traffic control facilities. OCIR procurements replace and modernize economically unmaintainable systems and equipment in order to increase air traffic control efficiency and safety.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$

FINANCIAL PLAN (IN MILLIONS)

<u>RDT&E</u>																					0	0.000	
<u>PROCUREMENT</u>																							
INSTALLATION KITS			Var	1.876	Var	0.296	Var	0.802	Var	0.430	Var	0.519	Var	0.564	Var	0.583					Var	5.070	
INSTALLATION KITS (UNIT COST)																							
INSTALLATION KITS NONRECURRING EQUIPMENT																					0	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
INTERIM CONTRACTOR SUPPORT																							0.000

INSTALLATION OF HARDWARE

FY 1996 EQUIPMENT & PRIOR (Var Kits)																						0	0.000	
FY 1997 EQUIPMENT (Var Kits)								Var	0.102														Var	0.102
FY 1998 EQUIPMENT (Var Kits)								Var	0.100														Var	0.100
FY 1999 EQUIPMENT (Var Kits)										Var	0.099												Var	0.099
FY 2000 EQUIPMENT (Var Kits)												Var	0.050										Var	0.050
FY 2001 EQUIPMENT (Var Kits)														Var	0.088								Var	0.088
FY 2002 EQUIPMENT (Var Kits)																Var	0.089						Var	0.089
FY 2003 EQUIPMENT (Var Kits)																							0	0.000
TO COMPLETE																							0	0.000
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	0	0.202	0	0.099	0	0.050	0	0.088	0	0.089	0	0.000		Var		0.528	

TOTAL PROCUREMENT COST		0	0.000	Var	1.876	Var	0.296	Var	1.004	Var	0.529	Var	0.569	Var	0.652	Var	0.672	Var	0.000		Var		5.598
TOTAL COST			0.000		1.876		0.296		1.004		0.529		0.569		0.652		0.672		0.000				5.598

METHOD OF IMPLEMENTATION: AIT
 CONTRACT DATE: FY 1997: Various
 PRODUCTION DELIVER DATE: FY 1997: Various
 ADMINISTRATIVE LEADTIME: Various
 PRODUCTION LEADTIME: Various
 FY 1998: Various
 FY 1999: Various
 FY 1998: Various
 FY 1999: Various

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: OCIR/ECPs

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT Var

P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION

P3A
 MODIFICATION TITLE: AN/FPN-63 UPGRADE
 MODELS OF SYSTEM AFFECTED: Air Stations
 DESCRIPTION/JUSTIFICATION: Extending the AN/FPN-63 service life until the Differential Global Positioning System replaces the system.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																					
<i>RDT&E</i>																				0	0.000
PROCUREMENT																					
INSTALLATION KITS	40	4.300																		40	4.300
INSTALLATION KITS (UNIT COST)																					0.000
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																					0.000
INSTALLATION OF HARDWARE																					
FY 1996 EQUIPMENT & PRIOR (40 Kits)	36	1.906	4	0.225																40	2.131
FY 1997 EQUIPMENT																				0	0.000
FY 1998 EQUIPMENT																				0	0.000
FY 1999 EQUIPMENT																				0	0.000
FY 2000 EQUIPMENT																				0	0.000
FY 2001 EQUIPMENT																				0	0.000
FY 2002 EQUIPMENT																				0	0.000
FY 2003 EQUIPMENT																				0	0.000
TO COMPLETE																				0	0.000
TOTAL INSTALLATION COST	36	1.906	4	0.225	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	40	2.131	
TOTAL PROCUREMENT COST	40	6.206	0	0.225	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	40	6.431	
TOTAL COST		6.206		0.225		0.000		0.000		0.000		0.000		0.000		0.000		0.000		40	6.431
METHOD OF IMPLEMENTATION: AIT																					
ADMINISTRATIVE LEADTIME: 8 PRODUCTION LEADTIME: 6																					
CONTRACT DATE:	FY 1997:	N/A			FY 1998:	N/A			FY 1999:	N/A											
PRODUCTION DELIVER DATE:	FY 1997:	N/A			FY 1998:	N/A			FY 1999:	N/A											

CLASSIFICATION: UNCLASSIFIED

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/FPN-63 UPGRADE

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT 40

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	36	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	40
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT 40

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																					
MODIFICATION TITLE:		<u>Instrument Landing System</u>																					
MODELS OF SYSTEM AFFECTED:		<u>Air Stations</u>																					
DESCRIPTION/JUSTIFICATION:		This 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 base training. This procurement will provide the required training.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL			
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																							
<u>RDT&E</u>																				0	0.000		
<u>PROCUREMENT</u>																				0	0.000		
INSTALLATION KITS																				0	0.000		
INSTALLATION KITS (UNIT COST)																							
INSTALLATION KITS NONRECURRING																					0.000		
EQUIPMENT		12	2.738																			12	2.738
EQUIPMENT NONRECURRING																					0.000		
ENGINEERING CHANGE ORDERS																					0.000		
DATA																					0.000		
TRAINING EQUIPMENT																					0.000		
SUPPORT EQUIPMENT																					0.000		
OTHER																					0.000		
INTERIM CONTRACTOR SUPPORT																					0.000		
INSTALLATION OF HARDWARE																							
FY 1996 EQUIPMENT & PRIOR (12 Units)		6	1.822	3	1.240	3	1.283	*	0.050											12	4.395		
FY 1997 EQUIPMENT																				0	0.000		
FY 1998 EQUIPMENT																				0	0.000		
FY 1999 EQUIPMENT																				0	0.000		
FY 2000 EQUIPMENT																				0	0.000		
FY 2001 EQUIPMENT																				0	0.000		
FY 2002 EQUIPMENT																				0	0.000		
FY 2003 EQUIPMENT																				0	0.000		
TO COMPLETE																				0	0.000		
TOTAL INSTALLATION COST		6	1.822	3	1.240	3	1.283	0	0.050	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	12	4.395
TOTAL PROCUREMENT COST		12	4.560	0	1.240	0	1.283	0	0.050	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	12	7.133
TOTAL COST		4.560		1.240		1.283		0.050		0.000		0.000		0.000		0.000		0.000		0.000		7.133	
METHOD OF IMPLEMENTATION: AIT																				ADMINISTRATIVE LEADTIME: N/A		PRODUCTION LEADTIME: N/A	
CONTRACT DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A																	
PRODUCTION DELIVER DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A																	
* Actual Installation of all 12 units for FY96 & prior will complete in late FY 99; however funding in FY 00 is required to complete associated "As Built Installation Drawings."																							

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: Instrument Landing System

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT																										12									

OUTPUT ==>	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						
FY 1996 & Prior	6	1	0	1	1	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	0	0	0	12
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT																										12									

P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION																					
P3A																					
MODIFICATION TITLE: <u>Differential Global Positioning Systems (DGPS)</u>																					
MODELS OF SYSTEM AFFECTED: <u>Air Stations</u>																					
DESCRIPTION/JUSTIFICATION: <u>Replace current Precision Approach Radar, since it is beyond it's serviceable life.</u>																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: <u>Milestone 0</u>																					
FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL			
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&E</u>																					
<u>PROCUREMENT</u>																					
INSTALLATION KITS																					
						6	3.100	8	4.224	10	5.400	10	5.520	10	5.640			44	23.884		
INSTALLATION KITS (UNIT COST)																					
							0.517		0.528		0.540		0.552		0.564						
INSTALLATION KITS NONRECURRING																					
EQUIPMENT																					
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR																					
FY 1997 EQUIPMENT																					
FY 1998 EQUIPMENT																					
FY 1999 EQUIPMENT (6 Kits)																					
						SS	0.149	6	0.596									6	0.745		
FY 2000 EQUIPMENT (8 Kits)																					
								SS	0.438	8	0.812							8	1.250		
FY 2001 EQUIPMENT (10 Kits)																					
										SS	0.408	10	1.045					10	1.453		
FY 2002 EQUIPMENT (10 Kits)																					
												SS	0.417	10	1.072			10	1.489		
FY 2003 EQUIPMENT (10 Kits)																					
														SS	0.428	10	1.099	10	1.527		
TO COMPLETE																					
																		0	0.000		
TOTAL INSTALLATION COST																					
		0	0.000	0	0.000	0	0.000	0	0.149	6	1.034	8	1.220	10	1.462	10	1.500	10	1.099	44	6.464
TOTAL PROCUREMENT COST																					
		0	0.000	0	0.000	0	0.000	6	3.249	8	5.258	10	6.620	10	6.982	10	7.140	0	1.099	44	30.348
TOTAL COST																					
			0.000		0.000		0.000		3.249		5.258		6.620		6.982		7.140		1.099		30.348
METHOD OF IMPLEMENTATION: AIT																					
CONTRACT DATE: FY 1997: N/A																					
PRODUCTION DELIVER DATE: FY 1997: N/A																					
ADMINISTRATIVE LEADTIME: 5																					
PRODUCTION LEADTIME: 13																					
FY 1998: N/A																					
FY 1998: N/A																					
FY 1999: 3/99																					
FY 1999: 4/00																					
SS= Site Survey																					

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																							
MODIFICATION TITLE:		ENVIRONMENTAL SHELTER																							
MODELS OF SYSTEM AFFECTED:		Air Stations																							
DESCRIPTION/JUSTIFICATION:		Environmental Shelters to protect current Precision Approach Radar until DGPS can be fully deployed.																							
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																							
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL					
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$				
FINANCIAL PLAN (IN MILLIONS)																									
<i>RD&E</i>																				0	0.000				
<i>PROCUREMENT</i>																				42	5.670				
INSTALLATION KITS		10	1.350	12	1.620	10	1.350	10	1.350											42	5.670				
INSTALLATION KITS (UNIT COST)				0.135		0.135		0.135																	
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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					
INTERIM CONTRACTOR SUPPORT																				0.000					
INSTALLATION OF HARDWARE																									
FY 1996 EQUIPMENT & PRIOR (10 Kits)				10	1.341											10	1.341								
FY 1997 EQUIPMENT (12 Kits)						10	1.539	2	0.337											12	1.876				
FY 1998 EQUIPMENT (10 Kits)								8	1.354	2	0.335											10	1.689		
FY 1999 EQUIPMENT (10 Kits)										8	1.354	2	0.337											10	1.691
FY 2000 EQUIPMENT																				0	0.000				
FY 2001 EQUIPMENT																				0	0.000				
FY 2002 EQUIPMENT																				0	0.000				
FY 2003 EQUIPMENT																				0	0.000				
TO COMPLETE																				0	0.000				
TOTAL INSTALLATION COST		0	0.000	10	1.341	10	1.539	10	1.691	10	1.689	2	0.337	0	0.000	0	0.000	0	0.000	42	6.597				
TOTAL PROCUREMENT COST		10	1.350	12	2.961	10	2.889	10	3.041	0	1.689	0	0.337	0	0.000	0	0.000	0	0.000	42	12.267				
TOTAL COST				2.961		2.889		3.041		1.689		0.337		0.000		0.000		0.000		12.267					
METHOD OF IMPLEMENTATION: AIT																									
CONTRACT DATE:		FY 1997: 3/97				ADMINISTRATIVE LEADTIME: 5				PRODUCTION LEADTIME: 7															
PRODUCTION DELIVER DATE:		FY 1997: 10/97				FY 1998: 3/98				FY 1999: 3/99															
		FY 1997: 10/97				FY 1998: 10/98				FY 1999: 10/99															

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: ENVIRONMENTAL SHELTER

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	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	0	0	0	0	0	0	0	10
FY 1997	0	0	0	0	0	3	3	3	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	12
FY 1998	0	0	0	0	0	0	0	0	0	2	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT 42

OUTPUT ==>	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						
FY 1996 & Prior	0	2	3	2	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	10
FY 1997	0	0	0	0	0	2	3	2	3	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	12
FY 1998	0	0	0	0	0	0	0	0	0	0	3	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT 42

P-3A

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE AN/FPN-63 Microwave Landing System (MLS)								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)	1	3																											
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
ASSETS ON HAND (BP)	4																												
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
QTY OVER (+) OR SHORT (-)	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
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				40				36				4				0				0								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 8				INITIAL ORDER				REORDER 6																

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**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A**

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE/PROJECT UNIT							
Other Procurement, Navy / BA2 - Communications and Electronics Equipme								Microwave Landing System (MLS)							
								AN/FPN-63							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
NAS KEY WEST	1	OLF IMPERIAL BEACH	1												
		MCAS KANEOHE BAY	1												
		NAVSTA ROTA	1												
FY 1999								FY 2000							

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TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE Instrument Landing System Microwave Landing System (MLS)								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)	1		1	1	1		2																						
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	1	1	2	3	4	4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
ASSETS ON HAND (BP)	6																												
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)																													
(P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
QTY OVER (+) OR SHORT (-)	5	5	4	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				12				6				6				0				0								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN				INITIAL ORDER				REORDER																

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**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A**

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE/PROJECT UNIT							
Other Procurement, Navy / BA2 - Communications and Electronics Equipme								Microwave Landing System (MLS) X1102 Instrument Landing System							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
NAS Pensacola	1			NAS Whiting Field	1	NAS Brunswick	1	NAS Meridian	1			NAS Whidbey Island	1		
												NAS Miramar	1		
FY 1999								FY 2000							

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CLASSIFICATION:

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TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE Differential Global Positioning Sys Microwave Landing System (MLS)								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)															3	3													
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	6	6	6	6	6	6	6	6	6	6	6	6	6
ASSETS ON HAND (BP)																													
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)															3	3													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	6	6	6	6	6	6	6	6	6	6	6	6	6
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	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				44				0				0				6				38								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 5				INITIAL ORDER 13				REORDER 13																

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CLASSIFICATION:

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT Microwave Landing System (MLS) X1018 Differential Global Positioning							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
												NATTC Pensacola	1	NAS Whidbey	1
												NISE EAST	1	NAS Miramar	1
												NAS OCEANA	1	NAS Kingsville	1

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TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE Environmental Shelters Microwave Landing System (MLS)								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)	1	3	3	3	1	3	3	3	1	3	3	3	1	3	3	3	2												
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	1	4	7	10	11	14	17	20	21	24	27	30	31	34	37	40	42	42	42	42	42	42	42	42	42	42	42	42	42
ASSETS ON HAND (BP)																													
DELIVERY FY 96 & PRIOR (P)	10																												
FY 96 & PRIOR (P)																													
FY 97 (P)					3	3	3	3																					
FY 98 (P)									2	3	2	3																	
FY 99 (P)													2	3	2	3													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	10	10	10	10	13	16	19	22	24	27	29	32	34	37	39	42	42	42	42	42	42	42	42	42	42	42	42	42	42
QTY OVER (+) OR SHORT (-)	9	6	3	0	2	2	2	2	3	3	2	2	3	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				42				0				10				32				0								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 5				INITIAL ORDER 7				REORDER 7																

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A													DATE FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT Microwave Landing System (MLS) X1020 Environmental Shelters							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
NRAD San Diego	1	NAS Norfolk	1	NAS Lemoore	1	NAS Orange Grove	1	NAS Key West	1	NAS Jacksonville	1	MCAS Iwakuni	1	NAS Whidbey Island	1
		NAS Oceana	1	MCAS Quantico	1	NAVSTA Rota	1			MCAS Cherry Point	1	MCAS Futenma	1	NAS Fallon	1
		NAS Lemoore	1	MCAS New River	1	NOLF Imperial Beach	1			MCAS Beaufort	1	MCAS Yuma	1	NAWC Point Mugu	1
FY 1999								FY 2000							
NAVSTA Roosevelt Roads	1	MCAS Kaneohe Bay	1	NATTC Pensacola	1	NAS Kingsville	1	NAS North Island	1	MCAS Miramar	1	NAS JRB Carswell	1	NAS Patuxent River	1
		NAS Pensacola	1	NAS Whiting Field	1	NAVSTA Keflavik	1			NAS Meridian	1	NAVSTA New Orleans	1	NAS Mayport	1
		NATTC Pensacola	1	NAS Corpus Christi	1	NAS Brunswick	1			NAS Meridian	1	NAS JRB Willow Grove	1	NALF San Clemente Isl	1

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**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A**

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE/PROJECT UNIT							
Other Procurement, Navy / BA2 - Communications and Electronics Equipme								Microwave Landing System (MLS) X1020 Environmental Shelters							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
MCAS New River	1														
MCAS Camp Pendleton	1														
FY 2003								FY 2004							

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CLASSIFICATION:

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CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy /BA-2 Communications Electronics Equipment					P-1 ITEM NOMENCLATURE Fleet Area Control and Surveillance Facility (FACSFAC) 284700			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$6.6	\$3.8	\$7.0	\$7.1	\$7.0	\$7.2	\$7.3	\$7.4
<p>DESCRIPTION:</p> <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>The Department of the Navy has established FACSFACs wherever the volume of military aircraft using off-shore operating areas creates serious potential for mid-air collisions with civilian aircraft. Four sites (Virginia Capes, San Diego, Jacksonville and Hawaii) have been established with two interim sites also commissioned (FACSFAC Whidbey Island and FACSFAC Caribbean). In order to accommodate mission expansion and to maintain proper interface with the FAA air traffic control systems, all FACSFACs must be provided enhanced capabilities.</p> <p>Funding in FY96 through FY99 provides for procurement and installation of the following: FY96 provides funding to: procure 8 Radar Input Unit Replacements (TT173)*; procure 8 Link 11 security filters (TT174)*; and procure miscellaneous mission enhancements for selected sites (OCIRs/ECPs) (TT145). FY97 provides funding to: procure 2 Radar Beacon Digitizer Replacements (TT175); procure 8 Display replacements (TT176); procure miscellaneous enhancements for selected sites (OCIRs/ECPs) (TT145). FY98 provides funding to: procure 5 Radar Beacon Digitizer Replacements (TT175); procure 22 Display replacements (TT176); procure miscellaneous enhancements for selected sites (OCIRs/ECPs) (TT145). FY99 provides funding to: procure 2 Advanced Combat Direction Systems (TT163); procure 8 Military Airspace Management System Interfaces (TT172); procure 3 Radar Beacon Digitizer Replacements (TT175); procure 11 Display replacements (TT176); 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-changability. This is especially important, since these are Non-developmental Item (NDI) units with limited model production runs. Economic benefits are also realized by single lot purchase.</p>								

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CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS									DATE:		
P-5									FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD							
Other Procurement, Navy / BA-2 Communications Electronics Equipment				Fleet Area Control and Surveillance Facility (FACSFAC) 42TT							
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
TT145	FACSFAC AIR CONTROL TRACKING SYSTEM (FACTS), ECPs, and OCIRs	N/A	VAR	485	VAR	423	VAR	270	VAR	612	
TT163	ADV COMBAT DIRECTION SYS INTERFACE	N/A							2	1,500	
TT172	MILITARY AIRSPACE MGMT SYS INTERFACE	N/A							8	600	
TT173	RADAR INPUT UNIT REPLACEMENT	N/A	8	800							
TT174	LINK 11 SECURITY FILTER	N/A	8	700							
TT175	RADAR BEACON DIGITIZER (RBD) REPLACE	N/A			2	625	5	1,597	3	978	
TT176	DISPLAY REPLACEMENT	N/A			8	950	22	2,671	11	1,341	
TT800	INTEGRATED LOGISTICS SUPPORT	N/A		392		473		517		468	
TT830	PRODUCTION ENGINEERING	N/A		1,128		744		811		696	
TT900	INSTALLATION (NON-FMP)	N/A		3,113		595		1,135		898	
	TOTAL										
				6,618		3,810		7,001		7,093	

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997																																							
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA2 Communication and Electronic Equipment					P-1 ITEM NOMENCLATURE IDENTIFICATION (ID) SYSTEMS																																							
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																																				
QUANTITY																																												
COST (In Millions)	\$9.4	\$18.3	\$11.3	\$16.0	\$17.0	\$18.2	\$17.4	\$17.1																																				
<p>The Identification Systems funds programs providing a secure combat navigation and identification capability for unit location and identification purposes. All systems combine to sharply reduce the risk of Blue on Blue engagement in a joint operating environment. The Naval Air Systems Command (NAVAIRSYSCOM) and the Space and Naval Warfare Systems Command (SPAWARSYSCOM) are the responsible organizations for items procured in this line. The funds presently assigned to them are as follows:</p> <table style="width: 100%; margin-top: 20px;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY 1996</u></th> <th style="text-align: center;"><u>FY 1997</u></th> <th style="text-align: center;"><u>FY 1998</u></th> <th style="text-align: center;"><u>FY 1999</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> </tr> </thead> <tbody> <tr> <td>NAVAIRSYSCOM</td> <td style="text-align: right;">\$9.397</td> <td style="text-align: right;">\$18.302</td> <td style="text-align: right;">\$11.293</td> <td style="text-align: right;">\$14.937</td> <td style="text-align: right;">\$15.442</td> <td style="text-align: right;">\$16.444</td> <td style="text-align: right;">\$16.796</td> <td style="text-align: right;">\$17.147</td> </tr> <tr> <td>SPAWARSYSCOM</td> <td style="text-align: right;">\$0.000</td> <td style="text-align: right;">\$0.000</td> <td style="text-align: right;">\$0.000</td> <td style="text-align: right;">\$1.093</td> <td style="text-align: right;">\$1.531</td> <td style="text-align: right;">\$1.795</td> <td style="text-align: right;">\$0.647</td> <td style="text-align: right;">\$0.000</td> </tr> <tr> <td>Total P-1</td> <td style="text-align: right;">\$9.397</td> <td style="text-align: right;">\$18.302</td> <td style="text-align: right;">\$11.293</td> <td style="text-align: right;">\$16.030</td> <td style="text-align: right;">\$16.973</td> <td style="text-align: right;">\$18.239</td> <td style="text-align: right;">\$17.443</td> <td style="text-align: right;">\$17.147</td> </tr> </tbody> </table>										<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	NAVAIRSYSCOM	\$9.397	\$18.302	\$11.293	\$14.937	\$15.442	\$16.444	\$16.796	\$17.147	SPAWARSYSCOM	\$0.000	\$0.000	\$0.000	\$1.093	\$1.531	\$1.795	\$0.647	\$0.000	Total P-1	\$9.397	\$18.302	\$11.293	\$16.030	\$16.973	\$18.239	\$17.443	\$17.147
	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>																																				
NAVAIRSYSCOM	\$9.397	\$18.302	\$11.293	\$14.937	\$15.442	\$16.444	\$16.796	\$17.147																																				
SPAWARSYSCOM	\$0.000	\$0.000	\$0.000	\$1.093	\$1.531	\$1.795	\$0.647	\$0.000																																				
Total P-1	\$9.397	\$18.302	\$11.293	\$16.030	\$16.973	\$18.239	\$17.443	\$17.147																																				

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CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET							DATE:	
P-40							FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
Other Procurement, Navy / BA2 Communication and Electronic Equipment					IDENTIFICATON SYSTEMS - NAVAIRSYSCOM 285100			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$9.4	\$18.3	\$11.3	\$14.9	\$15.4	\$16.4	\$16.8	\$17.1
<p>DESCRIPTION:</p> <p>The ID System funds the following procurements: MK XII Improvements, AN/UPX-29 Improvements, AN/UPM-155 Radar Test Set, AN/UPX-27 Interrogator set replacement and Shipboard Advanced Radar Target Identification System (SARTIS).</p> <p>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.</p> <p>The AN/UPX-29 Improvements program provides field changes to the AN/UPX-29 for improved reliability and maintenance.</p> <p>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 test equipment that will allow more accurate alignments in less time to increase the system's operational availability and reduce down time.</p> <p>The purpose of the new MKXII Interrogator (AN/UPX-27 replacement) is to replace 20-25 year old equipment with a Reliability and Maintainance enhancement through the use of COTS/NDI form/fit/function equipment.</p> <p>The purpose of the SARTIS is to improve the capability of the Vietnam-era AN/SLQ-20A EW System for AEGIS CLASS SHIPS.</p> <p>FY 96 funded the procurement of 5 AN/UPM-155 MK XII Test Sets, various MK XII AIMS Improvements , and various AN/UPX-29 improvements and related installations.</p> <p>FY 97 funds the procurement of 8 AN/UPM-155 MK XII Test Sets, 25 SARTIS units, and various MK XII AIMS Improvements.</p> <p>FY 98 funds the procurement of 11 AN/UPM-155 MK XII Test Sets, various MK XII AIMS Improvements, and 41 AN/UPX-27 Interrogator Replacements.</p> <p>FY 99 funds the procurement of 11 AN/UPM-155 MK XII Test Sets, various MK XII AIMS Improvements, and 63 AN/UPX-27 Interrogator Replacements.</p> <p>Installing Agent: Shipyard, Alteration Installation Teams (AIT) When installation to be made: ROH/RAV/SRA Type ships to receive equipment: An IFF system is on every ship in the fleet. SARTIS will be installed on CG-47 class.</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

WEAPONS SYSTEM COST ANALYSIS									DATE:	
P-5									FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD						
Other Procurement, Navy / BA2 Communication and Electronic Equip				IDENTIFICATON SYSTEMS - NAVAIRSYSCOM 42MT						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
MT003	AN/UPM-155 MK XII RADAR TEST SET	A	5	500	8	800	11	1,100	11	1,100
MT016	MK XII AIMS IMPROVEMENTS	N/A	VAR	2,105	VAR	200	VAR	1,240	VAR	2,455
MT024	AN/UPX-25 INTEROGATOR SET (USCG)	N/A		1,453						
MT027	AN/UPX-27 HARDWARE	N/A			VAR	150				
MT031	AN/UPX-27 REPLACEMENT	N/A					41	4,800	63	6,300
MT110	SARTIS	A			25	7,788				
MT700	AN/UPX-29 IMPROVEMENTS(OP-N865)	N/A		2,013						
MT800	INTEGRATED LOGISTICS SUPPORT	N/A		679		721		995		1,183
MT830	PRODUCTION ENGINEERING	N/A		845		4,105		1,571		1,305
MT840	QUALITY ASSURANCE	N/A				60				
MT850	PRODUCT IMPROVEMENT	N/A				398				
MT860	ACCEPTANCE TEST & EVALUATION	N/A		264		1,600		365		700
MT870	DEPOT	N/A		333				624		693
MT900	INSTALLATION OF EQUIPMENT (NON-FMP)	N/A		1,205		375		598		1,201
MT910	INSTALLATION OF EQUIPMENT (FMP)	N/A				2,075				
MT990	INITIAL TRAINING	N/A				30				
				9,397		18,302		11,293		14,937

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE FEBRUARY 1997	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment				C. P-1 ITEM NOMENCLATURE IDENTIFICATON SYSTEMS - NAVAIRS NAVAIR SYSCOM				SUBHEAD 42MT		
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MT003 AN/UPM-155 MARKMK XII RTS										
FY95	NAVCOM EI Monte CA	SS/Option	NAVAIR	3/95	5/96	12	50.0	Yes	No	
FY96	NAVCOM EI Monte CA	SS/FP	NAVAIR	3/97	9/98	5	100.0	Yes	No	
FY97	NAVCOM EI Monte CA	SS/FP	NAVAIR	3/97	9/98	8	100.0	Yes	No	
FY98	NAVCOM EI Monte CA	SS/Option	NAVAIR	3/98	9/99	11	100.0	Yes	No	
FY99	NAVCOM EI Monte CA	SS/Option	NAVAIR	3/99	9/00	11	100.0	Yes	No	
MT031 AN/UPX-27 Replacement										
FY98	TBD	C/FP	NAVAIR	5/98	4/99	41	117.1	No (1/98)		
FY99	TBD	Option/FP	NAVAIR	2/99	10/00	63	100.0	No (1/98)		
MT110 SARTIS										
FY97	TBD	C/FP	NAVAIR	8/97	1/99	25	311.5	YES	YES	Apr-97
D. REMARKS										

CLASSIFICATION:

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MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)						DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA2 Communication and Electronic Equipment					P-1 ITEM NOMENCLATURE IDENTIFICATON SYSTEMS - NAVAIRSYSCOM				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
ECP/OCIR						0.186	0.200	0.200	0.586
MK XII AIMS IMPROVEMENTS	0.569	0.315	0.598	0.609	0.288	0.138	0.170	0.105	2.792
AN/UPX-29 IMPROVEMENTS	0.636			0.502					1.138
AN/UPX-27 REPLACEMENT				0.090	0.570	0.948	1.055	1.230	3.893
SARTIS		2.135							
TOTAL	1.205	2.450	0.598	1.201	0.858	1.272	1.425	1.535	8.409

P-1 SHOPPING LIST

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CLASSIFICATION:

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CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**
 MODIFICATION TITLE: **ECP/OCIR**
 MODELS OF SYSTEM AFFECTED: ID SYSTEMS
 DESCRIPTION/JUSTIFICATION: The OCIR/ECP program provides the procurement of numerous relatively minor equipment/instrumentation needed at all Navy and Marine Corps air traffic control facilities

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

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.000
PROCUREMENT																				
INSTALLATION KITS									Var	0.861	Var	1.226	Var	1.295	Var	1.544			Var	4.926
INSTALLATION KITS (UNIT COST)																				
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT																			0	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
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALLATION OF HARDWARE																				
FY 1996 EQUIPMENT & PRIOR																			Var	0.000
FY 1997 EQUIPMENT																			Var	0.000
FY 1998 EQUIPMENT																			Var	0.000
FY 1999 EQUIPMENT																			Var	0.000
FY 2000 EQUIPMENT										Var	0.186								Var	0.186
FY 2001 EQUIPMENT												Var	0.200						Var	0.200
FY 2002 EQUIPMENT														Var	0.200				Var	0.200
FY 2003 EQUIPMENT																Var	0.210	Var	0.210	0.210
TO COMPLETE																			0	0.000
TOTAL INSTALLATION COST	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.186	0	0.200	0	0.200	0	0.210	0	0.796
TOTAL PROCUREMENT COST	0	0.000	0	0.000	0	0.000	0	0.000	Var	0.861	Var	1.412	Var	1.495	Var	1.744	Var	0.210	Var	5.722
TOTAL COST		0.000		0.000		0.000		0.000		0.861		1.412		1.495		1.744		0.210		5.722

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: Various PRODUCTION LEADTIME: Various
 CONTRACT DATE: FY 1997: N/A FY 1998: N/A FY 1999: N/A
 PRODUCTION DELIVER DATE: FY 1997: N/A FY 1998: N/A FY 1999: N/A

P3A		INDIVIDUAL MODIFICATION																															
MODIFICATION TITLE:		MK XII AIMS Improvements																															
MODELS OF SYSTEM AFFECTED:		ID SYSTEMS																															
DESCRIPTION/JUSTIFICATION:		Product improvement field changes to ensure proper system interface and optimum performance.																															
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		Full Production																															
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL													
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$												
FINANCIAL PLAN (IN MILLIONS)																																	
<u>RDT&E</u>																				0	0.000												
<u>PROCUREMENT</u>																				Var	20.535												
INSTALLATION KITS		Var	7.580	Var	0.200	Var	1.240	Var	2.455	Var	2.342	Var	2.185	Var	2.257	Var	2.276			Var													
INSTALLATION KITS (UNIT COST)																																	
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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												
INTERIM CONTRACTOR SUPPORT																					0.000												
<u>INSTALLATION OF HARDWARE</u>																																	
FY 1996 EQUIPMENT & PRIOR		Var	0.758	Var	0.315															Var	1.073												
FY 1997 EQUIPMENT						Var	0.598															Var	0.598										
FY 1998 EQUIPMENT								Var	0.609															Var	0.609								
FY 1999 EQUIPMENT										Var	0.288															Var	0.288						
FY 2000 EQUIPMENT												Var	0.138															Var	0.138				
FY 2001 EQUIPMENT														Var	0.170															Var	0.170		
FY 2002 EQUIPMENT																Var	0.105															Var	0.105
FY 2003 EQUIPMENT																		Var	0.150	Var	0.150	0.000											
TO COMPLETE																				0	0.000												
TOTAL INSTALLATION COST		0	0.758	0	0.315	0	0.598	0	0.609	0	0.288	0	0.138	0	0.170	0	0.105	0	0.150	Var	3.131												
TOTAL PROCUREMENT COST		Var	8.338	Var	0.515	Var	1.838	Var	3.064	Var	2.630	Var	2.323	Var	2.427	Var	2.381	0	0.150	Var	23.666												
TOTAL COST		8.338		0.515		1.838		3.064		2.630		2.323		2.427		2.381		0.150		23.666													
METHOD OF IMPLEMENTATION		AIT				ADMINISTRATIVE LEADTIME:				Various				PRODUCTION LEADTIME:				Various															
CONTRACT DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various																							
PRODUCTION DELIVER DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various																							
Note: No individual kit exceeds 2 million dollars.																																	

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: **MK XII AIMS Improvements**

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT Var

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		AN/UPX-29 Improvements																			
MODELS OF SYSTEM AFFECTED:		Identification Systems																			
DESCRIPTION/JUSTIFICATION:		Centralized IFF system used aboard DDG-51, CG-47, and LHD-1 Class ships																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		Full Production																			
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&E</u>																				0	0.000
<u>PROCUREMENT</u>																				Var	8.880
INSTALLATION KITS																				Var	8.880
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING																					0.000
EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																					0.000
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR		Var 0.636				Var 0.502										Var 1.043		Var		2.181	
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
TO COMPLETE																					0.000
TOTAL INSTALLATION COST		Var 0.636		0 0.000		Var 0.000		Var 0.502		0 0.000		0 0.000		0 0.000		0 0.000		0 1.043		Var 2.181	
TOTAL PROCUREMENT COST		Var 9.516		0 0.000		0 0.000		0 0.502		0 0.000		0 0.000		0 0.000		0 0.000		0 1.043		Var 11.061	
TOTAL COST		9.516		0.000		0.000		0.502		0.000		0.000		0.000		0.000		1.043		11.061	
METHOD OF IMPLEMENTATION		AIT				ADMINISTRATIVE LEADTIME:				Various				PRODUCTION LEADTIME:				Various			
CONTRACT DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various											
PRODUCTION DELIVER DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various											

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/UPX-29 Improvements

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	Var	0	0	0	0	Var	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	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						
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT Var

P-3A

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		AN/UPX-27 Replacement																			
MODELS OF SYSTEM AFFECTED:		AN/UPX-27																			
DESCRIPTION/JUSTIFICATION:		Current AN/UPX-27 is late 60s early 70s technology and is no longer as reliable as required. Due to its age it is hard to maintain because of obsolescence. A more reliable system with the same functionality is required. Maintenance alignment requirements are continually a problem with the current system, however should no longer be a problem with the current technology available.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																				0	0.000
PROCUREMENT																				0	0.000
INSTALLATION KITS																				0	0.000
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING																					0.000
EQUIPMENT				41	4.800	63	6.300	77	7.700	82	8.200	88	8.800	94	9.400			445	45.200		
EQUIPMENT NONRECURRING																					0.000
ENGINEERING CHANGE ORDERS																					0.000
DATA																					0.000
TRAINING EQUIPMENT																					0.000
SUPPORT EQUIPMENT																					0.000
OTHER																					0.000
INTERIM CONTRACTOR SUPPORT																					0.000
INSTALLATION OF HARDWARE																					
FY 1996 EQUIPMENT & PRIOR																				0	0.000
FY 1997 EQUIPMENT																				0	0.000
FY 1998 EQUIPMENT						3	0.090	38	0.570									41	0.660		
FY 1999 EQUIPMENT										63	0.948							63	0.948		
FY 2000 EQUIPMENT												77	1.055					77	1.055		
FY 2001 EQUIPMENT														82	1.230			82	1.230		
FY 2002 EQUIPMENT																88	1.232	88	1.232		
FY 2003 EQUIPMENT																94	1.316	94	1.316		
TO COMPLETE																				0	0.000
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	3	0.090	38	0.570	63	0.948	77	1.055	82	1.230	182	2.548	445	6.441
TOTAL PROCUREMENT COST		0	0.000	0	0.000	41	4.800	63	6.390	77	8.270	82	9.148	88	9.855	94	10.630	0	2.548	445	51.641
TOTAL COST		0.000		0.000		4.800		6.390		8.270		9.148		9.855		10.630		2.548		51.641	
METHOD OF IMPLEMENTATION		AIT						ADMINISTRATIVE LEADTIME: 7				PRODUCTION LEADTIME: 20									
CONTRACT DATE:		FY 1997: N/A		FY 1998: May-98				FY 1999: Feb-99													
PRODUCTION DELIVER DATE:		FY 1997: N/A		FY 1998: Apr-99				FY 1999: Oct-00													
The three installs in FY 99 are first articles, production deliveries start in Feb 2000.																					

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/UPX-27 Replacement

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	3	0	0	14	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	16	17	13	0	0	0	0	0	0	0	0	0	0	0	0	0	63
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	19	19	20	0	0	0	0	0	0	0	0	0	77
FY 2001	0	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	20	21	21	0	0	0	0	0	82
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	88	88	88		
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	94	94	94		
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT 445

OUTPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	3	0	0	14	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	18	19	13	0	0	0	0	0	0	0	0	0	0	0	0	0	63
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	19	19	20	0	0	0	0	0	0	0	0	0	77
FY 2001	0	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	20	21	21	0	0	0	0	0	82
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	88	88	88		
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	94	94	94		
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT 445

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE: SARTIS																			
MODELS OF SYSTEM AFFECTED: CG's																			
DESCRIPTION/JUSTIFICATION: Congressional plus-up to complete production/deployment for remaining 22 cruisers and three shore sites.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Updating specifications & revisiting Milestone III July '97 for contract award Aug '97.																			
FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																			
<i>RDT&E</i>																			
<i>PROCUREMENT</i>																			
INSTALLATION KITS																			
INSTALLATION KITS (UNIT COST)																			
INSTALLATION KITS NONRECURRING																			
EQUIPMENT																			
EQUIPMENT NONRECURRING																			
ENGINEERING CHANGE ORDERS																			
DATA																			
TRAINING EQUIPMENT																			
SUPPORT EQUIPMENT																			
OTHER																			
INTERIM CONTRACTOR SUPPORT																			
<u>INSTALLATION OF HARDWARE</u>																			
FY 1996 EQUIPMENT & PRIOR																			
FY 1997 EQUIPMENT																			
FY 1998 EQUIPMENT																			
FY 1999 EQUIPMENT																			
FY 2000 EQUIPMENT																			
FY 2001 EQUIPMENT																			
FY 2002 EQUIPMENT																			
FY 2003 EQUIPMENT																			
TO COMPLETE																			
TOTAL INSTALLATION COST																			
TOTAL PROCUREMENT COST																			
TOTAL COST																			
METHOD OF IMPLEMENTATION: AIT																			
CONTRACT DATE:																			
PRODUCTION DELIVER DATE:																			
ADMINISTRATIVE LEADTIME:																			
PRODUCTION LEADTIME:																			

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: SARTIS

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	6	6	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT 25

OUTPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	4	5	4	2	3	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT 25

P-3A

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23	A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment												B. P-1 ITEM NOMENCLATURE AN/UPX-27 REPLACEMENT IDENTIFICATON SYSTEMS - NAVAIRSYS								C. DATE FEBRUARY 1997				LATER
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				
	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)														14	12	12	13	18	19	13					
SCHOOLS/OTHER TRAINING (P)											1														
OTHER (P)											2														
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	3	3	17	29	41	54	72	91	104	104	104	104	104	
ASSETS ON HAND (BP)																									
DELIVERY FY 96 & PRIOR (P)																									
FY 96 & PRIOR (P)																									
FY 97 (P)																									
FY 98 (P)							S				3			14	12	12									
FY 99 (P)										S							17	16	17	13					
(P)																									
(P)																									
(P)																									
(P)																									
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	3	3	3	17	29	41	58	74	91	104	104	104	104	104	
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	4	2	0	0	0	0	0	0	
D. REMARKS	E. RQMT (QTY)											TOTAL RQMT		INSTALLED		ON HAND AS OF 10/01/96		FY 99 & PRIOR UNDELIVERED		UNFUNDED					
	1. APPN OPN											620		0		0		104		516					
	2. APPN -											54		0		0		0		54					
	3. PROCUREMENT LEADTIME											ADMIN 7		INITIAL ORDER		REORDER 20		REORDER 20							

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT IDENTIFICATON SYSTEMS - NAVAIRSYSCOM MT031 AN/UPX-27 Replacement							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
						NAWCAD	3			LHD-1	2	FFG-57	2	DDG-996	2
						St Inigoes				LHD-2	3	FFG-37	2	LCC-19	1
										LHD-3	3	CGN-36	3	LHD-4	3
										FFG-54	2	CGN-37	3	LHD-5	3
										FFG-55	2	LSD-50	2	CVN-69	1
										AOE-7	2			DDG-994	2

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT IDENTIFICATON SYSTEMS - NAVAIRSYSCOM AN/UPX-27 Replacement							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
CG-50	2	FTC NORVA	8	CG-69	2	CG-59	2								
CG-71	2	NATTC PEN	2	DD-970	2	CVN-65	5								
DD-972	2	FTSCLANT	2	DD-997	2	DD-968	2								
CVN-72	5	FTSCPAC	2	DD-979	2	DD-971	2								
CG-54	2	CG-52	2	LHA-3	3	DD-978	2								
		DDG-62	2	CG-63	2										
				CG-66	2										
				DDG-61	2										
				DDG-55	2										
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment										B. P-1 ITEM NOMENCLATURE SARTIS NAVAIRSYSCOM IDENTIFICATON SYSTEMS - NAVAIRSYS								C. DATE FEBRUARY 1997					
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
ACTIVE FORCE INVENTORY (P)										4	5	4	2	3	2	2	3											
SCHOOLS/OTHER TRAINING (P)																												
OTHER (P)																												
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	4	9	13	15	18	20	22	25	25	25	25	25	25	25	25	25	25		
ASSETS ON HAND (BP)																												
DELIVERY FY 96 & PRIOR (P)																												
FY 96 & PRIOR (P)																												
FY 97 (P)				A					6	6	6	6	6	1														
FY 98 (P)																												
FY 99 (P)																												
(P)																												
(P)																												
(P)																												
(P)																												
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	6	12	18	24	25	25	25	25	25	25	25	25	25	25	25	25	25		
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	2	3	5	9	7	5	3	0	0	0	0	0	0	0	0	0	0		
D. REMARKS	E. RQMT (QTY)								TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED			
	1. APPN OPN								25				0				0				25				0			
	2. APPN -												0				0				0				0			
	3. PROCUREMENT LEADTIME								ADMIN				8				INITIAL ORDER				17				REORDER			

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT IDENTIFICATON SYSTEMS - NAVAIRSYSCOM MT110 SARTIS							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
		AEGIS COMBAT SYS CEN	1	AEGIS TRNG CEN	1	NAWCAD PAX	1	CG-55	1	CG-58	1	CG-69	1	CG-73	1
		CG-52	1	CG-57	1	CG-64	1	CG-56	1	CG-61	1	CG-72	1	CG-65	1
		CG-53	1	CG-59	1	CG-66	1			CG-62	1				
		CG-54	1	CG-60	1	CG-67	1								
				CG-63	1										

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT IDENTIFICATON SYSTEMS - NAVAIRSYSCOM MT110							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
CG--68	1														
CG-70	1														
CG-71	1														
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B								DATE July 1996	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment				P-1 ITEM NOMENCLATURE					
ITEM/PROJECT UNIT	TOTAL I0 / REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY 97 PROGRAM FUNDS	PLANNED BUDGET YEAR PROCUREMENT FY 98	PLANNED BUDGET YEAR PROCUREMENT FY 99	BALANCE	PHASING RATIONALE
MT003 AN/UPM-155	463		415	5	8	11	11	13	OUTYEAR FUNDING
MEMO ENTRIES									
COST CODE: MT003 AN/UPM-155 Test Set replaces the AN/UPX-137A for all surface ships with MK XII Interrogators and shore stations (Total = 463)									

BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				ID SYSTEMS - SPAWARSYSCOM (SABER PROGRAM) 52MT 285100				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)				\$1.1	\$1.5	\$1.8	\$0.6	

The Situational Awareness BEacon with Reply (SABER) system provides critical battlefield/operating area situational awareness and friendly ID capabilities by uniting GPS and UHF/SATCOM technologies. The SABER system consists of a GPS receiver and two-way UHF radio capable of Over-The-Horizon (OTH) and Line-of-Sight (LOS) communications. The GPS receiver maintains a constant accurate position of the user. When a correctly encoded interrogation signal is received by the SABER, it transmits a reply containing the users identification, position, time, heading, speed, altitude, GPS diagnostics, polling acknowledge and authorization codes. 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 friendly fire fratricide. SABER will be installed on ships and aircraft.

FY99 funding procures 75 SABER units and 1 Navy Standard Terminal. This is a new start procurement in FY99.

Installation Agent: Alteration Installation Teams

INDENT CODE: B

**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM COST ANALYSIS	DATE: February 1997
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B. APPROPRIATION/BUDGET ACTIVITY OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	C. P-1 ITEM NOMENCLATURE ID SYSTEMS - SPAWARSSYSCOM (SABER PROGRAM) 52MT 285100
--	---

COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
MT001	Production Support	A							N/A	77
MT002	SABER	B							75	961
MT003	Navy Standard Terminal	B							1	55
MT777	Installation	A							N/A	0
TOTAL PROGRAM										1,093

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						ID SYSTEMS - SPAWARSSYSCOM (SABER PROGRAM) 52MT 285100						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
MT002	SABER FY99/Comp*	FY99	TBD	WX/RCP	TBD	Jan-99	Jun-99	75	\$12,906	No	Yes	
MT003	Navy Standard Terminal FY99/Compt	FY99	TBD	WX/RCP	TBD	Jan-99	Jun-99	1	\$55,000	No	Yes	
D. REMARKS *The Navy Standard Terminal is part of the SABER network. It is procured via the same contract as SABER and installed with the SABER units.												

UNCLASSIFIED
CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE ID SYSTEMS - SPAWARSSYSCOM (SABER PROGRAM) 52MT 285100						
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE	
MT002	SABER	500					75	425	Outyear Funded	
MT003	Navy Standard Terminal	10					1	9	Outyear Funded	
MEMO ENTERED										
ITEM #1	MT002	SABER	qty	ITEM #2	MT003	Navy Standard Terminal	qty			
hull/location		hull/location	qty	hull/location		hull/location	qty			
Ships	208			CV,CVN	10					
Aircraft	292									
	TOTAL I/O	500		TOTAL I/O	10					

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)											A. DATE FEBRUARY 1997	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2 Communications Electronics Equipment					C. P-1 ITEM NOMENCLATURE <i>Fleet Area Control and Surveillance Facility (FACSFAC)</i>				SUBHEAD 42TT			
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE		
TT163 ADV COMBAT DIRECTION SYS FY99	TBD	C/FFP	NAWCAD St. Inigoes	2/99	3/00	2	\$750	YES	NO			
TT172 MIL AIRSPACE MGMT SYS FY99	TBD	C/FFP	NAWCAD St. Inigoes	12/98	12/99	8	\$75	NO 7/98				
TT173 RADAR INPUT UNIT REP FY96	Concurrent Computer Ft. Lauderdale, FL	C/FFP	NAWCAD St. Inigoes	8/96	1/97	8	\$100	YES	NO			
TT174 LINK 11 SECURITY FILTER FY96	Lockheed Martin Lexington Park, MD	C/FFP	NAWCAD St. Inigoes	7/96	3/97	8	\$88	YES				
TT175 RADAR BEACON DIGITIZER REP FY97	TBD	C/FFP	NAWCAD St. Inigoes	5/97	5/98	2	\$313	YES	YES	8/96		
	TBD	OPTION/FFP	NAWCAD St. Inigoes	12/97	12/98	5	\$319	YES	YES	8/96		
	TBD	OPTION/FFP	NAWCAD St. Inigoes	12/98	12/99	3	\$326	YES	YES	8/96		
TT176 DISPLAY REPLACEMENT FY97	TBD	C/FFP	NAWCAD St. Inigoes	1/97	3/98	8	\$119	NO 8/96				
	TBD	OPTION/FFP	NAWCAD St. Inigoes	12/97	3/99	22	\$121	NO 8/96				
	TBD	OPTION/FFP	NAWCAD St. Inigoes	12/98	3/00	11	\$122	NO 8/96				
D. REMARKS												

CLASSIFICATION:

UNCLASSIFIED

MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)							DATE FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA-2 Communications Electronics Equipment					P-1 ITEM NOMENCLATURE Fleet Area Control and Surveillance Facility (FACSFAC)				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
ECP/OCIR	0.381	0.427	0.759	0.347	0.264	0.335	0.194	0.045	2.752
Advanced Combat Direction System					0.208	0.212	0.435		0.855
MAMS Interface					0.095	0.097			0.192
Radar Input Unit Replacement		0.070	0.074						0.144
Link 11 Security Filter		0.098	0.098						0.196
Radar Beacon Digitizer Replacement			0.060	0.155	0.090				0.305
Display Replacement			0.144	0.396	0.198	0.239			0.977
FACTS 3200 Radar Input Cap Upgrade*						0.280	0.310		0.590
Mode S Interface*								0.228	0.228
Joint Tactical Information Display System*								0.900	0.900
CARIBROC Upgrade	2.732								2.732
TOTAL	3.113	0.595	1.135	0.898	0.855	1.163	0.939	1.173	9.871

P-1 SHOPPING LIST
ITEM NO. 87

PAGE NO. 4

CLASSIFICATION:

* P3a exhibits for FY00 and beyond new start modifications are not included.

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																				
MODIFICATION TITLE:		<u>FACTS/ECP/OCIR</u>																				
MODELS OF SYSTEM AFFECTED:		<u>FACSFAC</u>																				
DESCRIPTION/JUSTIFICATION:		Changes to accommodate mission expansion and maintain proper interface with the FAA.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																				
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL		
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																						
<u>RDT&E</u>																				0	0.000	
<u>PROCUREMENT</u>																				Var	6.162	
INSTALLATION KITS		Var	3.300	Var	0.423	Var	0.270	Var	0.612	Var	0.386	Var	0.234	Var	0.510	Var	0.427			Var	6.162	
INSTALLATION KITS (UNIT COST)																					0.000	
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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	
INTERIM CONTRACTOR SUPPORT																					0.000	
<u>INSTALLATION OF HARDWARE</u>																						
FY 1996 EQUIPMENT & PRIOR (Var Kits)		Var	1.054																	Var	1.054	
FY 1997 EQUIPMENT (Var Kits)				Var	0.427																Var	0.427
FY 1998 EQUIPMENT (Var Kits)						Var	0.759														Var	0.759
FY 1999 EQUIPMENT (Var Kits)								Var	0.347												Var	0.347
FY 2000 EQUIPMENT (Var Kits)										Var	0.264										Var	0.264
FY 2001 EQUIPMENT (Var Kits)												Var	0.335								Var	0.335
FY 2002 EQUIPMENT (Var Kits)														Var	0.194						Var	0.194
FY 2003 EQUIPMENT (Var Kits)																Var	0.045				Var	0.045
TO COMPLETE																				0	0.000	
TOTAL INSTALLATION COST		0	1.054	0	0.427	0	0.759	0	0.347	0	0.264	0	0.335	0	0.194	0	0.045	0	0.000	0	3.425	
TOTAL PROCUREMENT COST		Var	4.354	Var	0.850	Var	1.029	Var	0.959	Var	0.650	Var	0.569	Var	0.704	Var	0.472	0	0.000	Var	9.587	
TOTAL COST		4.354		0.850		1.029		0.959		0.650		0.569		0.704		0.472		0.000		9.587		
METHOD OF IMPLEMENTATION:																						
CONTRACT DATE:		FY 1997: Various		ADMINISTRATIVE LEADTIME: Various				PRODUCTION LEADTIME: Various														
PRODUCTION DELIVER DATE:		FY 1997: Various		FY 1998: Various				FY 1999: Various														

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: FACTS/ECP/OCIR

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	Var
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	Var
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT Var

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		ADVANCED COMBAT DIRECTION SYSTEM																			
MODELS OF SYSTEM AFFECTED:		FACSFAC																			
DESCRIPTION/JUSTIFICATION:		Incorporate latest tactical data link system to allow the FACSFACs to conduct operations with surface and airborne units.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&E</u>																					
<u>PROCUREMENT</u>																					
INSTALLATION KITS																					
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING EQUIPMENT																					
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR																					
FY 1997 EQUIPMENT																					
FY 1998 EQUIPMENT																					
FY 1999 EQUIPMENT (2 Units)																					
FY 2000 EQUIPMENT (2 Units)																					
FY 2001 EQUIPMENT (4 Units)																					
FY 2002 EQUIPMENT																					
FY 2003 EQUIPMENT																					
TO COMPLETE																					
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	0	0.000	2	0.208	2	0.212	4	0.435	0	0.000	0	0.000	8	0.855
TOTAL PROCUREMENT COST		0	0.000	0	0.000	0	0.000	2	1.500	2	1.708	4	3.212	0	0.435	0	0.000	0	0.000	8	6.855
TOTAL COST			0.000		0.000		0.000		1.500		1.708		3.212		0.435		0.000		0.000		6.855
METHOD OF IMPLEMENTATION: AIT																					
CONTRACT DATE:		FY 1997: N/A				ADMINISTRATIVE LEADTIME: 4				PRODUCTION LEADTIME: 13				FY 1999: 2/99							
PRODUCTION DELIVER DATE:		FY 1997: N/A				FY 1998: N/A				FY 1999: 3/00											
First article delivered 3/00																					

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: ADVANCED COMBAT DIRECTION SYSTEM

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL				
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	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	2
FY 2000	0	0	0	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	2
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT 8

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL				
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	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	2
FY 2000	0	0	0	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	2
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT 8

P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION

P3A
 MODIFICATION TITLE: **MILITARY AIRSPACE MANAGEMENT SYSTEM INTERFACE**
 MODELS OF SYSTEM AFFECTED: **FACSFAC**
 DESCRIPTION/JUSTIFICATION: Interface with the DOD wide military airspace management system for scheduling of special use airspace.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **R&D / Milestone III FY 99**

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																					
<i>RDT&E</i>																				0	0.000
PROCUREMENT																					
INSTALLATION KITS																				0	0.000
INSTALLATION KIT (UNIT COST)																					
INSTALLATION KITS NONRECURRING EQUIPMENT							8	0.600												8	0.600
EQUIPMENT NONRECURRING																					0.000
ENGINEERING CHANGE ORDERS																					0.000
DATA																					0.000
TRAINING EQUIPMENT																					0.000
SUPPORT EQUIPMENT																					0.000
OTHER																					0.000
INTERIM CONTRACTOR SUPPORT																					0.000
INSTALLATION OF HARDWARE																					
FY 1996 EQUIPMENT & PRIOR																				0	0.000
FY 1997 EQUIPMENT																				0	0.000
FY 1998 EQUIPMENT																				0	0.000
FY 1999 EQUIPMENT (8 Units)									4	0.095	4	0.097								8	0.192
FY 2000 EQUIPMENT																				0	0.000
FY 2001 EQUIPMENT																				0	0.000
FY 2002 EQUIPMENT																				0	0.000
FY 2003 EQUIPMENT																				0	0.000
TO COMPLETE																				0	0.000
TOTAL INSTALLATION COST	0	0.000	0	0.000	0	0.000	0	0.600	4	0.095	4	0.097	0	0.000	0	0.000	0	0.000	8	0.192	
TOTAL PROCUREMENT COST	0	0.000	0	0.000	0	0.000	8	0.600	0	0.095	0	0.097	0	0.000	0	0.000	0	0.000	8	0.792	
TOTAL COST		0.000		0.000		0.000		0.600		0.095		0.097		0.000		0.000		0.000		0.000	0.792
METHOD OF IMPLEMENTATION: AIT																					
ADMINISTRATIVE LEADTIME: 2 PRODUCTION LEADTIME: 12																					
CONTRACT DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A		FY 1999: 12/98													
PRODUCTION DELIVER DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A		FY 1999: 12/99													

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: **MILITARY AIRSPACE MANAGEMENT SYSTEM INTERFACE**

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL				
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT 8

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL				
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT 8

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																					
MODIFICATION TITLE:		Radar Input Unit Replacement																					
MODELS OF SYSTEM AFFECTED:		FACSFAC																					
DESCRIPTION/JUSTIFICATION:		Replacement for aging & obsolete equipment radar interfaces with improved versions.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL			
		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		8	0.800																	8	0.800		
INSTALLATION KITS (UNIT COST)																					0.000		
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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		
INTERIM CONTRACTOR SUPPORT																					0.000		
INSTALLATION OF HARDWARE																							
FY 1996 EQUIPMENT & PRIOR (8 Units)				4	0.070	4	0.074															8	0.144
FY 1997 EQUIPMENT																				0	0.000		
FY 1998 EQUIPMENT																				0	0.000		
FY 1999 EQUIPMENT																				0	0.000		
FY 2000 EQUIPMENT																				0	0.000		
FY 2001 EQUIPMENT																				0	0.000		
FY 2002 EQUIPMENT																				0	0.000		
FY 2003 EQUIPMENT																				0	0.000		
TO COMPLETE																				0	0.000		
TOTAL INSTALLATION COST		0	0.000	4	0.070	4	0.074	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	8	0.144		
TOTAL PROCUREMENT COST		8	0.800	0	0.070	0	0.074	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	8	0.944		
TOTAL COST		0.800		0.070		0.074		0.000		0.000		0.000		0.000		0.000		0.000		0.944			
METHOD OF IMPLEMENTATION: AIT																							
CONTRACT DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A		ADMINISTRATIVE LEADTIME: 10		PRODUCTION LEADTIME: 5													
PRODUCTION DELIVER DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A																	

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: Radar Input Unit Replacement

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	2	2	2	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	8
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT 8

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	2	2	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	8
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT 8

P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION

P3A
 MODIFICATION TITLE: [LINK 11 Security Filter](#)
 MODELS OF SYSTEM AFFECTED: [FACSFAC](#)
 DESCRIPTION/JUSTIFICATION: [Enables Link 11 secure data, in the FACTS 3200 computer to be displayed at sites remote from the FACSFAC.](#)

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: [N/A](#)

FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL	
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	8	0.700																		8	0.700	
INSTALLATION KITS (UNIT COST)																						0.000
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																						0.000

INSTALLATION OF HARDWARE

FY 1996 EQUIPMENT & PRIOR (8 Kits)			4	0.098	4	0.098															8	0.196
FY 1997 EQUIPMENT																					0	0.000
FY 1998 EQUIPMENT																					0	0.000
FY 1999 EQUIPMENT																					0	0.000
FY 2000 EQUIPMENT																					0	0.000
FY 2001 EQUIPMENT																					0	0.000
FY 2002 EQUIPMENT																					0	0.000
FY 2003 EQUIPMENT																					0	0.000
TO COMPLETE																					0	0.000

TOTAL INSTALLATION COST	0	0.000	4	0.098	4	0.098	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	8	0.196
TOTAL PROCUREMENT COST	8	0.700	0	0.098	0	0.098	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	8	0.896
TOTAL COST		0.700		0.098		0.098		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.896

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 9 PRODUCTION LEADTIME: 8

CONTRACT DATE: FY 1997: N/A FY 1998: N/A FY 1999: N/A
 PRODUCTION DELIVER DATE: FY 1997: N/A FY 1998: N/A FY 1999: N/A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: LINK 11 Security Filter

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	2	2	2	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
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT 8

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	1	1	2	1	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
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT 8

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION																				
MODIFICATION TITLE: <u>Radar Beacon Digitizer Replacement</u>																				
MODELS OF SYSTEM AFFECTED: <u>FACSFAC</u>																				
DESCRIPTION/JUSTIFICATION: <u>Replacement for current Radar Beacon Digitizers that are obsolete and do not work with the new radars.</u>																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: <u>N/A</u>																				
FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL		
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																				
<u>RDT&E</u>																				
<u>PROCUREMENT</u>																				
INSTALLATION KITS		2	0.625	5	1.597	3	0.978							10	3.500	20	6.700			
INSTALLATION KITS (UNIT COST)			0.313		0.319		0.326													
INSTALLATION KITS NONRECURRING EQUIPMENT																		0	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	
INTERIM CONTRACTOR SUPPORT																			0.000	
<u>INSTALLATION OF HARDWARE</u>																				
FY 1996 EQUIPMENT & PRIOR																		0	0.000	
FY 1997 EQUIPMENT (2 Kits)				2	0.060													2	0.060	
FY 1998 EQUIPMENT (5 Kits)						5	0.155											5	0.155	
FY 1999 EQUIPMENT (3 Kits)								3	0.090									3	0.090	
FY 2000 EQUIPMENT																		0	0.000	
FY 2001 EQUIPMENT														10	0.355	0	0.000	10	0.355	
FY 2002 EQUIPMENT																		0	0.000	
FY 2003 EQUIPMENT																		0	0.000	
TO COMPLETE																		0	0.000	
TOTAL INSTALLATION COST	0	0.000	0	0.000	2	0.060	5	0.155	3	0.090	0	0.000	0	0.000	0	0.000	10	0.355	10	0.660
TOTAL PROCUREMENT COST	0	0.000	2	0.625	5	1.657	3	1.133	0	0.090	0	0.000	0	0.000	0	0.000	10	3.855	20	7.360
TOTAL COST		0.000		0.625		1.657		1.133		0.090		0.000		0.000		0.000		3.855		7.360
METHOD OF IMPLEMENTATION: AIT																				
CONTRACT DATE: FY 1997: 12/96																				
PRODUCTION DELIVER DATE: FY 1997: 12/97																				
ADMINISTRATIVE LEADTIME: 7																				
PRODUCTION LEADTIME: 12																				
FY 1998: 5/97																				
FY 1998: 5/98																				
FY 1999: 12/98																				
FY 1999: 12/99																				

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION

P3A

MODIFICATION TITLE: Display Replacement

MODELS OF SYSTEM AFFECTED: FACSFAC

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: Contractor off the shelf (COTS)

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$

FINANCIAL PLAN (IN MILLIONS)

<u>RDT&E</u>																				0	0.000
<u>PROCUREMENT</u>																					
INSTALLATION KITS			8	0.950	22	2.671	11	1.341	13	1.612										54	6.574
INSTALLATION KITS (UNIT COST)				0.119		0.121		0.122		0.124											
INSTALLATION KITS NONRECURRING																					0.000
EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																					0.000

INSTALLATION OF HARDWARE

FY 1996 EQUIPMENT & PRIOR																				0	0.000
FY 1997 EQUIPMENT (8 Kits)					8	0.144														8	0.144
FY 1998 EQUIPMENT (22 Kits)							22	0.396												22	0.396
FY 1999 EQUIPMENT (11 Kits)									11	0.198										11	0.198
FY 2000 EQUIPMENT (13 Kits)											13	0.239								13	0.239
FY 2001 EQUIPMENT																				0	0.000
FY 2002 EQUIPMENT																				0	0.000
FY 2003 EQUIPMENT																				0	0.000
TO COMPLETE																				0	0.000

TOTAL INSTALLATION COST	0	0.000	0	0.000	8	0.144	22	0.396	11	0.198	13	0.239	0	0.000	0	0.000	0	0.000	0	0.000	54	0.977
TOTAL PROCUREMENT COST	0	0.000	8	0.950	22	2.815	11	1.737	13	1.810	0	0.239	0	0.000	0	0.000	0	0.000	0	0.000	54	7.551
TOTAL COST		0.000		0.950		2.815		1.737		1.810		0.239		0.000		0.000		0.000		0.000		7.551

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 3 PRODUCTION LEADTIME: 14

CONTRACT DATE: FY 1997: 1/97 FY 1998: 12/97 FY 1999: 12/98

PRODUCTION DELIVER DATE: FY 1997: 3/98 FY 1998: 3/99 FY 1999: 3/00

P-3A

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION

P3A
 MODIFICATION TITLE: CARIBROC Upgrade
 MODELS OF SYSTEM AFFECTED: FACSFAC
 DESCRIPTION/JUSTIFICATION: Procurement of processor and communications upgrade hardware and documentation.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NDI Program

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																					
<i>RDT&E</i>																				0	0.000
PROCUREMENT																					
INSTALLATION KITS	Var	14.000																		Var	14.000
INSTALLATION KITS (UNIT COST)																					0.000
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																					0.000
INSTALLATION OF HARDWARE																					
FY 1996 EQUIPMENT & PRIOR (Var Kits)	Var	3.632																		Var	3.632
FY 1997 EQUIPMENT																					0
FY 1998 EQUIPMENT																					0
FY 1999 EQUIPMENT																					0
FY 2000 EQUIPMENT																					0
FY 2001 EQUIPMENT																					0
FY 2002 EQUIPMENT																					0
FY 2003 EQUIPMENT																					0
TO COMPLETE																					0
TOTAL INSTALLATION COST		0	3.632	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	3.632
TOTAL PROCUREMENT COST	Var	17.632	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	Var
TOTAL COST		17.632	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		17.632
METHOD OF IMPLEMENTATION: AIT																					
											ADMINISTRATIVE LEADTIME: Various					PRODUCTION LEADTIME: Various					
CONTRACT DATE:		FY 1997: N/A				FY 1998: N/A				FY 1999: N/A											
PRODUCTION DELIVER DATE:		FY 1997: N/A				FY 1998: N/A				FY 1999: N/A											

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: CARIBROC Upgrade

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT Var

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE Advanced Combat Direction Sys Fleet Area Control and Surveillance Facility (FACSFAC)								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)														1	1														
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
ASSETS ON HAND (BP)																													
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)									S					1	1														
(P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
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	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				8				0				0				2				6								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 4				INITIAL ORDER 13				REORDER 13																

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P-1 SHOPPING LIST

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CLASSIFICATION:

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**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A**

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy / BA-2 Communications Electronics Equipment

P-1 ITEM NOMENCLATURE/PROJECT UNIT
Fleet Area Control and Surveillance Facility (FACSFAC) TT163
Advanced Combat Direction S

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		
FY 1997								FY 1998							
FY 1999								FY 2000							
										St Inigoes	1	FACSFAC VACAPES	1		

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

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TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE Military Airspace Mgmt Sys Interface Fleet Area Control and Surveillance Facility (FACSFAC)								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)														1	1	2	1	1	1	1									
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	5	6	7	8	8	8	8	8	8	8	8	8	8
ASSETS ON HAND (BP)																													
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)									S				1	2	2	2	1												
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	7	8	8	8	8	8	8	8	8	8	8	8	8	8
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	3	3	2	1	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				8				0				0				8				0								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 2				INITIAL ORDER 13				REORDER																

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P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A**

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy / BA-2 Communications Electronics Equipment

P-1 ITEM NOMENCLATURE/PROJECT UNIT
Fleet Area Control and Surveillance Facility (FACSFAC) TT172
Military Airspace Mgmt System Interface

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		
FY 1997								FY 1998							
FY 1999								FY 2000							
										St Inigoes	1	FACSFAC VACAPES	1	FACSFAC Jacksonville	1
														FACSFAC Pensacola	1

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

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**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A**

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy / BA-2 Communications Electronics Equipment

P-1 ITEM NOMENCLATURE/PROJECT UNIT
Fleet Area Control and Surveillance Facility (FACSFAC) TT172
Military Airspace Mgmt System Interface

1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
FACSFAC Caribbean	1	FACSFAC San Diego	1	FACSFAC Whidbey Isl	1	FACSFAC Hawaii	1								
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE Radar Input Unit Replacement Fleet Area Control and Surveillance Facility (FACS) FEBRUARY 1997								C. DATE								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)			2	2	4																								
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	2	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
ASSETS ON HAND (BP)																													
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)		2	2	2	2																								
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	2	4	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
QTY OVER (+) OR SHORT (-)	0	2	2	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
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				8				0				0				8				0								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 10				INITIAL ORDER				5				REORDER				5								

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P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2 Communications Electronics Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT Fleet Area Control and Surveillance Facility (FACSFAC) TT173 Radar Input Unit Replacemen							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
				St Inigoes	2	FACSFAC VACAPES	2	FACSFAC Jacksonville	4						
FY 1999								FY 2000							

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CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE Link 11 Security Filter Fleet Area Control and Surveillance Facility (FAC)								C. DATE FEBRUARY 1997								
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
ACTIVE FORCE INVENTORY (P)		1	1	2	1	1	1	1																					
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	1	2	4	5	6	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
ASSETS ON HAND (BP)																													
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)		2	2	2	2																								
FY 97 (P)																													
FY 98 (P)																													
FY 99 (P)																													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	2	4	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
QTY OVER (+) OR SHORT (-)	0	1	2	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN				8				0				0				8				0								
	2. APPN -																												
	3. PROCUREMENT LEADTIME				ADMIN 9				INITIAL ORDER				8				REORDER												

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P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A**

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy / BA-2 Communications Electronics Equipment

P-1 ITEM NOMENCLATURE/PROJECT UNIT
Fleet Area Control and Surveillance Facility (FACSFAC) TT174
LINK 11 SECURITY FILTER

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		
FY 1997								FY 1998							
		St Inigoes	1	FACSFAC VACAPES	1	FACSFAC San Diego	1	FACSFAC Hawaii	1	FACSFAC Caribbean	1	FACSFAC Pensacola	1	FACSFAC Whidbey Isl	1
						FACSFAC Jacksonville	1								
FY 1999								FY 2000							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA2 Communications and Electronics Equipment									B. P-1 ITEM NOMENCLATURE Radar Beacon Digitizer Fleet Area Control and Surveillance Facility (FACS) FEBRUARY 1997								C. DATE						
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
ACTIVE FORCE INVENTORY (P)							1	1	1	1	1	2	2	1														
SCHOOLS/OTHER TRAINING (P)																												
OTHER (P)																												
TOTAL PHASED REQ (C)	0	0	0	0	0	0	1	2	3	4	5	7	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
ASSETS ON HAND (BP)																												
DELIVERY FY 96 & PRIOR (P)																												
FY 96 & PRIOR (P)																												
FY 97 (P)							2																					
FY 98 (P)									2	2	1																	
FY 99 (P)													2	1														
(P)																												
(P)																												
(P)																												
(P)																												
TOTAL ASSETS (C)	0	0	0	0	0	0	2	2	4	6	7	7	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	1	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED							
	1. APPN - OPN				20				0				0				10				10							
	2. APPN -																											
	3. PROCUREMENT LEADTIME				ADMIN 7				INITIAL ORDER				12				REORDER 12											

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

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**TIME PHASED REQUIREMENTS SCHEDULE
(SUPPLEMENT SHEET-INSTALLATION DATA)
P-23A**

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy / BA-2 Communications Electronics Equipment

P-1 ITEM NOMENCLATURE/PROJECT UNIT
Fleet Area Control and Surveillance Facility (FACSFAC) TT175

Radar Beacon Digitizer

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		
FY 1997								FY 1998							
				St Inigoes	1	St Inigoes	1	NAS Jacksonville	1	NS Mayport	1	NF Barking Sands	1	FACSFAC Caribbean	2
FY 1999								FY 2000							
FACSFAC San Diego	2	NAS Fallon	1												

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

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TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA2 Communications and Electronics Equipment								B. P-1 ITEM NOMENCLATURE Display Replacement Fleet Area Control and Surveillance Facility (FAC)								C. DATE FEBRUARY 1997				LATER				
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002								
	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)							8				12	10			11														
SCHOOLS/OTHER TRAINING (P)																													
OTHER (P)																													
TOTAL PHASED REQ (C)	0	0	0	0	0	0	8	8	8	8	20	30	30	30	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
ASSETS ON HAND (BP)																													
DELIVERY FY 96 & PRIOR (P)																													
FY 96 & PRIOR (P)																													
FY 97 (P)						2	6																						
FY 98 (P)										7	8	7																	
FY 99 (P)														4	4	3													
(P)																													
(P)																													
(P)																													
(P)																													
TOTAL ASSETS (C)	0	0	0	0	0	2	8	8	8	15	23	30	30	34	38	41	41	41	41	41	41	41	41	41	41	41	41	41	41
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	2	0	0	0	7	3	0	0	4	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED								
	1. APPN - OPN								54				0				0				4K				54				
	2. APPN -																												
	3. PROCUREMENT LEADTIME								ADMIN 3				INITIAL ORDER 14				REORDER 15												

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA-2 Communications Electronics Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT Fleet Area Control and Surveillance Facility (FACSFAC) TT176 Display Replacement							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
												FACSFAC Jacksonville	8		
FY 1999								FY 2000							
				FACSFAC VACAPES	12	St Inigoes	2					FACSFAC San Diego	11		
						FACSFAC Pensacola	3								
						FACSFAC Caribbean	5								

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997																																							
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE																																							
Other Procurement, Navy BA2 Communication and Electronic Equipment					IDENTIFICATION (ID) SYSTEMS																																							
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																																				
QUANTITY																																												
COST (In Millions)	\$9.4	\$18.3	\$11.3	\$16.0	\$17.0	\$18.2	\$17.4	\$17.1																																				
<p>The Identification Systems funds programs providing a secure combat navigation and identification capability for unit location and identification purposes. All systems combine to sharply reduce the risk of Blue on Blue engagement in a joint operating environment. The Naval Air Systems Command (NAVAIRSYSCOM) and the Space and Naval Warfare Systems Command (SPAWARSYSCOM) are the responsible organizations for items procured in this line. The funds presently assigned to them are as follows:</p> <table style="width: 100%; margin-top: 20px;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY 1996</u></th> <th style="text-align: center;"><u>FY 1997</u></th> <th style="text-align: center;"><u>FY 1998</u></th> <th style="text-align: center;"><u>FY 1999</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> </tr> </thead> <tbody> <tr> <td>NAVAIRSYSCOM</td> <td style="text-align: right;">\$9.397</td> <td style="text-align: right;">\$18.302</td> <td style="text-align: right;">\$11.293</td> <td style="text-align: right;">\$14.937</td> <td style="text-align: right;">\$15.442</td> <td style="text-align: right;">\$16.444</td> <td style="text-align: right;">\$16.796</td> <td style="text-align: right;">\$17.147</td> </tr> <tr> <td>SPAWARSYSCOM</td> <td style="text-align: right;">\$0.000</td> <td style="text-align: right;">\$0.000</td> <td style="text-align: right;">\$0.000</td> <td style="text-align: right;">\$1.093</td> <td style="text-align: right;">\$1.531</td> <td style="text-align: right;">\$1.795</td> <td style="text-align: right;">\$0.647</td> <td style="text-align: right;">\$0.000</td> </tr> <tr> <td>Total P-1</td> <td style="text-align: right;">\$9.397</td> <td style="text-align: right;">\$18.302</td> <td style="text-align: right;">\$11.293</td> <td style="text-align: right;">\$16.030</td> <td style="text-align: right;">\$16.973</td> <td style="text-align: right;">\$18.239</td> <td style="text-align: right;">\$17.443</td> <td style="text-align: right;">\$17.147</td> </tr> </tbody> </table>										<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	NAVAIRSYSCOM	\$9.397	\$18.302	\$11.293	\$14.937	\$15.442	\$16.444	\$16.796	\$17.147	SPAWARSYSCOM	\$0.000	\$0.000	\$0.000	\$1.093	\$1.531	\$1.795	\$0.647	\$0.000	Total P-1	\$9.397	\$18.302	\$11.293	\$16.030	\$16.973	\$18.239	\$17.443	\$17.147
	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>																																				
NAVAIRSYSCOM	\$9.397	\$18.302	\$11.293	\$14.937	\$15.442	\$16.444	\$16.796	\$17.147																																				
SPAWARSYSCOM	\$0.000	\$0.000	\$0.000	\$1.093	\$1.531	\$1.795	\$0.647	\$0.000																																				
Total P-1	\$9.397	\$18.302	\$11.293	\$16.030	\$16.973	\$18.239	\$17.443	\$17.147																																				

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET							DATE:	
P-40							FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
Other Procurement, Navy / BA2 Communication and Electronic Equipment					IDENTIFICATON SYSTEMS - NAVAIRSYSCOM 285100			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$9.4	\$18.3	\$11.3	\$14.9	\$15.4	\$16.4	\$16.8	\$17.1
<p>DESCRIPTION:</p> <p>The ID System funds the following procurements: MK XII Improvements, AN/UPX-29 Improvements, AN/UPM-155 Radar Test Set, AN/UPX-27 Interrogator set replacement and Shipboard Advanced Radar Target Identification System (SARTIS).</p> <p>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.</p> <p>The AN/UPX-29 Improvements program provides field changes to the AN/UPX-29 for improved reliability and maintenance.</p> <p>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 test equipment that will allow more accurate alignments in less time to increase the system's operational availability and reduce down time.</p> <p>The purpose of the new MKXII Interrogator (AN/UPX-27 replacement) is to replace 20-25 year old equipment with a Reliability and Maintainance enhancement through the use of COTS/NDI form/fit/function equipment.</p> <p>The purpose of the SARTIS is to improve the capability of the Vietnam-era AN/SLQ-20A EW System for AEGIS CLASS SHIPS.</p> <p>FY 96 funded the procurement of 5 AN/UPM-155 MK XII Test Sets, various MK XII AIMS Improvements , and various AN/UPX-29 improvements and related installations.</p> <p>FY 97 funds the procurement of 8 AN/UPM-155 MK XII Test Sets, 25 SARTIS units, and various MK XII AIMS Improvements.</p> <p>FY 98 funds the procurement of 11 AN/UPM-155 MK XII Test Sets, various MK XII AIMS Improvements, and 41 AN/UPX-27 Interrogator Replacements.</p> <p>FY 99 funds the procurement of 11 AN/UPM-155 MK XII Test Sets, various MK XII AIMS Improvements, and 63 AN/UPX-27 Interrogator Replacements.</p> <p>Installing Agent: Shipyard, Alteration Installation Teams (AIT) When installation to be made: ROH/RAV/SRA Type ships to receive equipment: An IFF system is on every ship in the fleet. SARTIS will be installed on CG-47 class.</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

WEAPONS SYSTEM COST ANALYSIS									DATE:	
P-5									FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD						
Other Procurement, Navy / BA2 Communication and Electronic Equip				IDENTIFICATON SYSTEMS - NAVAIRSYSCOM 42MT						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
MT003	AN/UPM-155 MK XII RADAR TEST SET	A	5	500	8	800	11	1,100	11	1,100
MT016	MK XII AIMS IMPROVEMENTS	N/A	VAR	2,105	VAR	200	VAR	1,240	VAR	2,455
MT024	AN/UPX-25 INTEROGATOR SET (USCG)	N/A		1,453						
MT027	AN/UPX-27 HARDWARE	N/A			VAR	150				
MT031	AN/UPX-27 REPLACEMENT	N/A					41	4,800	63	6,300
MT110	SARTIS	A			25	7,788				
MT700	AN/UPX-29 IMPROVEMENTS(OP-N865)	N/A		2,013						
MT800	INTEGRATED LOGISTICS SUPPORT	N/A		679		721		995		1,183
MT830	PRODUCTION ENGINEERING	N/A		845		4,105		1,571		1,305
MT840	QUALITY ASSURANCE	N/A				60				
MT850	PRODUCT IMPROVEMENT	N/A				398				
MT860	ACCEPTANCE TEST & EVALUATION	N/A		264		1,600		365		700
MT870	DEPOT	N/A		333				624		693
MT900	INSTALLATION OF EQUIPMENT (NON-FMP)	N/A		1,205		375		598		1,201
MT910	INSTALLATION OF EQUIPMENT (FMP)	N/A				2,075				
MT990	INITIAL TRAINING	N/A				30				
				9,397		18,302		11,293		14,937

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE FEBRUARY 1997	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment				C. P-1 ITEM NOMENCLATURE IDENTIFICATON SYSTEMS - NAVAIRS NAVAIR SYSCOM				SUBHEAD 42MT		
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
MT003 AN/UPM-155 MARKMK XII RTS										
FY95	NAVCOM EI Monte CA	SS/Option	NAVAIR	3/95	5/96	12	50.0	Yes	No	
FY96	NAVCOM EI Monte CA	SS/FP	NAVAIR	3/97	9/98	5	100.0	Yes	No	
FY97	NAVCOM EI Monte CA	SS/FP	NAVAIR	3/97	9/98	8	100.0	Yes	No	
FY98	NAVCOM EI Monte CA	SS/Option	NAVAIR	3/98	9/99	11	100.0	Yes	No	
FY99	NAVCOM EI Monte CA	SS/Option	NAVAIR	3/99	9/00	11	100.0	Yes	No	
MT031 AN/UPX-27 Replacement										
FY98	TBD	C/FP	NAVAIR	5/98	4/99	41	117.1	No (1/98)		
FY99	TBD	Option/FP	NAVAIR	2/99	10/00	63	100.0	No (1/98)		
MT110 SARTIS										
FY97	TBD	C/FP	NAVAIR	8/97	1/99	25	311.5	YES	YES	Apr-97
D. REMARKS										

CLASSIFICATION:

UNCLASSIFIED

MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)						DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA2 Communication and Electronic Equipment					P-1 ITEM NOMENCLATURE IDENTIFICATON SYSTEMS - NAVAIRSYSCOM				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
ECP/OCIR						0.186	0.200	0.200	0.586
MK XII AIMS IMPROVEMENTS	0.569	0.315	0.598	0.609	0.288	0.138	0.170	0.105	2.792
AN/UPX-29 IMPROVEMENTS	0.636			0.502					1.138
AN/UPX-27 REPLACEMENT				0.090	0.570	0.948	1.055	1.230	3.893
SARTIS		2.135							
TOTAL	1.205	2.450	0.598	1.201	0.858	1.272	1.425	1.535	8.409

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CLASSIFICATION:

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CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**
 MODIFICATION TITLE: **ECP/OCIR**
 MODELS OF SYSTEM AFFECTED: ID SYSTEMS
 DESCRIPTION/JUSTIFICATION: The OCIR/ECP program provides the procurement of numerous relatively minor equipment/instrumentation needed at all Navy and Marine Corps air traffic control facilities

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

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.000
PROCUREMENT																				
INSTALLATION KITS									Var	0.861	Var	1.226	Var	1.295	Var	1.544			Var	4.926
INSTALLATION KITS (UNIT COST)																				
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT																			0	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
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALLATION OF HARDWARE																				
FY 1996 EQUIPMENT & PRIOR																			Var	0.000
FY 1997 EQUIPMENT																			Var	0.000
FY 1998 EQUIPMENT																			Var	0.000
FY 1999 EQUIPMENT																			Var	0.000
FY 2000 EQUIPMENT										Var	0.186								Var	0.186
FY 2001 EQUIPMENT												Var	0.200						Var	0.200
FY 2002 EQUIPMENT														Var	0.200				Var	0.200
FY 2003 EQUIPMENT																Var	0.210	Var	0.210	0.210
TO COMPLETE																			0	0.000
TOTAL INSTALLATION COST	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.186	0	0.200	0	0.200	0	0.210	0	0.796
TOTAL PROCUREMENT COST	0	0.000	0	0.000	0	0.000	0	0.000	Var	0.861	Var	1.412	Var	1.495	Var	1.744	Var	0.210	Var	5.722
TOTAL COST		0.000		0.000		0.000		0.000		0.861		1.412		1.495		1.744		0.210		5.722

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: Various PRODUCTION LEADTIME: Various
 CONTRACT DATE: FY 1997: N/A FY 1998: N/A FY 1999: N/A
 PRODUCTION DELIVER DATE: FY 1997: N/A FY 1998: N/A FY 1999: N/A

P-3A

P3A		INDIVIDUAL MODIFICATION																									
MODIFICATION TITLE:		MK XII AIMS Improvements																									
MODELS OF SYSTEM AFFECTED:		ID SYSTEMS																									
DESCRIPTION/JUSTIFICATION:		Product improvement field changes to ensure proper system interface and optimum performance.																									
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		Full Production																									
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL							
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$						
FINANCIAL PLAN (IN MILLIONS)																											
<u>RDT&E</u>																				0	0.000						
<u>PROCUREMENT</u>																				Var	20.535						
INSTALLATION KITS		Var	7.580	Var	0.200	Var	1.240	Var	2.455	Var	2.342	Var	2.185	Var	2.257	Var	2.276			Var							
INSTALLATION KITS (UNIT COST)																											
INSTALLATION KITS NONRECURRING EQUIPMENT																				0	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						
INTERIM CONTRACTOR SUPPORT																					0.000						
<u>INSTALLATION OF HARDWARE</u>																											
FY 1996 EQUIPMENT & PRIOR		Var	0.758	Var	0.315															Var	1.073						
FY 1997 EQUIPMENT						Var	0.598															Var	0.598				
FY 1998 EQUIPMENT								Var	0.609															Var	0.609		
FY 1999 EQUIPMENT										Var	0.288															Var	0.288
FY 2000 EQUIPMENT												Var	0.138											Var	0.138		
FY 2001 EQUIPMENT														Var	0.170							Var	0.170				
FY 2002 EQUIPMENT																Var	0.105			Var	0.105						
FY 2003 EQUIPMENT																		Var	0.150	Var	0.150						
TO COMPLETE																				0	0.000						
TOTAL INSTALLATION COST		0	0.758	0	0.315	0	0.598	0	0.609	0	0.288	0	0.138	0	0.170	0	0.105	0	0.150	Var	3.131						
TOTAL PROCUREMENT COST		Var	8.338	Var	0.515	Var	1.838	Var	3.064	Var	2.630	Var	2.323	Var	2.427	Var	2.381	0	0.150	Var	23.666						
TOTAL COST		8.338		0.515		1.838		3.064		2.630		2.323		2.427		2.381		0.150		23.666							
METHOD OF IMPLEMENTATION		AIT				ADMINISTRATIVE LEADTIME:				Various				PRODUCTION LEADTIME:				Various									
CONTRACT DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various																	
PRODUCTION DELIVER DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various																	
Note: No individual kit exceeds 2 million dollars.																											

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: **MK XII AIMS Improvements**

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	Var	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1998	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	Var
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	0	0	0	0	Var
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT Var

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		AN/UPX-29 Improvements																			
MODELS OF SYSTEM AFFECTED:		Identification Systems																			
DESCRIPTION/JUSTIFICATION:		Centralized IFF system used aboard DDG-51, CG-47, and LHD-1 Class ships																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		Full Production																			
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&E</u>																				0	0.000
<u>PROCUREMENT</u>																				Var	8.880
INSTALLATION KITS																				Var	8.880
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING																					0.000
EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																					0.000
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR		Var 0.636				Var 0.502										Var 1.043		Var		2.181	
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
TO COMPLETE																					0.000
TOTAL INSTALLATION COST		Var 0.636		0 0.000		Var 0.000		Var 0.502		0 0.000		0 0.000		0 0.000		0 0.000		0 1.043		Var 2.181	
TOTAL PROCUREMENT COST		Var 9.516		0 0.000		0 0.000		0 0.502		0 0.000		0 0.000		0 0.000		0 0.000		0 1.043		Var 11.061	
TOTAL COST		9.516		0.000		0.000		0.502		0.000		0.000		0.000		0.000		1.043		11.061	
METHOD OF IMPLEMENTATION		AIT				ADMINISTRATIVE LEADTIME:		Various		PRODUCTION LEADTIME:		Various									
CONTRACT DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various											
PRODUCTION DELIVER DATE:		FY 1997: Various				FY 1998: Various				FY 1999: Various											

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/UPX-29 Improvements

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	Var	0	0	0	0	Var	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT Var

OUTPUT ==>	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						
FY 1996 & Prior	Var	0	0	0	0	0	0	0	0	Var	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Var	Var
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT Var

P-3A

P3A		INDIVIDUAL MODIFICATION																											
MODIFICATION TITLE:		AN/UPX-27 Replacement																											
MODELS OF SYSTEM AFFECTED:		AN/UPX-27																											
DESCRIPTION/JUSTIFICATION:		Current AN/UPX-27 is late 60s early 70s technology and is no longer as reliable as required. Due to its age it is hard to maintain because of obsolescence. A more reliable system with the same functionality is required. Maintenance alignment requirements are continually a problem with the current system, however should no longer be a problem with the current technology available.																											
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																													
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL									
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$								
FINANCIAL PLAN (IN MILLIONS)																													
<u>RDT&E</u>																					0	0.000							
<u>PROCUREMENT</u>																					0	0.000							
INSTALLATION KITS																					0	0.000							
INSTALLATION KITS (UNIT COST)																													
INSTALLATION KITS NONRECURRING																						0.000							
EQUIPMENT						41	4.800	63	6.300	77	7.700	82	8.200	88	8.800	94	9.400			445	45.200								
EQUIPMENT NONRECURRING																						0.000							
ENGINEERING CHANGE ORDERS																						0.000							
DATA																						0.000							
TRAINING EQUIPMENT																						0.000							
SUPPORT EQUIPMENT																						0.000							
OTHER																						0.000							
INTERIM CONTRACTOR SUPPORT																						0.000							
<u>INSTALLATION OF HARDWARE</u>																													
FY 1996 EQUIPMENT & PRIOR																					0	0.000							
FY 1997 EQUIPMENT																					0	0.000							
FY 1998 EQUIPMENT						3	0.090	38	0.570													41	0.660						
FY 1999 EQUIPMENT										63	0.948													63	0.948				
FY 2000 EQUIPMENT												77	1.055													77	1.055		
FY 2001 EQUIPMENT														82	1.230													82	1.230
FY 2002 EQUIPMENT																88	1.232	88	1.232			88	1.232						
FY 2003 EQUIPMENT																		94	1.316	94	1.316			94	1.316				
TO COMPLETE																					0	0.000							
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	3	0.090	38	0.570	63	0.948	77	1.055	82	1.230	182	2.548	445	6.441								
TOTAL PROCUREMENT COST		0	0.000	0	0.000	41	4.800	63	6.390	77	8.270	82	9.148	88	9.855	94	10.630	0	2.548	445	51.641								
TOTAL COST		0.000		0.000		4.800		6.390		8.270		9.148		9.855		10.630		2.548		51.641									
METHOD OF IMPLEMENTATION		AIT						ADMINISTRATIVE LEADTIME: 7				PRODUCTION LEADTIME: 20																	
CONTRACT DATE:		FY 1997: N/A		FY 1998: May-98				FY 1999: Feb-99																					
PRODUCTION DELIVER DATE:		FY 1997: N/A		FY 1998: Apr-99				FY 1999: Oct-00																					
The three installs in FY 99 are first articles, production deliveries start in Feb 2000.																													

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/UPX-27 Replacement

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	3	0	0	14	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	16	17	13	0	0	0	0	0	0	0	0	0	0	0	0	0	63
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	19	19	20	0	0	0	0	0	0	0	0	0	77
FY 2001	0	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	20	21	21	0	0	0	0	0	82
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	88	88	88		
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	94	94	94		
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT 445

OUTPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	3	0	0	14	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	18	19	13	0	0	0	0	0	0	0	0	0	0	0	0	0	63
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	19	19	20	0	0	0	0	0	0	0	0	0	77
FY 2001	0	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	20	21	21	0	0	0	0	0	82
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	88	88	88		
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	94	94	94		
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT 445

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE: SARTIS																			
MODELS OF SYSTEM AFFECTED: CG's																			
DESCRIPTION/JUSTIFICATION: Congressional plus-up to complete production/deployment for remaining 22 cruisers and three shore sites.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Updating specifications & revisiting Milestone III July '97 for contract award Aug '97.																			
FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																			
<u>RDT&E</u>																			
<u>PROCUREMENT</u>																			
INSTALLATION KITS																			
INSTALLATION KITS (UNIT COST)																			
INSTALLATION KITS NONRECURRING																			
EQUIPMENT																			
EQUIPMENT NONRECURRING																			
ENGINEERING CHANGE ORDERS																			
DATA																			
TRAINING EQUIPMENT																			
SUPPORT EQUIPMENT																			
OTHER																			
INTERIM CONTRACTOR SUPPORT																			
<u>INSTALLATION OF HARDWARE</u>																			
FY 1996 EQUIPMENT & PRIOR																			
FY 1997 EQUIPMENT																			
FY 1998 EQUIPMENT																			
FY 1999 EQUIPMENT																			
FY 2000 EQUIPMENT																			
FY 2001 EQUIPMENT																			
FY 2002 EQUIPMENT																			
FY 2003 EQUIPMENT																			
TO COMPLETE																			
TOTAL INSTALLATION COST																			
TOTAL PROCUREMENT COST																			
TOTAL COST																			
METHOD OF IMPLEMENTATION: AIT																			
CONTRACT DATE:																			
PRODUCTION DELIVER DATE:																			
ADMINISTRATIVE LEADTIME:																			
PRODUCTION LEADTIME:																			

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: SARTIS

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	0	0	0	6	6	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	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 INPUT 25

OUTPUT ==>	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					
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FY 1997	0	0	0	0	0	0	0	0	0	0	4	5	4	2	3	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	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 OUTPUT 25

P-3A

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23	A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment												B. P-1 ITEM NOMENCLATURE AN/UPX-27 REPLACEMENT IDENTIFICATON SYSTEMS - NAVAIRSYS								C. DATE FEBRUARY 1997				LATER
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				
	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)														14	12	12	13	18	19	13					
SCHOOLS/OTHER TRAINING (P)											1														
OTHER (P)											2														
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	0	0	3	3	17	29	41	54	72	91	104	104	104	104	104	
ASSETS ON HAND (BP)																									
DELIVERY FY 96 & PRIOR (P)																									
FY 96 & PRIOR (P)																									
FY 97 (P)																									
FY 98 (P)							S				3			14	12	12									
FY 99 (P)										S							17	16	17	13					
(P)																									
(P)																									
(P)																									
(P)																									
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	0	3	3	3	17	29	41	58	74	91	104	104	104	104	104	
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	4	2	0	0	0	0	0	0	
D. REMARKS	E. RQMT (QTY)											TOTAL RQMT		INSTALLED		ON HAND AS OF 10/01/96		FY 99 & PRIOR UNDELIVERED		UNFUNDED					
	1. APPN OPN											620		0		0		104		516					
	2. APPN -											54		0		0		0		54					
	3. PROCUREMENT LEADTIME											ADMIN 7		INITIAL ORDER		REORDER 20		20							

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT IDENTIFICATON SYSTEMS - NAVAIRSYSCOM MT031 AN/UPX-27 Replacement							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
						NAWCAD	3			LHD-1	2	FFG-57	2	DDG-996	2
						St Inigoes				LHD-2	3	FFG-37	2	LCC-19	1
										LHD-3	3	CGN-36	3	LHD-4	3
										FFG-54	2	CGN-37	3	LHD-5	3
										FFG-55	2	LSD-50	2	CVN-69	1
										AOE-7	2			DDG-994	2

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. **88** PAGE NO. **8A**

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CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT IDENTIFICATON SYSTEMS - NAVAIRSYSCOM AN/UPX-27 Replacement							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
CG-50	2	FTC NORVA	8	CG-69	2	CG-59	2								
CG-71	2	NATTC PEN	2	DD-970	2	CVN-65	5								
DD-972	2	FTSCLANT	2	DD-997	2	DD-968	2								
CVN-72	5	FTSCPAC	2	DD-979	2	DD-971	2								
CG-54	2	CG-52	2	LHA-3	3	DD-978	2								
		DDG-62	2	CG-63	2										
				CG-66	2										
				DDG-61	2										
				DDG-55	2										
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. **88** PAGE NO. **8B**

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23	A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment																B. P-1 ITEM NOMENCLATURE SARTIS NAVAIRSYSCOM IDENTIFICATON SYSTEMS - NAVAIRSYS								C. DATE FEBRUARY 1997				LATER					
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002													
	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)										4	5	4	2	3	2	2	3																	
SCHOOLS/OTHER TRAINING (P)																																		
OTHER (P)																																		
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	4	9	13	15	18	20	22	25	25	25	25	25	25	25	25	25	25	25	25	25	25				
ASSETS ON HAND (BP)																																		
DELIVERY FY 96 & PRIOR (P)																																		
FY 96 & PRIOR (P)																																		
FY 97 (P)				A						6	6	6	6	1																				
FY 98 (P)																																		
FY 99 (P)																																		
(P)																																		
(P)																																		
(P)																																		
(P)																																		
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	0	6	12	18	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25				
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	2	3	5	9	7	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
D. REMARKS	E. RQMT (QTY)																TOTAL RQMT				INSTALLED		ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED			
	1. APPN OPN																25				0		0				25				0			
	2. APPN -																				0		0				0							
	3. PROCUREMENT LEADTIME																ADMIN				8		INITIAL ORDER				REORDER							

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT IDENTIFICATON SYSTEMS - NAVAIRSYSCOM MT110 SARTIS							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
		AEGIS COMBAT SYS CEN	1	AEGIS TRNG CEN	1	NAWCAD PAX	1	CG-55	1	CG-58	1	CG-69	1	CG-73	1
		CG-52	1	CG-57	1	CG-64	1	CG-56	1	CG-61	1	CG-72	1	CG-65	1
		CG-53	1	CG-59	1	CG-66	1			CG-62	1				
		CG-54	1	CG-60	1	CG-67	1								
				CG-63	1										

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 88

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UNCLASSIFIED

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CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT IDENTIFICATON SYSTEMS - NAVAIRSYSCOM MT110							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
CG--68	1														
CG-70	1														
CG-71	1														
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. **88** PAGE NO. **8E**

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CLASSIFICATION:

REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B								DATE July 1996	
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communication and Electronic Equipment				P-1 ITEM NOMENCLATURE					
ITEM/PROJECT UNIT	TOTAL I0 / REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY 97 PROGRAM FUNDS	PLANNED BUDGET YEAR PROCUREMENT FY 98	PLANNED BUDGET YEAR PROCUREMENT FY 99	BALANCE	PHASING RATIONALE
MT003 AN/UPM-155	463		415	5	8	11	11	13	OUTYEAR FUNDING
MEMO ENTRIES									
COST CODE: MT003 AN/UPM-155 Test Set replaces the AN/UPX-137A for all surface ships with MK XII Interrogators and shore stations (Total = 463)									

BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				ID SYSTEMS - SPAWARSYSCOM (SABER PROGRAM) 52MT 285100				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)				\$1.1	\$1.5	\$1.8	\$0.6	

The Situational Awareness BEacon with Reply (SABER) system provides critical battlefield/operating area situational awareness and friendly ID capabilities by uniting GPS and UHF/SATCOM technologies. The SABER system consists of a GPS receiver and two-way UHF radio capable of Over-The-Horizon (OTH) and Line-of-Sight (LOS) communications. The GPS receiver maintains a constant accurate position of the user. When a correctly encoded interrogation signal is received by the SABER, it transmits a reply containing the users identification, position, time, heading, speed, altitude, GPS diagnostics, polling acknowledge and authorization codes. 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 friendly fire fratricide. SABER will be installed on ships and aircraft.

FY99 funding procures 75 SABER units and 1 Navy Standard Terminal. This is a new start procurement in FY99.

Installation Agent: Alteration Installation Teams

INDENT CODE: B

**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM COST ANALYSIS	DATE: February 1997
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B. APPROPRIATION/BUDGET ACTIVITY OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	C. P-1 ITEM NOMENCLATURE ID SYSTEMS - SPAWARSSYSCOM (SABER PROGRAM) 52MT 285100
--	---

COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
MT001	Production Support	A							N/A	77
MT002	SABER	B							75	961
MT003	Navy Standard Terminal	B							1	55
MT777	Installation	A							N/A	0
TOTAL PROGRAM										1,093

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						ID SYSTEMS - SPAWARSSYSCOM (SABER PROGRAM) 52MT 285100						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
MT002	SABER FY99/Comp*	FY99	TBD	WX/RCP	TBD	Jan-99	Jun-99	75	\$12,906	No	Yes	
MT003	Navy Standard Terminal FY99/Compt	FY99	TBD	WX/RCP	TBD	Jan-99	Jun-99	1	\$55,000	No	Yes	
D. REMARKS *The Navy Standard Terminal is part of the SABER network. It is procured via the same contract as SABER and installed with the SABER units.												

UNCLASSIFIED
CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE ID SYSTEMS - SPAWARSSYSCOM (SABER PROGRAM) 52MT 285100						
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE	
MT002	SABER	500					75	425	Outyear Funded	
MT003	Navy Standard Terminal	10					1	9	Outyear Funded	
MEMO ENTERED										
ITEM #1	MT002	SABER	qty	ITEM #2	MT003	Navy Standard Terminal	qty			
hull/location	208	hull/location	292	hull/location	CV,CVN	10				
Aircraft										
TOTAL I/O			500	TOTAL I/O			10			

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE Surface Identification Systems 285600			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$8.3	\$0.0	\$0.0	\$5.5	\$3.0	\$1.7	\$1.7	\$1.7
<p>DESCRIPTION:</p> <p>Surface Identification Systems fund procurement of the AN/SLQ-20 upgrade to improve the capability of the AN/SLQ-20 A, Auto-ID prototype upgrades, and the installation of Shipboard Advanced Radar Target Identification System (SARTIS) AN/UPX-34 RTDS ruggedized prototypes.</p> <p>The AN/SLQ-20 upgrade improves the capability of the Vietnam era AN/SLQ-20A EW System for AEGIS class ships. AUTO-ID is a laboratory prototype deployed during the Gulf War on CV/CVNs; due to other upgrades on CV/CVNs, AUTO-ID needs to be upgraded.</p> <p>FY96 and FY99 funds procure and install the following:</p> <p>FY96 provides funding to: procure and install three (3) Auto-ID prototype upgrades (for crossdecking), install one (1) SARTIS prototype unit, and forward fund the procurement of eleven (11) AN/SLQ-20 EW System upgrades in the FY97/98 time frame.</p> <p>FY99 provides funding to: procure 5 AN/SLQ-20 EW System upgrades and installation of 4 previously procured units.</p> <p>Installing Agent: Alteration Installation Teams 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> <p>Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS										DATE:			
P-5										FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD								
Other Procurement, Navy / BA2 - Communications and Electronics Equipment					Surface Identification Systems							42DB	
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS										
			FY 1996		FY 1997		FY 1998		FY 1999				
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST			
DB011	AN/SLQ-20 UPGRADE	B NOTE: 1	7	6,808					5	4,660			
DB013	AUTO-ID UPGRADE		3	815									
DB800	INTEGRATED LOGISTICS SUPPORT			133						183			
DB830	PRODUCTION ENGINEERING			253						183			
DB840	QUALITY ASSURANCE			15						55			
DB860	ACCEPTANCE, TEST & EVALUATION			0						67			
DB900	INSTALLATION (NON-FMP)									195			
DB910	INSTALLATION (FMP) NOTE: 2			250						95			
DB920	DESIGN SERVICE AGENT									24			
NOTE: 1 - Related RDT&E Elements W0676 IMPROVED ID DEVELOPMENTS													
NOTE: 2 -FY 96 Reflects installation of 1 SARTIS unit originally procured with RDT&E funds will now be installed aboard AEGIS (CG-47 Class) Cruisers for Fleet use.													
				8,274		0		0		5,462			

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CLASSIFICATION:

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

A. DATE

FEBRUARY 1997

B. APPROPRIATION/BUDGET ACTIVITY

Other Procurement, Navy / BA2 - Communications and Electronics Equipment

C. P-1 ITEM NOMENCLATURE

Surface Identification Systems

SUBHEAD

42DB

Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
DB011 AN/SLQ-20 EW SYSTEM UPGRADE FY95	TBD	C/FFP	NISE WEST	5/97	12/98	3	1,374.0	NO (10/96)		
FY96	TBD	OPTION/FFP	NISE WEST	5/97	3/99	7	972.6	NO (10/96)		
FY99	TBD	OPTION/FFP	NISE WEST	11/99	5/01	5	932.0	NO (10/96)		
DB014 AUTO-ID FY96	NAWCAD ST INIGOES	PO	NAWCAD St. Inigoes	11/95	3/96	3	271.7	YES		

D. REMARKS

CLASSIFICATION:

UNCLASSIFIED

MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)							DATE FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy / BA2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE Surface Identification Systems				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
AN/UPX-34 SARTIS	0.080								0.080
AN/SLQ-20 UPGRADE	0.035			0.314	0.776	0.448	0.343	0.104	2.020
AUTO-ID	0.135								0.135
TOTAL	0.250	0.000	0.000	0.314	0.776	0.448	0.343	0.104	2.235

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CLASSIFICATION:

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CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		AN/UPX-34 SARTIS																			
MODELS OF SYSTEM AFFECTED:		SURFACE ID																			
DESCRIPTION/JUSTIFICATION:		International Incident/Congressional direction (new capability). SARTIS will enable positive identification of aircraft. SARTIS will provide a core processor capable of interacting with two radars and dual channel Navy Tactical Data Systems.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																			
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&E</u>		2	4.400																	2	4.400
<u>PROCUREMENT</u>																					
INSTALLATION KITS																				0	0.000
INSTALLATION KITS (UNIT COST)																					
INSTALLATION KITS NONRECURRING																					0.000
EQUIPMENT																				0	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
INTERIM CONTRACTOR SUPPORT																					0.000
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR (0 KITS)		2	0.196																	2	0.196
FY 1997 EQUIPMENT																				0	0.000
FY 1998 EQUIPMENT																				0	0.000
FY 1999 EQUIPMENT																				0	0.000
FY 2000 EQUIPMENT																				0	0.000
FY 2001 EQUIPMENT																				0	0.000
FY 2002 EQUIPMENT																				0	0.000
FY 2003 EQUIPMENT																				0	0.000
TO COMPLETE																				0	0.000
TOTAL INSTALLATION COST		2	0.196	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	2	0.196
TOTAL PROCUREMENT COST		0	0.196	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	0.196
TOTAL COST			4.596		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		4.596
METHOD OF IMPLEMENTATION: AIT							ADMINISTRATIVE LEADTIME: N/A					PRODUCTION LEADTIME: N/A									
CONTRACT DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A															
PRODUCTION DELIVER DATE:		FY 1997: N/A		FY 1998: N/A		FY 1999: N/A															
Note: FY96 & prior reflects installation of 2 SARTIS units (1 in FY95; 1 in FY96) originally procured with RDT&E funds which will now be installed aboard AEGIS (CG-47 class) cruisers for fleet use.																					

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/UPX-34 SARTIS

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	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	0	0	0	0	2
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 INPUT 2

OUTPUT ==>	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						
FY 1996 & Prior	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	0	0	0	0	2
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT 2

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																				
MODIFICATION TITLE:		AN/SLQ-20 Upgrade																				
MODELS OF SYSTEM AFFECTED:		SURFACE ID																				
DESCRIPTION/JUSTIFICATION:		Upgrade Improves the capability of the Vietnam-era AN/SLQ-20A EW System for AEGIS class ships.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																				
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																				0	0.000	
PROCUREMENT																						
INSTALLATION KITS																				0	0.000	
INSTALLATION KITS (UNIT COST)																						
INSTALLATION KITS NONRECURRING																					0.000	
EQUIPMENT		10	10.930			5	4.660	2	1.906	1	0.974	1	0.995	1	1.017	8	8.807	28	29.289			
EQUIPMENT NONRECURRING																					0.000	
ENGINEERING CHANGE ORDERS																					0.000	
DATA																					0.000	
TRAINING EQUIPMENT																					0.000	
SUPPORT EQUIPMENT																					0.000	
OTHER																					0.000	
INTERIM CONTRACTOR SUPPORT																					0.000	
INSTALLATION OF HARDWARE																						
FY 1996 EQUIPMENT & PRIOR (10 Units)		AP	0.035			4	0.314	6	0.776											10	1.125	
FY 1997 EQUIPMENT																					0	0.000
FY 1998 EQUIPMENT																					0	0.000
FY 1999 EQUIPMENT (5 Units)										4	0.448	1	0.113								5	0.561
FY 2000 EQUIPMENT (2 Units)												2	0.230								2	0.230
FY 2001 EQUIPMENT (1 Unit)														1	0.104						1	0.104
FY 2002 EQUIPMENT (1 Unit)																1	0.120				1	0.120
FY 2003 EQUIPMENT (1 Unit)																1	0.120				1	0.120
TO COMPLETE (8 Units)																8	1.024				8	1.024
TOTAL INSTALLATION COST		0	0.035	0	0.000	0	0.000	4	0.314	6	0.776	4	0.448	3	0.343	1	0.104	10	1.264	28	3.284	
TOTAL PROCUREMENT COST		10	10.965	0	0.000	0	0.000	5	4.974	2	2.682	1	1.422	1	1.338	1	1.121	8	10.071	28	32.573	
TOTAL COST			10.965		0.000		0.000		4.974		2.682		1.422		1.338		1.121		10.071		28	32.573
METHOD OF IMPLEMENTATION: AIT												ADMINISTRATIVE LEADTIME: 1		PRODUCTION LEADTIME: 19								
CONTRACT DATE:		FY 1997: N/A					FY 1998: N/A					FY 1999: 11/99										
PRODUCTION DELIVER DATE:		FY 1997: N/A					FY 1998: N/A					FY 1999: 05/01										

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: AN/SLQ-20 Upgrade

INSTALLATION SCHEDULE:

INPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	1	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5
FY 2000	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	0	0	0	0	0	0	0	0	0	2
FY 2001	0	0	0	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	0	0	0	0	0	1
FY 2002	0	0	0	0	0	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	0	0	1	1
FY 2003	0	0	0	0	0	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	0	0	1	1
TO COMPLETE	0	0	0	0	0	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	0	0	8	8

TOTAL INPUT 28

OUTPUT ==>	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						
FY 1996 & Prior	0	0	0	0	0	0	0	0	0	0	1	2	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5
FY 2000	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	0	0	0	0	0	0	0	0	0	2
FY 2001	0	0	0	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	0	0	0	0	0	1
FY 2002	0	0	0	0	0	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	0	0	1	1
FY 2003	0	0	0	0	0	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	0	0	1	1
TO COMPLETE	0	0	0	0	0	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	0	0	8	8

TOTAL OUTPUT 28

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																				
MODIFICATION TITLE:		Auto ID Upgrade																				
MODELS OF SYSTEM AFFECTED:		CV/CVNs																				
DESCRIPTION/JUSTIFICATION:		Auto-ID units were laboratory prototypes built by JHU/APL with RDT&E funds to support the Gulf War. These R&D units have been cross-decked on carriers (CV/CVNs) with O&M,N since; but changes to carrier radars and software require Auto-ID upgrades.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		N/A																				
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																						
<u>RDT&E</u>																					0	0.000
<u>PROCUREMENT</u>																					3	0.815
INSTALLATION KITS		3	0.815																		3	0.815
INSTALLATION KITS (UNIT COST)																						
INSTALLATION KITS NONRECURRING																						0.000
EQUIPMENT																					0	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
INTERIM CONTRACTOR SUPPORT																						0.000
<u>INSTALLATION OF HARDWARE</u>																						
FY 1996 EQUIPMENT & PRIOR (3 Kits)		3	0.135																		3	0.135
FY 1997 EQUIPMENT																					0	0.000
FY 1998 EQUIPMENT																					0	0.000
FY 1999 EQUIPMENT																					0	0.000
FY 2000 EQUIPMENT																					0	0.000
FY 2001 EQUIPMENT																					0	0.000
FY 2002 EQUIPMENT																					0	0.000
FY 2003 EQUIPMENT																					0	0.000
TO COMPLETE																					0	0.000
TOTAL INSTALLATION COST		3	0.135	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	0.135	
TOTAL PROCUREMENT COST		3	0.950	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	0.950	
TOTAL COST			0.950		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.950	
METHOD OF IMPLEMENTATION: AIT																	ADMINISTRATIVE LEADTIME: N/A		PRODUCTION LEADTIME: N/A			
CONTRACT DATE:		FY 1997:	N/A					FY 1998:	N/A					FY 1999:	N/A							
PRODUCTION DELIVER DATE:		FY 1997:	N/A					FY 1998:	N/A					FY 1999:	N/A							

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: Auto ID Upgrade

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	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	3
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 INPUT 3

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	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	3
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TO COMPLETE	0	0	0	0	0	0	0	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 OUTPUT 3

P-3A

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23					A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 Communications and Electronics Equipment									B. P-1 ITEM NOMENCLATURE AN/SLQ-20B Upgrade Surface Identification Systems								C. DATE FEBRUARY 1997				LATER		
	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
ACTIVE FORCE INVENTORY (P)											1	1	1	2	2	2					2	2	1					
SCHOOLS/OTHER TRAINING (P)									1																			
OTHER (P)																												
TOTAL PHASED REQ (C)	0	0	0	0	0	0	0	0	0	1	2	3	4	6	8	10	10	10	10	12	14	15	15	15	15	15	15	15
ASSETS ON HAND (BP)																												
DELIVERY FY 96 & PRIOR (P)																												
FY 96 & PRIOR (P)									2	1	2	3	2															
FY 97 (P)																												
FY 98 (P)																												
FY 99 (P)																					2	2	1					
(P)																												
(P)																												
(P)																												
TOTAL ASSETS (C)	0	0	0	0	0	0	0	0	2	3	5	8	10	10	10	10	10	10	10	12	14	15	15	15	15	15	15	15
QTY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	2	2	3	5	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS	E. RQMT (QTY)				TOTAL RQMT				INSTALLED				ON HAND AS OF 10/01/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED							
	1. APPN - OPN								28				0				0				15				13			
	2. APPN -																											
	3. PROCUREMENT LEADTIME				ADMIN				1				INITIAL ORDER				19				REORDER				19			

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT Surface Identification Systems AN/SLQ-20B DB011							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
FY 1999								FY 2000							
		ISEA	1	DEPOT ATC WALLOPS	1	DDG	1	DDG	1	DDG DDG	1 1	DDG DDG	1 1	DDG DDG	1 1

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy / BA2 - Communications and Electronics Equipme								P-1 ITEM NOMENCLATURE/PROJECT UNIT Surface Identification Systems AN/SLQ-20B DB011							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
				DDG	1	DDG	1	DDG	1						
				DDG	1	DDG	1								
FY 2003								FY 2004							

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE Tactical Automated Mission Planning System (TAMPS) Y2S7			
	FY 1996*	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$4.8	\$7.0	\$15.7	\$24.2	\$23.7	\$17.5	\$15.3	\$15.4
<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. Items to 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. Workstation upgrade consists of only that hardware necessary to update current inventoried hardware to accommodate new software releases.</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>* FY96 and prior funding is budgeted under the BA-3 Other Aviation Support Equipment program. Starting in FY97, TAMPS becomes its own line item under BA-2.</p> <p>Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>								

P-1 SHOPPING LIST

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WEAPONS SYSTEM COST ANALYSIS									DATE:	
P-5									February 1997	
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD						
Other Procurement, Navy				Tactical Automated Mission Planning System (TAMPS) Y2S7						
BA-2 - Communications and Electronics Equipment										
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996*		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
S7400	New Workstations		43	2,992	93	3,724	194	10,210	281	15,115
S7405	Workstation Upgrades						78	2,896	99	3,749
S7410	Software Release			1,001		2,133		1,118		1,565
S7430	Production Support			782		808		1,051		1,545
S7900	Non-FMP Installation			14		307		447		1,790
S7910	FMP Installation									384
TBD	Design Service Agent (FMP Install)									100
				4,789		6,972		15,722		24,248

* FY96 and prior funding is budgeted under the BA-3 Other Aviation Support Equipment (OASE) program. Starting in FY97, TAMPS becomes its own line under BA-2.

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE February 1997	
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	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
FY96 *	Planning Technologies, Inc. Atlanta GA	C/FFP	GSA	04/96	06/96	43	69.6 (New)	N/A	N/A	N/A
FY97	Cordant, Inc., Reston, VA Intergraph Corp. Huntsville, AL	C/FFP	NAFAC CAD2	01/97	04/97	93	40.0 (New)	N/A	N/A	N/A
FY98	TBD	C/FFP	NAVAIR CAD2	01/98	04/98	194 78	52.6 (New) 37.1 (Replacmnt)	N/A	N/A	N/A
FY99	TBD	C/FFP	NAVAIR CAD2	01/99	04/99	281 99	53.8 (New) 38.0 (Replacmnt)	N/A	N/A	N/A

D. REMARKS
 TAMPS hardware is a Nondevelopmental Item purchased via the NAVAIR/NAVFAC CAD2 omnibus contract. Delivery orders are placed against contracts which are competed every 18 - 24 months.
 * FY96 hardware purchased via GSA due to TAC-4 contract limitations.
 Note: FY96 and prior year funding is budgeted under BA-3 Other Aviation Support Equipment program. Starting in FY97, TAMPS is a separate line item in BA-2.

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MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)								DATE February 1997	
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy BA-2 - Communications and Electronics Equipment					P-1 ITEM NOMENCLATURE Tactical Automated Mission Planning System (TAMPS) Y2S7				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
Tactical Automated Mission Planning System (TAMPS) Hardware	0.0	0.3	0.4	2.3	1.8	0.8	0.9	0.9	7.4
Note: FY96 and prior funding is budgeted under the BA-3 Other Aviation Support Equipment program. Starting in FY97, TAMPS has its own line item.									
TOTAL	0.0	0.3	0.4	2.3	1.8	0.8	0.9	0.9	7.4

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P3A INDIVIDUAL MODIFICATION																					
MODIFICATION TITLE:		TAMPS																			
MODELS OF SYSTEM AFFECTED:		Aviation Capable Ships, Air Stations, Aviation Units, Aviation Training/Support Facilities																			
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:		TAMPS is Post Milestone III																			
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<u>FINANCIAL PLAN (IN MILLIONS)</u>																					
RD&E			2.5		2.4		2.4		9.1		10.4		17.2		17.6		18.0		CONT	0	79.6
PROCUREMENT																					
HARDWARE																				0	0.0
NEW		253	70.5	93	3.7	194	10.2	281	15.1	276	15.2	183	10.3	0	0.0	0	0.0			1280	125.0
NEW - UNIT COST			0.279		0.040		0.053		0.054		0.055		0.056		0.000		0.000				
UPGRADE						78	2.9	99	3.7	107	4.1	85	3.4	272	11.0	266	11.0		CONT	907	36.1
UPGRADE - UNIT COST							0.037		0.037		0.038		0.040		0.041		0.041				
SOFTWARE			24.8		2.1		1.1		1.6		1.4		1.9		2.1		2.2				37.2
PRODUCTION SUPPORT			7.6		0.8		1.1		1.5		1.2		1.1		1.4		1.4				16.1
<u>INSTALLATION OF HARDWARE</u>																					
FY 1996 EQUIPMENT & PRIOR		253	0.9																	253	0.9
FY 1997 EQUIPMENT				93	0.3															93	0.3
FY 1998 EQUIPMENT						272	0.4													272	0.4
FY 1999 EQUIPMENT								380	2.3											380	2.3
FY 2000 EQUIPMENT										383	1.8									383	1.8
FY 2001 EQUIPMENT												268	0.8							268	0.8
FY 2002 EQUIPMENT														272	0.9					272	0.9
FY 2003 EQUIPMENT																266	0.9			266	0.9
TO COMPLETE																				0	0.0
TOTAL INSTALLATION COST		253	0.9	93	0.3	272	0.4	380	2.3	383	1.8	268	0.8	272	0.9	266	0.9	0	0.0	2187	8.2
TOTAL PROCUREMENT COST		253	103.8	93	7.0	272	15.7	380	24.2	383	23.7	268	17.5	272	15.3	266	15.4	0	0.0	2187	222.6
TOTAL COST			106.3		9.4		18.1		33.3		34.1		34.7		32.9		33.5		0.0		302.2
METHOD OF IMPLEMENTATION:		Field Installation Teams				ADMINISTRATIVE LEADTIME: 90-120 Days						PRODUCTION LEADTIME: N/A									
CONTRACT DATE:		FY 1997: JAN 97				FY 1998: JAN 98				FY 1999: JAN 99											
PRODUCTION DELIVER DATE:		FY 1997: APR 97				FY 1998: APR 98				FY 1999: APR 99											

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P3A (Continued)		INDIVIDUAL MODIFICATION (Continued)																																					
MODIFICATION TITLE: <u>TAMPS</u>																																							
INSTALLATION SCHEDULE:																																							
INPUT ==>	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	1	2	3	4	1	2	3	4		
FY 1996 & Prior	253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	253
FY 1997	0	0	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
FY 1998	0	0	0	0	0	0	272	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272
FY 1999	0	0	0	0	0	0	0	0	0	0	380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	380
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	383	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	383
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	266	0	0	0	0	0	0	0	0	0	0	0	266
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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 INPUT																													2187								
OUTPUT ==>	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	1	2	3	4	1	2	3	4		
FY 1996 & Prior	253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	253
FY 1997	0	0	0	47	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
FY 1998	0	0	0	0	0	0	0	136	136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272
FY 1999	0	0	0	0	0	0	0	0	0	0	0	190	190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	380
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	192	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	383
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134	134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136	136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	133	133	0	0	0	0	0	0	0	0	0	266
TO COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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 OUTPUT																													2187								

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TIME PHASED REQUIREMENT SCHEDULE					A. APPROPRIATION/BUDGET ACTIVITY								B. P-1 ITEM NOMENCLATURE								C. DATE				LATER									
P-23					Other Procurement, Navy BA-2 Comm. and Electronics Equipment								Tactical Automated Mission Planning System (TAMPS)								Feb 1997													
					FY 1997				FY 1998				FY 1999				FY 2000				FY 2001					FY 2002								
					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)																																	
SCHOOLS/OTHER TRAINING	(P)																																	
OTHER	(P)			47	46			136	136					187	187					190	187					134	134					136	136	266
TOTAL PHASED REQ	(C)	0	0	47	93	93	93	229	365	365	365	555	745	745	745	937	1128	1128	1128	1262	1396	1396	1396	1532	1668	1934								
ASSETS ON HAND	(BP)																																	
DELIVERY FY 96 & PRIOR	(P)																																	
FY 96 & PRIOR	(P)																																	
FY 97	(P)			47	46																													
FY 98	(P)							136	136																									
FY 99	(P)											190	190																					
FY 00	(P)															192	191																	
FY01	(P)																			134	134													
FY02	(P)																										136	136						
FY03	(P)																											266						
TOTAL ASSETS	(C)	0	0	47	93	93	93	229	365	365	365	555	745	745	745	937	1128	1128	1128	1262	1396	1396	1396	1532	1668	1934								
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
D. REMARKS TOTAL REQUIREMENT COMPRISED OF NEW (1280) AND REPLACEMENT (907) WORKSTATIONS					E. RQMT (QTY)								TOTAL RQMT				INSTALLED				ON HAND AS OF 10/1/96				FY 99 & PRIOR UNDELIVERED				UNFUNDED					
					1. APPN - 1810								2187				253				0				745				0					
					2. APPN -																													
					3. PROCUREMENT LEADTIME								ADMIN 90-120 days				INITIAL ORDER same				REORDER same													

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2 - Communications and Electronics Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT Tactical Automated Mission Planning System (TAMPS)							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
				USN Squad	22	USN Squad	23					USN Squad	67	USN Squad	67
				USMC Squad	23	USMC Squad	23					USMC Squad	67	USMC Squad	67
				Intel Act.	2							Intel Act.	4		
FY 1999								FY 2000							
				USN Squad	96	USN Squad	93					USN Squad	87	USN Squad	91
				USMC Squad	89	USMC Squad	93					USMC Squad	63	USMC Squad	58
				LHA00	3	LHD00	3					LHA00	2	LHD00	4
				Intel Act.	3							Intel Act.	7	Air stations	38
												Fleet Com.	7		
												Battle Group	15		
												Air Stations	11		

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2 Communicationns and Electronic Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT Tactical Automated Mission Planning System (TAMPS)							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2001								FY 2002							
				USN Squad USMC Squad	69 65	USN Squad USMC Squad	69 65					USN Squad USMC Squad	68 68	USN Squad USMC Squad	68 68

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BUDGET ITEM JUSTIFICATION SHEET					DATE			
					Feb-97			
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				JMCIS Ashore (LI #2804) (formerly in NCCS Ashore LI 2906) 52**				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)			\$3.4	\$4.9	\$7.9	\$7.9	\$7.8	\$9.1
<p>PROGRAM COVERAGE: The Joint Maritime Command Information System (JMCIS) Ashore program (formerly Operations Support System (OSS) and included in LI 2906, NCCS Ashore) provides evolutionary systems and ancillary equipment upgrades to support the CNO, Fleet Commanders in Chief, Unified Commanders, Force Anti-Submarine Warfare (ASW) Commander, and Submarine Operating Authorities worldwide. The Command and Control services provided a single Command and Control (C2) 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. JMCIS Ashore will provide current geolocational information on hostile land, sea and air forces integrated with environmental and other nationally derived information. JMCIS Ashore will provide the tools necessary for operational commanders to execute plans, and to transmit tasking and tactical information to forces in their respective Areas of Responsibility (AORs).</p> <p>**031. JMCIS Ashore (formerly OSS). Provides the Fleet Command Centers, 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. OSS implements incremental changes in an evolutionary manner using modular segments as operational requirements dictate and as funding and technology allow. Hardware suites to support OSS follow a client/server design implementing LAN and WAN architecture, serial and parallel processors, communications and database servers. OSS also offers distributed briefing capabilities among commands using video and large screen displays.</p> <p>**776. Installation of Equipments. Provides for installation of equipments at the shore sites listed below.</p> <p>The FY 98 Budget Request Procures: 1. JMCIS Ashore Command Center Equipment; 2. Installation of Equipment. The FY 99 Budget Request Procures: 1. JMCIS Ashore Command Center Equipment; 2. Installation of Equipment.</p> <p>INSTALLATION DATA: NCCS Shore equipment installation sites include the Navy Command Center Pentagon; USCINCLANT; USCINCPAC; CINCLANTFLT; CINCPACFLT; CINCUSNAVEUR; Software Support Facility (San Diego, CA) ; 4 Submarine Operating Command Center sites at Yokosuka, Japan; Pearl Harbor, HI; Norfolk, VA and Naples, Italy; 4 Shore ASW Command Center sites at Kamiseya, Norfolk, Makalapa, and Naples; TYCOM sites at SURFPAC, AIRPAC, SUBPAC, SURFLANT, AIRLANT, SUBLANT; and FCTC, Dam Neck, VA.</p>								
MODIFICATION SUMMARY (\$M)								
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:								
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>
JMCIS Ashore			\$3.4	\$4.9	\$7.9	\$7.9	\$7.8	\$9.1

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WEAPON SYSTEM COST ANALYSIS								DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE JMCIS Ashore (LI #2804) (formerly in NCCS Ashore LI 2906) 52**					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY96		FY97		FY98		FY99		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
**031	JMCIS Ashore (formerly OSS)	A					VAR	2,918	4521	4,521	
**776	Non FMP Install	A					VAR	475	VAR	376	
	TOTAL PROGRAM							3,393		4,897	

MODIFICATION TITLE: JMCIS Ashore
 MODELS OF SYSTEMS AFFECTED: N/A
 DESCRIPTION/JUSTIFICATION: JMCIS Ashore (formerly OSS) provides a single C3I capability 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. JMCIS Ashore provides information to help optimize the allocation of Naval resources.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment					VAR	2.9	VAR	4.5	VAR	7.0	VAR	7.2	VAR	7.1	VAR	8.3	N/A	N/A	N/A	N/A	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware *					23	0.5	23	0.4	23	0.9	23	0.7	23	0.7	23	0.8	N/A	N/A	N/A	N/A	
PRIOR YR EQUIP																					0
FY 97 EQUIP																					0
FY 98 EQUIP					23	0.5															23
FY 99 EQUIP							23	0.4													23
FY 00 EQUIP									23	0.9											23
FY 01 EQUIP											23	0.7									23
FY 02 EQUIP													23	0.7							23
FY 03 EQUIP															23	0.8					23
FY TC EQUIP																					23
TOTAL INSTALLATION COST					23	0.5	23	0.4	23	0.9	23	0.7	23	0.7	23	0.8	N/A	N/A	N/A	N/A	
TOTAL PROCUREMENT COST					VAR	3.4	VAR	4.9	VAR	7.9	VAR	7.9	VAR	7.8	VAR	9.1	N/A	N/A	N/A	N/A	

METHOD OF IMPLEMENTATION:

Depot field teams ADMINISTRATIVE LEADTIME: VAR PROCUREMENT LEADTIME: VAR

CONTRACT DATES:

FY 1997: VAR FY 1998: VAR FY 1999: VAR

DELIVERY DATES:

FY 1997: VAR FY 1998: VAR FY 1999: VAR

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT 12 11 12 11 12 11

OUTPUT 12 11 12 11 12 11

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	

INPUT 12 11 12 11 12 11 N/A

OUTPUT 12 11 12 11 12 11 N/A

* P-5 CONTAINS VAR AS QUANTITY, P-3A CONTAINS "NUMBER OF SHORE SITES" AS QUANTITY

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET					DATE																					
					Feb-97																					
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE																							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT			JMCIS OED (LI #2805) (formerly in NCCS Ashore LI 2906) 52**																							
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																		
QUANTITY																										
COST (in millions)			\$0.3	\$0.4	\$0.5	\$0.6	\$0.6	\$0.6																		
<p>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.</p> <p>**011. Correlation 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.</p> <p>**776. Installation of Equipments. Provides for installation of equipments at the shore sites listed below.</p> <p>The FY 98 Budget Request Procures: 1. JMCIS OED upgrades; 2. Initial training for these systems; and 3. Installation of Equipment. The FY 99 Budget Request Procures: 1. JMCIS OED upgrades; 2. Initial training for these systems; and 3. Installation of Equipment.</p> <p>INSTALLATION DATA: JMCIS OED equipment installation sites include ONI, JICPAC, JICPAC DETACHMENT,AIC, NMITC, and JAC MOLESWORTH.</p> <p style="text-align: center;">MODIFICATION SUMMARY (\$M)</p> <p>Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:</p> <table border="1"> <thead> <tr> <th><u>EQUIPMENT</u></th> <th><u>FY96</u></th> <th><u>FY97</u></th> <th><u>FY98</u></th> <th><u>FY99</u></th> <th><u>FY00</u></th> <th><u>FY01</u></th> <th><u>FY02</u></th> <th><u>FY03</u></th> </tr> </thead> <tbody> <tr> <td>JMCIS OED</td> <td></td> <td></td> <td>\$0.3</td> <td>\$0.4</td> <td>\$0.5</td> <td>\$0.6</td> <td>\$0.6</td> <td>\$0.6</td> </tr> </tbody> </table>									<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	JMCIS OED			\$0.3	\$0.4	\$0.5	\$0.6	\$0.6	\$0.6
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>																		
JMCIS OED			\$0.3	\$0.4	\$0.5	\$0.6	\$0.6	\$0.6																		

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UNCLASSIFIED
CLASSIFICATION

**UNCLASSIFIED
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WEAPON SYSTEM COST ANALYSIS								DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE JMCIS OED (LI #2805) (formerly in NCCS Ashore LI 2906) 52**					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY96		FY97		FY98		FY99		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
**011	JMCIS OED	A	VAR		VAR		VAR	313	VAR	382	
**776	Non FMP Install	A	VAR		VAR		VAR	30	VAR	37	
	TOTAL PROGRAM							343		419	

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING											A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY											Feb-97		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE							
						JMCIS OED						52**	
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE	
**011	JMCIS OED File Servers	FY98	Various	Option C/FFPN	NISMIC/SPAWAR	Apr-98	Jun-98	6	\$52,333	YES	NO	N/A	
	JMCIS OED Workstations	FY99	Various	Option C/FFPN	NISMIC/SPAWAR	Apr-99	Jun-99	15	\$25,600	YES	NO	N/A	
D. REMARKS													

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Exhibit P-5A

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MODIFICATION TITLE: JMCIS OED

MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: JMCIS OED provides for the analysis of intelligence information from multiple sources to produce a comprehensive report of foreign forces and potential hostile activity. JMCIS OED provides positional data and operational intelligence to commanders at all levels. It consists of three Joint Intelligence Centers (JIC), one JIC Detachment, a software support activity, and a training site. 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.

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 (OPEVFOR).

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment					VAR	0.3	VAR	0.3	VAR	0.5	VAR	0.5	VAR	0.6	VAR	0.6	N/A	N/A	N/A	N/A	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware *					6	0.03	2	0.037	3	0.028	3	0.033	3	0.034	2	0.035	N/A	N/A	N/A	N/A	
PRIOR YR EQUIP																					VAR 0.00
FY 97 EQUIP																					0 0.00
FY 98 EQUIP					6	0.03															6 0.03
FY 99 EQUIP							2	0.037													2 0.04
FY 00 EQUIP									3	0.028											3 0.03
FY 01 EQUIP											3	0.033									3 0.03
FY 02 EQUIP													3	0.034							3 0.03
FY 03 EQUIP															2	0.035					2 0.04
FY TC EQUIP																	N/A	N/A	N/A	N/A	
TOTAL INSTALLATION COST					6	0.03	2	0.037			3	0.033	3	0.034	2	0.035	N/A	N/A	N/A	N/A	
TOTAL PROCUREMENT COST					VAR	0.3	VAR	0.4	VAR	0.5	VAR	0.6	VAR	0.6	VAR	0.6	N/A	N/A	N/A	N/A	

METHOD OF IMPLEMENTATION: Depot Field Team

ADMINISTRATIVE LEADTIME: N/A

PROCUREMENT LEADTIME: N/A

CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

DELIVERY DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00									
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT																						3	
OUTPUT																							3
INSTALLATION SCHEDULE:																							TOTAL
INPUT																							N/A
OUTPUT																							N/A

* INSTALL QUANTITIES REFLECT INSTALLATIONS AMONG 6 U.S. SITES.

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BUDGET ITEM JUSTIFICATION SHEET						DATE		
						Feb-97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				TADIXS B 290000 52DH				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$2.0	\$14.9	\$5.2	\$26.4	\$34.6	\$22.1	\$7.9	\$3.7
<p>PROGRAM COVERAGE: 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 a 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 by all services, including OPTEVFOR. 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) will be procured to allow migration of CTT to be upgraded to JTT functional level. CIBS-M also provides expanded capability for JTT to meet outyear and emergent requirements.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: FY97, FY98 and FY99 funds will procure JTTs, ancillary hardware and appropriate production support</p> <p>INSTALLATION AGENT: Naval Command, Control and Ocean Surveillance Center In-Service Engineering , East Coast Division /West Coast Division (NISE East/NISE West) will install systems on Navy surface ships, submarines and Navy Shore stations. Shipboard installations will be accomplished by Alteration Installation Teams (AITs)</p> <p>Note: Budget reflects transfer of design services into the appropriate equipment P-1 line item beginning FY 1998.</p> <p>Listed below are the costs(i.e. hardware and installation) for equipment being procured in this line that have associated installation costs budgeted.</p>								
EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
JTT	2.0	13.1	3.9	17.1	25.3	13.0	1.2	2.0

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS							DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE TADIXS B 290000 52DH					
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
DH400	Production Support	A			VAR	1,211	VAR	1,002	VAR	1,095
DH520	JTT	A	VAR	2,033	37	13,102	13	3,907	57	17,096
DH776	Non FMP Installation	A							13	1,940
DH777	FMP Installation	A			VAR	588			VAR	5,519
	Design Service Agent	A					VAR	330	VAR	714
TOTAL PROGRAM				2,033		14,901		5,239		26,364

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING											A. DATE	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						TADIXS B 290000 52DH						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
DH520	JTT System	FY97	TBD	FFP	Army	Mar-97	Jan-99	37	\$354,108	Yes	No	N/A
DH520	JTT System	FY98	TBD	FFP/Opt	Army	Jan-98	May-99	13	\$300,538	Yes	No	N/A
DH520	JTT System	FY99	TBD	FFP/Opt	Army	Jan-99	Jan-00	57	\$299,930	Yes	No	N/A
D. REMARKS												
Unit prices include funds for ancillary hardware and miscellaneous interface equipment.												

UNCLASSIFIED

MODIFICATION TITLE: TADIXS B

MODELS OF SYSTEMS AFFECTED: Joint Tactical Terminals (JTT)

DESCRIPTION/JUSTIFICATION: Army is the lead service for JTT procurement per OSD direction in PBD720 Dtd 22Jan 1996.

Feb-97

This display includes installation of both shipboard (FMP) and Shore (non-FMP) equipment

Note: The CTT units bought prior to FY97 will migrate to JTT configuration using CIBS-M to meet the total requirement of 183.

FY00 begins procurement of various configurations of CIBS-M with 12 units in FY00.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
RDT&E																						
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment	4	7.4	37	13.1	13	3.9	57	17.1	72	25.3	VAR	13.0	VAR	1.2	VAR	2.0				183	83.0	
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Eqpt			4	0.6																	4	0.6
FY97 Eqpt																						
FY98 Eqpt							50	8.2													50	8.2
FY99 Eqpt									50	8.2											50	8.2
FY00 Eqpt											50	8.1									50	8.1
FY01 Eqpt													29	5.7							29	5.7
FY02 Eqpt															VAR	1.1				VAR	1.1	1.1
FY03 Eqpt																	VAR	1.0	VAR	1.0	1.0	1.0
FY TC Eqpt																						
Total Installation Cost				0.6				8.2		8.2		8.1		29	5.7		1.1		1.0		183	32.9
Total Procurement Cost		7.4		13.7		3.9		25.3		33.5		21.1		6.9		3.1		1.0				115.9

METHOD OF IMPLEMENTATION:

AIT ADMINISTRATIVE LEADTIME: 4 months PROCUREMENT LEADTIME: 12 months

CONTRACT DATES:

FY 1997: 1/97 FY 1998 1/98 FY 1999 1/99

DELIVERY DATE:

FY 1997: 8/98 FY 1998 1/99 FY 1999 1/00

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00									
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT				4									25	12	13					16	17	17
OUTPUT								4					12	13	12		13				16	17

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	7	18	18	7	18	11								183
OUTPUT	17	7	18	18	7	18	11							183

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES								A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY								Feb-97			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE							
				TADIXS B		290000		52DH			
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE		
DH520 JTT Systems	183			4	37	13	57	72	Dutyyear Funded		
MEMO ENTERED											
ITEM #1 DH520 JTT Systems	cost code	item	hull/location	qty	ITEM #2 cost code item	hull/location	qty	ITEM #3 cost code item	hull/location	qty	
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	
Ships/Subs	160										
Shore	13										
Training/Suppc	10										
TOTAL I/O				183							
ITEM #4 cost code item	hull/location	qty	ITEM #5 cost code item	hull/location	qty	ITEM #6 cost code item	hull/location	qty	TOTAL I/O		
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	
TOTAL I/O				TOTAL I/O				TOTAL I/O			

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Exhibit P-23B

**UNCLASSIFIED
CLASSIFICATION**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
Other Procurement, Navy BA2/Communications & Electronics Equipment					National Imagery Support (NIS) (J25E) (PEO(CU))			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	-	-	-	-	-	-	-	-
COST (In Millions)	\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<p>The National Imagery Support (NIS) project provides a capability to electronically provide real time/near real time original resolution imagery to afloat tactical users. Current systems provide imagery on a degraded, non-real time basis either electronically or on magnetic media. The system will interface with a shipboard satellite antenna, and the Digital Imagery Workstation Suite Afloat (DIWSA). The NIS will satisfy the requirements to provide national imagery to the Joint Service Imagery Processing System - Navy (JSIPS-N). The JSIPS-N DIWSA serves as the national and tactical imagery processing, analysis, and storage system for afloat Tomahawk/TACAIR mission planning, mission rehearsal, and C3I systems.</p> <p>COMMENCING IN FY 1997 THIS PROGRAM TRANSFERS TO BUDGET LINE ITEM 426000, DEFENSE AIRBORNE RECONNAISSANCE PROGRAM (DARP), PROCUREMENT, DEFENSE WIDE APPROPRIATION.</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS									DATE:	
P-5									February 1997	
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD						
Other Procurement, Navy				National Imagery Support (NIS) (J25E) (PEO(CU))						
BA2/Communications & Electronics Equipment										
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
01000	National Imagery Support (NIS) National Input Segment	N/A	1	1,250	0	0	0	0	0	0
<p>COMMENCING IN FY 1997 THIS PROGRAM TRANSFERS TO BUDGET LINE ITEM 426000, DEFENSE AIRBORNE RECONNAISSANCE PROGRAM (DARP), PROCUREMENT, DEFENSE WIDE APPROPRIATION.</p>										
				1,250		0		0		0

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CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA2/Communications & Electronics Equipment				C. P-1 ITEM NOMENCLATURE National Imagery Support (NIS)				SUBHEAD J25E		
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
National Input Segment FY96	TRW Los Angeles, CA	C/FPP	USAF	Feb 96	Feb 97	1	1,250	Yes	No	
D. REMARKS COMMENCING IN FY 1997 THIS PROGRAM TRANSFERS TO BUDGET LINE ITEM 426000, DEFENSE AIRBORNE RECONNAISSANCE PROGRAM (DARP), PROCUREMENT, DEFENSE WIDE APPROPRIATION.										

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																					
MODIFICATION TITLE:		National Input Segment (NIS)																					
MODELS OF SYSTEM AFFECTED:		CVNs/LHAs/LHDs																					
DESCRIPTION/JUSTIFICATION:		The National Input Segment provides a capability to electronically provide realtime/near real time original resolution imagery to afloat tactical users. The NIS will satisfy the requirement to provide national imagery to the Joint Service Imagery Processing System - Navy (JSIPS-N).																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																							
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<u>FINANCIAL PLAN (IN MILLIONS)</u>																							
<i>RDT&E</i>																							
<i>PROCUREMENT</i>																							
INSTALLATION KITS		1	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	1	1.3
INSTALLATION KITS - UNIT COST			1.300		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		
INSTALLATION KITS NONRECURRING EQUIPMENT																							
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT			0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
OTHER																							
INTERIM CONTRACTOR SUPPORT																							
<u>INSTALLATION OF HARDWARE</u>																							
FY 1996 EQUIPMENT & PRIOR																							
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
TO COMPLETE																							
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	0	0.0
TOTAL PROCUREMENT COST		1	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	1	1.3
TOTAL COST			1.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.3
METHOD OF IMPLEMENTATION:		Alteration Installation Team (AIT)						ADMINISTRATIVE LEADTIME: 6 months						PRODUCTION LEADTIME: 12 months									
CONTRACT DATE:		FY97: N/A						FY98: N/A						FY99: N/A									
PRODUCTION DELIVER DATE:		FY97: N/A						FY98: N/A						FY99: N/A									
NIS IS A TURNKEY INSTALLATION; THEREFORE INSTALLATION COSTS ARE NOT SEPARATELY BROKEN OUT ON THIS P-3A.																							
THIS EXHIBIT ADDRESSES ONLY REQUIREMENTS FUNDED BY OTHER PROCUREMENT, NAVY APPROPRIATION; THE TOTAL PROGRAM QUANTITY OF 1 REFLECTS THE NAVY-FUNDED PORTION OF THE INVENTORY OBJECTIVE FOR THIS ITEM.																							
COMMENCING IN FY 1997 THIS PROGRAM TRANSFERS TO BUDGET LINE ITEM 426000, DEFENSE AIRBORNE RECONNAISSANCE PROGRAM (DARP), PROCUREMENT, DEFENSE WIDE APPROPRIATION.																							

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: **National Input Segment**

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	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
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To Complete	0	0	0	0	0	0	0	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 INPUT																1															

OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	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
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To Complete	0	0	0	0	0	0	0	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 OUTPUT																1															

COMMENCING IN FY 1997 THIS PROGRAM TRANSFERS TO BUDGET LINE ITEM 426000, DEFENSE AIRBORNE RECONNAISSANCE PROGRAM (DARP), PROCUREMENT, DEFENSE WIDE APPROPRIATION. NIS IS A TURNKEY INSTALLATION.

P-3A

**UNCLASSIFIED
CLASSIFICATION**

BUDGET ITEM JUSTIFICATION SHEET					DATE Feb-97			
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT			JMCIS Tactical/Mobile (JTM)(formerly NCCS Ashore) LI #2906 52T4					
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY2003
QUANTITY								
COST (in millions)	\$8.9	\$50.2	\$2.9	\$5.7	\$3.7	\$5.7	\$6.2	\$6.9
<p>PROGRAM COVERAGE: Through FY97, the Navy Command and Control System (NCCS) Ashore program provides 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 Warfare (ASW) Commander, Sector Surveillance 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 becomes the Joint Maritime Command Information System (JMCIS) Tactical/Mobile (JTM) program. The JTM Systems are nodes of the Navy Command and Control System (NCCS) Ashore, and 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 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. TSCs consist of C4I systems (based on the Joint Maritime Command Information System (JMCIS) common architecture) which will evolve to the Navy's implementation of the Defense Information Infrastructure (DII) Common Operating Environment (COE); 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. MAST and MICFAC are miniaturized mobile facilities designed to support a theater commander or naval liaison element ashore. MAST provides a deployable basic C3 capability, and MICFAC provides a deployable complete C4I capability (less special compartmented information elements). The Mobile Inshore Undersea Warfare System Upgrade (MIUW-SU) provides improved surface/subsurface surveillance of inshore areas, C4I support, and crisis response support to special operations and law enforcement forces. Inshore surveillance data from remote acoustic sensors, thermal imagers, radar, sonar and optical sensors is correlated into intelligence holdings. The system upgrade provides enhanced underwater sensors and acoustic processing, surveillance, tracking and classification of surface and subsurface contacts, expanded areas of operational coverage, incorporation of ESM, rapid deployment capabilities, improved operational communications and embedded training.</p> <p>T4011. Correlation 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. Beginning in FY 98, this program transfers to LI #2805, JMCIS OSIS Evolutionary Development (OED) program.</p> <p>T4031. Operations Support System (OSS). OSS provides the Fleet Command Centers, Unified Command Centers, and the Navy Command Center with a common C3I capability. OSS 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. OSS implements incremental changes such as Fleet Planning Center improvements in an evolutionary manner using modular segments as operational requirements dictate and as funding and technology allow. Hardware suites to support OSS follow a client/server design implementing LAN and WAN architecture, serial and parallel processors, communications and database servers. OSS also offers distributed briefing capabilities among commands using video and large screen displays. Beginning in FY 98, this program transfers to LI #2804, JMCIS Ashore.</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.</p>								

P-1 SHOPPING LIST

ITEM NO. 95
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**Exhibit P-40
UNCLASSIFIED
CLASSIFICATION**

**UNCLASSIFIED
CLASSIFICATION**

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE Feb-97
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	JMCIS Tactical/Mobile (JTM)(formerly NCCS Ashore) LI #29 52T4	
<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 to 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 JMCIS C4I capability (less special compartmented information elements) 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. Mobile Inshore Undersea Warfare (MIUW) System Upgrade (MIUW-SU). Funds procure C4I upgrades for nine MIUWS. Each system consists of a processor van, a HUMMV-mounted mobile sensor platform and a trailer-mounted portable sensor platform.</p> <p>T4666. Initial Training. Initial training of instructors for equipments procured above.</p> <p>T4776. Installation of Equipments. Provides for installation of equipments at the shore sites listed below.</p> <p>The FY 96 Budget Request Procures: 1. Correlation Upgrades; 2. OSS Command Center Equipment; 3. additional TSC Communication Replacement Equipment; 4. MAST/MICFAC Equipment; 5. Initial training for these systems; and 6. Installation of Equipment.</p> <p>The FY 97 Budget Request Procures: 1. Correlation Upgrades; 2. OSS Command Center Equipment; 3. additional TSC Communication Replacement Equipment; 4. TSC Upgrade Equipment; 5. MAST/MICFAC Equipment; 6. MIUW Upgrade Equipment; 7. Initial training for these systems; and 8. Installation of Equipment.</p> <p>The FY98 Budget Request Procures: 1. TSC Communication Replacement equipment; 2. TSC Upgrade Equipment; 3. MAST/MICFAC Equipment; 4. Initial training for these systems; and 5. Installation of Equipment.</p> <p>The FY99 Budget Request Procures: 1. TSC Communication Replacement equipment; 2. TSC Upgrade Equipment; 3. MAST/MICFAC Equipment; 4. Initial training for these systems; and 5. Installation of Equipment.</p> <p>INSTALLATION DATA: NCCS Shore equipment installation sites include the Navy Command Center Pentagon; USCINCLANT; USCINCPAC; CINCLANTFLT; CINCPACFLT; COMUSNAVCENT; CINCUSNAVEUR; TYCOMMs at SURFPAC, AIRPAC, SUBPAC, SURFLANT, AIRLANT and SUBLANT; Software Support Facility (San Diego, CA) and subordinate commands at Rota, Spain; Kamiseya, Japan; Naples, Italy; COMTHIRDFLT; 16 TSC systems (15 beginning FY 98) at 14 operational sites (13 beginning FY 98) (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 98); 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 at NISE EAST Det St Inigoes, MD; 8 MOCC's (Homeported at Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Barbers Point/Kaneohe, HI; Misawa, Japan; Kadena, Japan; Willow Grove, VA; Moffett Field, CA; 4 MAST located at Little Creek, VA; Guam, Mariana Island; Rota, Spain; Bahrain; 4 MICFAC located at Little Creek, VA; Lualualei HI; Sigonella, Italy; Bahrain; 4 Submarine Operating Authorities at Yokosuka, Japan; Pearl Harbor, HI; Norfolk, VA and Naples, Italy; FCTC, Dam Neck, VA and the C2 Engineering Development, Software Support Facility (NISE EAST Det St. Inigoes, MD). In FY 97, NISE EAST Det St. Inigoes, relocates to Charleston, SC.</p>		

**UNCLASSIFIED
CLASSIFICATION**

BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE		
						Feb-97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				JMCIS Tactical/Mobile (JTM)(formerly NCCS Ashore) LI #29 52T4				
MODIFICATION SUMMARY (\$M)								
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs bu								
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>
OBU	\$0.5	\$0.2						
OSS	\$4.8	\$3.6						
TSC	\$1.2	\$1.3	\$2.5	\$3.2	\$3.0	\$3.0	\$3.1	\$3.7
MAST/MICFAC	\$1.9	\$0.7	\$0.4	\$2.5	\$0.7	\$2.7	\$3.1	\$3.2
MIUW-SU		\$44.1						
Total	\$8.4	\$49.9	\$2.9	\$5.7	\$3.7	\$5.7	\$6.2	\$6.9

**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM COST ANALYSIS								DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE JMCIS Tactical/Mobile (JTM)(formerly NCCS Ashore) LI #29152T4						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 96		FY 97		FY 98		FY 99		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
T4011	Correlation Upgrade OBU	A	VAR	383	VAR	151					
T4031	OSS	A	VAR	4,158	VAR	3,239					
T4350	TCOMM Replacements TSC	A	VAR	746	VAR	294	VAR	1483	VAR	1552	
T4371	Upgrade Equipment TSC	A	VAR		VAR	478	VAR	327	VAR	535	
T4500	MAST/MICFAC	A	VAR	1,903	VAR	722	VAR	265	VAR	2258	
T4600	MIUW-SU	A			9	44,077					
T4666	Initial Training	A		472		291					
T4776	Non FMP Install	A		1,267		950		813		1,391	
TOTAL PROGRAM				8,929		50,202		2,888		5,736	

MODIFICATION TITLE: Correlation Upgrade SUBHEAD/COST CODE: 52T4/T4011

MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: OSIS Baseline Upgrade (OBU) provides for the analysis of intelligence information from multiple sources to produce a comprehensive report of foreign forces and potential hostile activity. OSIS provides positional data and operational intelligence to commanders at all levels. It consists of two Joint Intelligence Centers (JIC), one JIC Detachment, one Fleet Ocean Surveillance Facility (FOSIF), a software support activity, and a training site. OBU 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.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Development and Operational testing for major system upgrades began in FY 94 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		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment	VAR	8.5	VAR	0.2																	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware																					
PRIOR YR EQUIP	VAR	0.9																			
FY 97 EQUIP			6	0.02																	
FY 98 EQUIP																					
FY 99 EQUIP																					
FY 00 EQUIP																					
FY 01 EQUIP																					
FY 02 EQUIP																					
FY 03 EQUIP																					
FY TC EQUIP																					
TOTAL INSTALLATION COST	0	0.9	6	0.0																	
TOTAL PROCUREMENT COST		9.4		0.2																	

LI # 2805

METHOD OF IMPLEMENTATION: Field Activity and Contractor

ADMINISTRATIVE LEADTIME: 3 months

PROCUREMENT LEADTIME: 9 months

CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

DELIVERY DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

INSTALLATION SCHEDULE:

	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT				6													
OUTPUT				6													

INSTALLATION SCHEDULE:

	FY 01				FY 02				FY 03				TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT													N/A
OUTPUT													N/A

Notes: Qty on TSC P-3 Exhibits reflects "sites", not items of equipment.

MODIFICATION TITLE: Operations Support System SUBHEAD/COST CODE: 52T4/T4031

DESCRIPTION/JUSTIFICATION: OSS provides a single C3I capability 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. OSS provides information to help optimize the allocation of Naval resources.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment	VAR	35.1	VAR	3.2																	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware																					
PRIOR YR EQUIP	80	4.2																			
FY 97 EQUIP			23	0.4																	
FY 98 EQUIP																					
FY 99 EQUIP																					
FY 00 EQUIP																					
FY 01 EQUIP																					
FY 02 EQUIP																					
FY 03 EQUIP																					
FY TC EQUIP																					
TOTAL INSTALLATION COST	80	4.2	23	0.4																	
TOTAL PROCUREMENT COST		39.3		3.6																	

LI # 2804

METHOD OF IMPLEMENTATION: Field Activity and Contractor ADMINISTRATIVE LEADTIME: 3 months PROCUREMENT LEADTIME: 9 months

CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

DELIVERY DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

	PY	FY 97				FY 98				FY 99				FY 00				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	36		12	11														
OUTPUT	36		12	11														

	PY	FY 01				FY 02				FY 03				TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT														N/A
OUTPUT														N/A

Notes: Qty on TSC P-3 Exhibits reflects "sites", not items of equipment.

MODIFICATION TITLE: Tactical Support Centers (portion of Naval Command & Control Centers) SUBHEAD/COST CODE: 52T4/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 Joint Maritime Command Information System-JMCIS 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: (Evolutionary Acquisition of COTS equipment; milestones refer to associated software) OT IIA Q3 FY95; M/SIIIA, Q4 FY95;

OT IIB Q2 FY96; OT IIB Q4 FY96; M/S IIIB Q1 FY97; DT IIC Q1 FY98; OT IIC Q2 FY98; M/S IIIC Q3 FY 98; DTIID Q1 FY99; OTIID Q2 FY99; M/S IIID Q3 FY99

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment	VAR	10.9	VAR	0.3	VAR	1.5	VAR	1.6	VAR	2.0	VAR	1.9	VAR	1.7	VAR	2.6		N/A	VAR	22.5	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware																					
PRIOR YR EQUIP	40	5.2	9	0.4																	
FY 97 EQUIP					16	0.5														16	0.5
FY 98 EQUIP							16	0.5												16	0.5
FY 99 EQUIP									12	0.8										12	0.8
FY 00 EQUIP											15	1.0								15	1.0
FY 01 EQUIP													13	0.9						13	0.9
FY 02 EQUIP															14	1.0				14	1.0
FY 03 EQUIP																	VAR	TBD		0	0.0
FY TC EQUIP																				0	0.0
TOTAL INSTALLATION COST	40	5.2	9	0.4	16	0.5	16	0.5	12	0.8	15	1.0	13	0.9	14	1.0			135	10.4	
TOTAL PROCUREMENT COST		16.1		0.7		2.0		2.1		2.8		2.9		2.6		3.6			VAR	32.9	

METHOD OF IMPLEMENTATION: Field Activity and Contractor

ADMINISTRATIVE LEADTIME: 3 months

PROCUREMENT LEADTIME: 9 MONTHS

CONTRACT DATES: FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

DELIVERY DATES: FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

INSTALLATION SCHEDULE:

	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	40	9				16				16				3			
OUTPUT	40	9				16				8 8				3 4 5 5			

INSTALLATION SCHEDULE:

	PY	FY 01				FY 02				FY 03				TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT		10 5				5 8				5 9				N/A
OUTPUT		10 5				5 4 4				2 3 5 4				N/A

Notes: Qty on TSC P-3 Exhibits reflects "sites", not items of equipment.

MODIFICATION TITLE: Tactical Support Centers (portion of Naval Command & Control Centers) SUBHEAD/COST CODE: 52T4/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 Joint Maritime Command Information System-JMCIS 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: (Evolutionary Acquisition of COTS equipment; milestones refer to associated software) OT IIA Q3 FY95; M/SIIIA, Q4 FY95;

OT IIB Q2 FY96; OT IIB Q4 FY96; M/S IIIB Q1 FY97; DT IIC Q1 FY98; OT IIC Q2 FY98; M/S IIIC Q3 FY 98; DTIID Q1 FY99; OTIID Q2 FY99; M/S IIID Q3 FY99

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment	VAR	16.8	VAR	0.5	VAR	0.3	VAR	0.5	VAR	0.0	VAR	0.1	VAR	0.4	VAR	0		N/A	VAR	18.542	
Equipment Nonrecurring																					
Engineering Change Orders	VAR	2.6																			
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware																					
PRIOR YR EQUIP	32	5.9	6	0.1																	
FY 97 EQUIP					15	0.2														15	0.2
FY 98 EQUIP							15	0.7												15	0.7
FY 99 EQUIP									8	0.2										8	0.2
FY 00 EQUIP																				0	0
FY 01 EQUIP												15	0.1							15	0.095
FY 02 EQUIP														6	0.1					6	0.1
FY 03 EQUIP																	VAR	TBD		0	0
FY TC EQUIP																				0	0
TOTAL INSTALLATION COST	32	5.9	6	0.1	15	0.2	15	0.7	8	0.2	0	0.0	15	0.1	6	0.1			97	7.295	
TOTAL PROCUREMENT COST		25.3		0.6		0.5		1.2		0.2		0.1		0.4		0.1			VAR	28.437	

METHOD OF IMPLEMENTATION: Field Activity and Contractor

ADMINISTRATIVE LEADTIME: 3 months

PROCUREMENT LEADTIME: 9 MONTHS

CONTRACT DATES: FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

DELIVERY DATES: FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

INSTALLATION SCHEDULE:

	PY	FY 97				FY 98				FY 99				FY 00			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	32		6				15				15				8		
OUTPUT	32		3	3				15				15				4	4

INSTALLATION SCHEDULE:

	PY	FY 01				FY 02				FY 03				TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	
INPUT							15				6			N/A
OUTPUT								15				3	3	N/A

Notes: Qty on TSC P-3 Exhibits reflects "sites", not items of equipment.

MODIFICATION TITLE: Mobile Ashore Support Terminal/Mobile Integrated Command Facility (MAST/MICFAC) SUBHEAD/COST CODE: 52T4/T4500

MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: The MAST/MICFACs provide a rapidly deployable abbreviated or full C4I capability to the Naval Component Commander of a joint force in order to plan, direct and control the tactical operations of naval component elements.

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		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment	VAR	1.9	VAR	0.7	VAR	0.3	VAR	2.26	VAR	0.0	VAR	2.6	VAR	2.2	VAR	2.4	VAR	N/A	VAR	12.416	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware *																					
PRIOR YR EQUIP																				0	0.0
FY 97 EQUIP					6	0.1														6	0.1
FY 98 EQUIP							4	0.25												4	0.3
FY 99 EQUIP									4	0.7	1	0.1								5	0.8
FY 00 EQUIP													8	0.9					0	0.0	
FY 01 EQUIP															8	0.8			8	0.9	
FY 02 EQUIP																	VAR	N/A	8	0.8	
FY 03 EQUIP																			0	0.0	
FY TC EQUIP																			0	0.0	
TOTAL INSTALLATION COST	0	0.0	0	0.0	6	0.1	4	0.25	4	0.7	1	0.1	8	0.9	8	0.8			31	2.8	
TOTAL PROCUREMENT COST		1.9		0.7		0.4		2.5		0.7		2.7		3.1		3.2			VAR	15.2	

METHOD OF IMPLEMENTATION: Field Activity and Contractor

ADMINISTRATIVE LEADTIME: VAR

PROCUREMENT LEADTIME: VAR

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00				TC	TOTAL		
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT							6				2	2			4						
OUTPUT								3	3			2	2			1	3				
INSTALLATION SCHEDULE:																					
INPUT			1				4	4			4	4			4	4		N/A		N/A	
OUTPUT				1				4	4			4	4					N/A		N/A	

*NOTES: - Installation quantities indicate sites

MODIFICATION TITLE: Mobile Inshore Undersea Warfare (MIUW) System Upgrade (MIUW-SU) SUBHEAD/COST CODE: 52T4/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: N/A

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT:																					
Kit Quantity																					
Installation Kits																					
Installation Kits Nonrecurring Equipment*			9	44.1																VAR	44.077
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interm Contractor Support																					
Installation of Hardware *																					
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																					0 0.0
FY 02 EQUIP																					0 0.0
FY 03 EQUIP																			VAR	N/A	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	0.0
TOTAL PROCUREMENT COST		0.0		44.1		0.0		0.0		0.0		0.0		0.0		0.0				VAR	44.1

METHOD OF IMPLEMENTATION: Field Activity and Contractor

ADMINISTRATIVE LEADTIME: 3 months

PROCUREMENT LEADTIME: 6 months

CONTRACT DATES: FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

DELIVERY DATES: FY 1997: VAR

FY 1998: VAR

FY 1999: VAR

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00							
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT																					
OUTPUT																					

INSTALLATION SCHEDULE:	FY 01				FY 02				FY 03				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT														N/A	N/A
OUTPUT														N/A	N/A

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEB 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE Nuclear Radiation Safety Monitoring Equipme (RADIAC) (82M2)			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$4.8	\$3.4	\$6.1	\$6.9	\$6.8	\$6.9	\$7.0	\$5.9
<p>JUSTIFICATION: This program provides for the centrally managed acquisition of equipment to detect and measure ionizing radiation and to convert these measurements into meaningful terms so that Navy personnel can adequately control radiation exposure to Naval, Coast Guard, and Military Sealift Command personnel on ships as well as at shore activities, including shipyards, hospital, schools laboratories, air facilities, EOD activities etc. Requirements for radiological data obtained using these instruments are placed on the Navy by the Nuclear Regulatory Commission (Federal Laws) and within the Navy by the Nuclear Power Program and Naval Medical Command, This program supports requirements for radiological monitoring equipment for the Nuclear Propulsion Program, the Radiological Affairs Support Program, Nuclear Weapons Handling Program Chemical, Biological and Radiological Defense Program and the Naval Medical Radiation Safety Program. Budget Year year requirement are based on future ship and shore allowances, establishment of new requirements and replacements for equipment which are lost, fail or become obsolete. The Multifunction RADIAC and Laser Heated TLD programs replace older systems with equipment with increased capability that can be operated and maintained at lower life cycle cost.</p> <p>Requirements:</p> <ol style="list-style-type: none"> 1. Nuclear Propulsion Program: Field changes, ITEMS UNDER \$200K, MULTIFUNCTION RADIAC AND LASER HEATED TLDS 2. Nuclear Weapons Program: Items under \$200K, MULTIFUNCTION RADIAC 3. Radiological Affairs Support Program: Items under \$200K, MULTIFUNCTION RADIAC 4. Chemical, Biological and Radiological Program/ Nuclear Warfare: Items under \$200K, MULTIFUNCTION RADIAC 5. Naval Medical Radiation Safety Program: Field Changes, Items under \$200K, DT-648/PD, MULTIFUNCTION RADIAC 								

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WEAPONS SYSTEM COST ANALYSIS										FEB 1997
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE/SUBHEAD							
OTHER PROCUREMENT, NAVY			Nuclear Radiation Safety Monitoring Equipment (RADIAC) (82M2)							
BA: 2 Communications & Electronic Equipmen										
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY1997		FY1998		FY 1999	
			QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COST
M2004	Field Changes	A						74		215
M2010	Multifunction RADIAC Control Unit	A	1279	1,500	457	537	1000	1,159	1000	1,163
M2012	Gamma/Beta Probe	A	790	500						
M2014	Beta Probe Interface	A	540	350	458	290	560	350	560	350
M2016	Alpha Probe	A	150	375	95	239	184	460	150	375
M2018	Neutron Indicator Probe	A					250	375	250	375
M2019	Radiography Probe	A							200	300
M2020	DT-678 LHTLD	B	2151	200	1253	370	2151	200	7527	700
M2022	CP-2197 LHTLD Reader (Ship)	B	5	400	6	995	15	1,200	15	1,200
M2024	CP-2198 LHTLD Reader (Shore)	B					12	1,300	6	730
M2031	DT-648/PD TLD Medical Rqmt Dosimet	A	7533	113						
M2087	Items Under \$200K	A		555		135		162		254
M2830	Production Support	A		400		367		341		575
M2860	Acceptance Testing	A		400		486		222		434
M2060	Underwater RADIAC	B					25	250	25	250
TOTAL				4,793		3,419		6,093		6,921

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BUDGET PROCUREMENT HISTORY AND PLANNING										DATE:	
P-5A										FEB 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE					SUBHEAD	
OTHER PROCUREMENT, NAVY					NUCLEAR RADIATION SAFETY MONITORING EQUIPMENT (RADIAC)					82M2	
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST (\$)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
M2010	MULTIFUNCTION RADIAC	SAIC/SAN DIEGO	OPT	NESEC CHASN	2/96	9/97	1,279	1,173	YES	NO	
	FY 96 (CONTROL UNITS)										
	FY 97 (CONTROL UNITS)										
	FY 98 (CONTROL UNITS)										
	FY 99 (CONTROL UNITS)										
M2012	GAMMA/BETA PROBE FY 96	SAIC/SAN DIEGO	OPT	NESEC CHASN	2/96	7/97	790	632	YES	NO	
M2014	BETA PROBE INTERFACE	SAIC/SAN DIEGO	OPT	NESEC CHASN	2/96	7/97	540	649	YES	NO	
	FY 96										
	FY 97										
	FY 98										
	FY 99										
M2016	ALPHA PROBE	SAIC, SAN DIEGO	CFP	NESEC CHASN	6/97	3/98	95	2,500	YES	NO	
	FY 97										
	FY 98										
	FY 99										

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BUDGET PROCUREMENT HISTORY AND PLANNING										DATE:	FEB 1997
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE						SUBHEAD
OTHER PROCUREMENT, NAVY					NUCLEAR RADIATION SAFETY MONITORING EQUIPMENT (RADIAC)						82M2
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (\$)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
M2018	NEUTRON INDICATOR PROBE FY 98	TBD	C/FP	NESEC CHASN	6/98	3/99	250	1,500	YES	NO	
	FY 99	TBD	OPT	NESEC CHASN	1/99	7/99	250	1,500			
M2019	RADIOGRAPHY PROBE FY 99	TBD	C/FP	NESEC CHASN	6/99	3/00	200	1,500	YES	NO	
M2020	DT-678 LHTLD FY 97	KEITHLEY, OHIO	C/FP	NSWC	2/97	3/98	1,253	295	YES	NO	
	FY 98	TBD	C/FP	NESEC CHASN	1/98	10/98	2,151	93			
	FY 99	TBD	OPT	NESEC CHASN	6/99	3/00	7,527	93			
M2022	CP-2197 SHIP READER FY 97	KEITHLEY, OHIO	C/FP	NSWC	2/97	3/98	6	165,000	YES	NO	
	FY 98	TBD	C/FP	NESEC CHASN	1/98	10/98	15	80,000			
	FY 99	TBD	OPT	NESEC CHASN	6/99	3/00	15	77,000			
M2024	CP-2198 SHORE READER FY 98	KEITHLEY, OHIO	C/FP	NSWC	1/98	8/98	12	108,000	YES	NO	
	FY 99	KEITHLEY, OHIO	OPT	NSWC	1/99	8/99	6	121,667			
M2060	UNDERWATER RADIAC FY 98	TBD	C/FP	NRAD S. DIEGC	1/98	7/98	25	10,000	YES	NO	
	FY 99	TBD	C/FP	NRAD S. DIEGC	1/99	7/99	25	10,000	YES	NO	
REMARKS											

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BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA: 2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE GENERAL PURPOSE ELECTRONIC TEST EQUIPMENT (GPETE) (82M6)			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$13.4	\$9.1	\$7.5	\$10.3	\$9.9	\$10.2	\$10.4	\$10.8
<p>ITEM DESCRIPTION/JUSTIFICATION:</p> <p>This program provides for the 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 (preventative 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> <p>GPETE was transferred to the Navy Stock Fund beginning FY 82 and the Resource Sponsors are required to program for GPETE Initial Outfitting in this line for procurement initiation. Navy Ships Parts Control Center will "Buy-In" GPETE using Navy Stock Funds consistent with resource sponsors programmed requirements. NAVSEA Systems Command will Buy-Out GPETE in accordance with Required Delivery Dates.</p>								

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PROGRAM COST BREAKDOWN								DATE:		
P-5								February 1997		
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD					
OTHER PROCUREMENT, NAVY					GENERAL PURPOSE ELECTRONIC TEST					
BA: 2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					EQUIPMENT (GPETE) 82M6					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
M6000	FIBER OPTICS AND DATA COMM					3,259		3,400		2,345
M6271	Bit Error Rate Tester (BERT)	A	81	1,100	164	(1,558)			68	(502)
	Test Lead Fiber	A					####	(1,573)		
	Fiber Optic Tool Kit	A					422	(1,827)		
M6270	Radio Test Set	A	104	1,090	51	(719)			51	(755)
	Fiber Optic Time Domain Reflectometer	A			21	(982)				
	Mini Optical Time Domain Reflectometer	A							98	(1,088)
M6001	SIGNAL GENERATORS AND ANALYZERS					2,689		2,820		5,667
M6035	Function Generator	A	59	591						
	Network Analyzer	A			42	(1,201)				
M6132	RF Spectrum Analyzer	A	51	1,130						
M6153	Microwave Spectrum Analyzer	A	25	701						
M6274	Procurements under \$500K	A		4,359		(1,488)		(1,670)		(5,667)
	Frequency Synthesizer	A					115	(1,150)		0
M6002	OSCILLSCPS, METERS, AND COUNTERS					0		0		0
M6275	CW Power Meter Set	A	104	1,285						
M6003	PROC ENGR AND DOCUMENTATION					3,150		1,241		2,252
M6286	APL and Documentation	A		300		(300)		(300)		(300)
M6287	Procurement/Production Engineering	A		2,850		(2,850)		(941)		(1,952)
	TOTAL			13,406		9,098		7,461		10,264

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT										DATE:	
P-5A										February 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OTHER PROCUREMENT, NAVY					GENERAL PURPOSE ELECTRONIC				82M6		
BA - 2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					TEST EQUIPMENT (GPETE)						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
M6035	Function Generator FY96	SPCC	PD	SPCC	1/97	3/97	59	10.02	YES	NO	
M6132	RF Spectrum Analyzer FY96	SPCC	PD	SPCC	1/97	3/97	51	22.16	YES	NO	
M6153	Microwave Spectrum Analyzer FY96	SPCC	PD	SPCC	1/97	3/97	25	28.04	YES	NO	
M6275	CW Power Meter Set FY96	SPCC	PD	SPCC	1/97	3/97	104	12.36	YES	NO	
M6270	Radio Test Set FY96 (SEE M6000 FOR FY 97-99)	SPCC	PD	SPCC	1/97	3/97	104	10.48	YES	NO	
M6271	Bit Error Rate Tester (BERT) FY96 (SEE M6000 FOR FY 97-99)	SPCC	PD	SPCC	1/97	3/97	81	13.58	YES	NO	

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT										DATE:	
P-5A										February 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE					SUBHEAD	
OTHER PROCUREMENT, NAVY					GENERAL PURPOSE ELECTRONIC					82M6	
BA - 2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT					TEST EQUIPMENT (GPETE)						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
M6000	FIBER OPTICS AND DATA COMMUNICATIONS										
	Bit Error Rate Tester (BERT) (Previously M6271)										
	FY97	SPCC	PD	SPCC	1/98	3/98	164	9.50	YES	NO	
	FY99	SPCC	PD	SPCC	1/00	3/00	68	7.39	YES	NO	
	Test Lead Fiber										
	FY 98	SPCC	PD	SPCC	1/99	3/99	1,484	1.06	YES	NO	
	Fiber Optic Tool Kit										
	FY 98	SPCC	PD	SPCC	1/99	3/99	422	4.33	YES	NO	
	Radio Test Set (Previously M6270)										
	FY97	SPCC	PD	SPCC	1/98	3/98	51	14.10	YES	NO	
	FY99	SPCC	PD	SPCC	1/00	3/00	51	14.83	YES	NO	
	Fiber Optic Time Domain Reflectometer										
	FY97	SPCC	PD	SPCC	1/98	3/98	21	46.77	YES	NO	
	Mini Optic Time Domain Reflectometer										
	FY99	SPCC	PD	SPCC	1/00	3/00	98	11.10	YES	NO	
M6001	AL GENERATORS AND ANALYZERS										
	Network Analyzer										
	FY 97	SPCC	PD	SPCC	1/98	3/98	42	28.60	YES	NO	
	Frequency Synthesizer										
	FY 98	SPCC	PD	SPCC	1/99	3/99	115	10.02	YES	NO	
REMARKS											

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997															
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY: BA-2: COMMUNICATION AND ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE INTEGRATED COMBAT SYSTEMS TEST FACILITY (ICSTF)															
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03												
QUANTITY																				
COST (In Millions)	\$6.1	\$4.8	\$3.9	\$4.5	\$4.5	\$4.6	\$4.7	\$4.8												
ITEMS DESCRIPTION/JUSTIFICATION:																				
<p>Integrated Combat Systems Test Facility (ICSTF) PHD, NSWC is the Navy owned and operated combat systems computer program integration test site in San Diego at NCCOSC RDTE&N Division. ICSTF performs an essential role in promoting the readiness of surface combatant computer program networks. ICSTF'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 USS CALIFORNIA's protracted pierside recovery program in the 1970's. ICSTF 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>ICSTF is the only permanent Navy facility for testing CN/CVN, LHD, LHA, LPD-17, DD-963, FFG and NTU 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, ICSTF must upgrade its testbeds to perform computer network integration and certification testing.</p> <p>The basic procurement program outlined herein is directed at adding to ICSTF the capability of supporting the following upgrades/new systems:</p> <table style="width:100%; border: none;"> <tr> <td style="width: 33%;">BFTT</td> <td style="width: 33%;">CVN-76 Combat System</td> <td style="width: 33%;">LPD-17 Combat System</td> </tr> <tr> <td>Fiber Optics</td> <td>Open Architecture</td> <td>CEC Upgrade</td> </tr> <tr> <td>ACDS Block 1</td> <td>COTS</td> <td>CIFF</td> </tr> <tr> <td>Battle Group Testing</td> <td>SSDS/ISDS/ICDS</td> <td>C41</td> </tr> </table> <p>In addition, the basic program provides for increasing centralized test support so that ICSTF can provide simultaneous support to multiple ship classes.</p> <p>All procurements will be received and installed by ICSTF. Installations are based on CSIT schedules.</p>									BFTT	CVN-76 Combat System	LPD-17 Combat System	Fiber Optics	Open Architecture	CEC Upgrade	ACDS Block 1	COTS	CIFF	Battle Group Testing	SSDS/ISDS/ICDS	C41
BFTT	CVN-76 Combat System	LPD-17 Combat System																		
Fiber Optics	Open Architecture	CEC Upgrade																		
ACDS Block 1	COTS	CIFF																		
Battle Group Testing	SSDS/ISDS/ICDS	C41																		

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY: BA-2: COMMUNICATION AND ELECTRONIC EQUIPMENT	P-1 ITEM NOMENCLATURE INTEGRATED COMBAT SYSTEMS TEST FACILITY (ICSTF)	
<u>ITEM DESCRIPTION/JUSTIFICATION (CONT)</u> <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>		

WEAPON SYSTEM COST ANALYSIS								February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA: 2 Communications & Electronic Equipment				P-1 ITEM NOMENCLATURE/SUBHEAD INTEGRATED COMBAT SYSTEMS TEST FACILITY (ICSTF) (82M8)						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	<u>SURFACE SHIPS (N86)</u>									
M8004	MISC ELEC EQUIP	A		319		220		110		345
M8026	AN/SLQ-32 UPGRADES	A		65					1	850
M8047	CONTROL CONSOLE REPL	A			4	950	1	200	12	830
M8084	DATA REDUCT/ANALYS	A		210		100		150		75
M8089	SUPT SYS PROCESSR	A					4	120	7	210
M8101	CENTRALIZED IFF	A			1	311	1	311		
M8125	SSDS/RAIDS	A			1	500			1	750
M8129	COOP ENGAGE CAPABILITY	A					2	650		
M8130	CSS SIMULATION UPGRADE	A		2,656		782		476		382
M8131	FIBER OPTIC DATA SYS	A		1,220		45		135		
M8132	UYK-43 COTS EMULATOR	A				50				
M8134	ON-173 COTS EMULATOR	A			1	150				
M8136	VME BASED KCMX EMULATOR	A	2	167						
M8137	DRVDS	A			1	500				
M8139	TAC SERIES WORKSTATION	A		91	2	160	1	60		
M8143	NAVSSI	A		264		231		231		
M8144	NATO-REACH	A					1	600		
M8200	SESEF ELECTRONICS EQUIP	A		800		557		562		812
M8900	SESEF CONSULTING SERVICES	A		138		133		134		145
M86IN	EQUIPMENT INSTALLATION			129		139		138		150
TOTAL				6,059		4,828		3,877		4,549

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING										DATE	
P-5A										February 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OTHER PROCUREMENT, NAVY					INTEGRATED COMBAT SYSTEM				82M8		
BA -2: COMMUNICATION AND ELECTRONIC EQUIPMENT					TEST FACILITY						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
M8026	AN/SLQ-32 UPGRADE FY 99	UNKNOWN	C/FP	NAVSEA	03/99	09/99	1	850			
M8047	CONRL CONSL REPL FY 95	LORAL, ST. PAUL, MN	C/FP	NAVSEA	05/95	10/95	4	120	YES		
	FY 97	LORAL, ST. PAUL, MN	C/FP	NAVSEA	03/97	09/97	4	237			
	FY 98	LORAL, ST. PAUL, MN	C/FP	NAVSEA	03/98	09/98	1	200			
	FY 99	LORAL, ST. PAUL, MN	C/FP	NAVSEA	03/99	09/99	12	69			
M8089	SPT SYS PROCESSOR FY 98	UNKNOWN	WX	NSWC, PHD	03/98	09/98	4	30			
	FY 99	UNKNOWN	WX	NSWC, PHD	03/99	09/99	7	30			
M8101	CENTRALIZED IFF FY 97	UNKNOWN	PD	NAVAIR	06/97	12/98	1	311			
	FY 98	UNKNOWN	PD	NAVAIR	06/98	12/99	1	311			
M8125	SSDS/RAIDS FY 97	HUGHES	C/FP	NAVSEA	03/97	03/98	1	500			
	FY 99	SAN DIEGO, CA	C/FP	NAVSEA	03/98	03/99	1	750			
M8129	COOP ENGAGE CAPB FY 98	APL/JHU, MD	C/FP	NAVSEA	03/98	03/99	2	325			
M8134	ON-173 COTS EMUL FY 97	UNKNOWN	WX	NSWC, PHD	03/97	03/98	1	150			
M8136	VME BASED KCMX EM FY 96	MUCPAC CORP BROCKTON, ME	WX	NSWC, PHD	03/96	03/97	2	83.5			
REMARKS											

APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA -2: COMMUNICATION AND ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE INTEGRATED COMBAT SYSTEMS TEST FACILITY				SUBHEAD 82M8		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
M8137	DRVDS FY 97	UNKNOWN	RC	NRAD	03/97	3/98	1	500	YES		
M8139	TAC SERIES WORK STA FY 97 FY 98	HEWLETT-PACKARD PALO ALTO, CA	C/FP C/FP	NRAD NRAD	01/97 01/98	06/97 06/98	2 1	80 60	YES		
M8144	NATO-REACH FY 98	UNKNOWN	C/FP	NAVSEA	03/98	03/99	1	600			
REMARKS											

CLASSIFICATION: UNCLASSIFIED

P3A INDIVIDUAL MODIFICATION February 1997
 MODIFICATION TITLE: INTEGRATED COMBAT SYSTEMS TEST FACILITY (ICSTF) 82M8
 MODELS OF SYSTEM AFFECTED:
 DESCRIPTION/JUSTIFICATION: INSTALLATION OF TEST BED EQUIPMENT REQUIRED TO CONDUCT PLANNED COMBAT SYSTEM INTEGRATION TESTS.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 96		FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST					
	QTY	&PRIOR																
FINANCIAL PLAN (IN MILLIONS)																		
RDT&E													0	0.000				
PROCUREMENT													0	45.150				
QUANTITY													0	0.000				
INSTALLATION KITS													0	0.000				
INSTALLATION KITS NONRECURRING													0	0.000				
EQUIPMENT	VAR	15.7	VAR	4.5	VAR	3.6	VAR	4.2	VAR	4.2	VAR	4.3	VAR	4.4	0	40.800		
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		3.2		0.15		0.2		0.1		0.2		0.15		0.2		0.2	0	4.350
INTERIM CONTRACTOR SUPPORT																	0	0.000

INSTALLATION OF HARDWARE																			
FY96 EQUIPMENT & PRIOR		0.330															0	0.330	
FY97 EQUIPMENT				0.140													0	0.140	
FY98 EQUIPMENT						0.140											0	0.140	
FY99 EQUIPMENT								0.150									0	0.150	
FY00 EQUIPMENT									0.100								0	0.100	
FY01 EQUIPMENT										0.150							0	0.150	
FY02 EQUIPMENT											0.150						0	0.150	
FY 03 EQUIPMENT												0.150					0	0.150	
TO COMPLETE																	0	0.000	
TOTAL INSTALLATION COST		0.330		0.140		0.140		0.150		0.100		0.150		0.150		0.150	0.000	0	1.310
TOTAL PROCUREMENT COST		18.900		4.7		3.8		4.3		4.4		4.5		4.5		4.6	0.0	0	45.150
TOTAL COST		19.230		4.8		3.9		4.5		4.5		4.6		4.7		4.8	0.0	0	46.460

METHOD OF IMPLEMENTATION: NOT APPLICABLE
 CONTRACT DATE: PRIOR YEAR: VARIOUS ADMINISTRATIVE LEADTIME: VARIOUS PRODUCTION LEADTIME: VARIOUS
 CURRENT YEAR: VARIOUS BUDGET YEAR: VARIOUS BUDGET YEAR 2: VARIOUS
 PRODUCTION DELIVER DATE: PRIOR YEAR: VARIOUS CURRENT YEAR: VARIOUS BUDGET YEAR: VARIOUS BUDGET YEAR 2: VARIOUS

INSTALLATION SCHEDULE:*														
INPUT =====>	FY 96 & PRIOR	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	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	1, 2, 3, 4	1, 2, 3, 4	0	0		
		00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	0	0		
OUTPUT =====>	FY 96 & PRIOR	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	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	1, 2, 3, 4	1, 2, 3, 4	0	0		
		00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	0	0		

*ICSTF IS NOT AN ACQUISITION PROGRAM AND INSTALLATION OF DISCRETE MOD KITS DOES NOT APPLY. P-3A

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40						DATE: February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA: 2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE CALIBRATION STANDARDS 82NB			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$2.4	\$2.1	\$2.1	\$2.1	\$2.0	\$2.0	\$2.1	\$2.1
<p>JUSTIFICATION: These funds are used to 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.</p> <p>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.</p>								

CLASSIFICATION:

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PROGRAM COST BREAKDOWN							DATE:				
P-5							February 1997				
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA: 2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE/SUBHEAD CALIBRATION STANDARDS (82NB)						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
NB320	<u>SPONSOR N4</u>										
	CALIBRATION STANDARDS	A		2,375		2,138		2,075		2,057	
	MECHANICAL STANDARDS	A		400		400		400		400	
	ELECTRONIC STANDARDS	A		1,575		1,338		1,275		1,257	
	ACCEPTANCE AND PRODUCTION TEST	A		300		300		300		300	
	TRAINING COURSE STANDARDS	A		100		100		100		100	
	TOTAL			2,375		2,138		2,075		2,057	

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P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO.- 99

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CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE EMI CONTROL INSTRUMENTATION LI:2970 82MA			
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY								
COST (In Millions)	\$5.7	\$5.3	\$5.0	\$7.7	\$7.6	\$7.9	\$8.1	\$8.3
<p>These funds procure emergency field change kits, hardware devices and sensor kits to solve Electromagnetic Interference (EMI) problems in electronic systems/equipments 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 equipments. 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>								

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS EXHIBIT							A. DATE February 1997			
B. APPROPRIATION/BUDGET ACTIVITY BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE EMI CONTROL INSTRUMENTATION 332970 82MA					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	<u>ELECTRONICS SUPPORT (OP-N6)</u>									
MA001	EMERG FIELD CHANGE KITS	A			31			55		500
MA104	EMI CONTROL INSTRUMENTATION	A		1,305		1,028		1,190		1,586
MA107	FACTS INSTRUMENTATION	A		<u>120</u>		<u>130</u>		<u>131</u>		<u>150</u>
	OP-N6 SUBTOTAL			1,425		1,189		1,376		2,236
	<u>ELECTRONICS SUPPORT (OP-N4)</u>									
MA001	EMERG FIELD CHANGE KITS	A		282		284				
MA004	FIXES & SENSOR KITS	A		<u>4,013</u>		<u>3,837</u>		<u>3,608</u>		<u>5,482</u>
	OP-N4 SUBTOTAL			4,295		4,121		3,608		5,482
	TOTAL			<u>5,720</u>		<u>5,310</u>		<u>4,984</u>		<u>7,718</u>

**OTHER PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION S (DOD EXHIBIT P-40)**

DATE:

Feb-97

NAVMAT FORMAT 7110/1

BUDGET ACTIVITY:
OTHER PROCUREMENT NAVY BA-2

P-1 ITEM NOMENCLATURE: S/H 82M7
SHORE ELECTRONIC ITEMS UNDER \$2.0 MILLION - 33297

	FY1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Quantity								
Cost (In Millions)	8.0	4.0	3.4	5.0	4.3	4.8	5.1	5.2

ITEM DESCRIPTION/JUSTIFICATION

Funds production implementation tools for product improvements to the AN/UYK-43 and AN/UYK-44 computer family; production hardware and software engineering, production, and product assurance support for the AN/UYS-2 signal processor; procurement of precious metals required for AN/UYS-2 Standard Electronic Modules card production; and establishment of depot capabilities for elements of Standard Embedded Computer Resources (SECR) product lines, including computers, displays, peripherals and affiliated support products. The AN/UYK-43 and AN/UYK-44 are, respectively, the Navy's current 32-bit and 16-bit tactical computers and the AN/UYS-2 is the successor to the standard AN/UYS-1 signal processor. These equipments are used in over 100 mission-critical surface ship, submarine, aviation and land-based systems. Additionally, funding is provided for the Computer Open Systems Implementation Program (COSIP), which affords Navy applications greater use of commercially available technology. The SECR Depot and Diminishing Manufacturing Sources (DMS) capability includes procurement of equipment and parts to maintain both organic and original equipment manufacturer depots, taking into consideration as well DMS to maintain production and repair of equipment affected by the highly volatile evolution of technology.

DD Form 2454, June 1986

P-1 SHOPPING

LIST ITEM NO.	PAGE NO.
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1

APPROPRIATION:		WEAPON SYSTEM COST ANALYSIS (P-5)						Jan-93		
OTHER PROCUREMENT NAVY										
BUDGET ACTIVITY:				P-1 LINE ITEM:				SUBHEAD		
2 - COMMUNICATION AND ELECTRONIC EQUIPMENT				SHORE ELECTRONIC ITEMS UNDER \$2.0M				82M7		
COST CODE	WEAPON SYSTEM COST ELEMENTS	I/C	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
M7505	AN/UYS-2 SUPPORT			6,317		1,883		1,862		2,484
M7509	AN/UYK-43 PROD. IMP.			0		0		0		0
M7510	AN/UYK-44 PROD. IMP.			0		0		0		0
M7511	COSIP			366		416		312		555
M7513	SECR DEPOT AND DMS CAPABILITIES			1,194		1,587		1,151		1,928
M7900	CONSULTING SERVICES			81		100		100		0
	SUBTOTAL SHORE ELEC SUPPORT EQUIPMENT (NAVSEA)			7,958		3,986		3,425		4,967
			P-1 SHOPPING LIST LINE ITEM NO.		PAGE NO.					
			101		2					

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET					DATE Feb-97			
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIP			BLI: 3010 Ship Tactical Comms 52DN					
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$12.3	\$10.8	\$24.5	\$46.1	\$45.5	\$55.6	\$65.7	\$82.2
<p>PROGRAM COVERAGE: 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>Items procured under this program provide interconnectivity with the ADNS and JMCOMS architectures:</p> <p>HF TILT MECHANISMS - DEVICES TO ENABLE VERTICAL WHIP ANTENNA TO BE LOWERED TO A HORIZONTAL POSITION DURING FLIGHT OPERATIONS.</p> <p>HFRG BROADBAND - HIGH FREQUENCY RADIO GROUP THAT 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>DIGITAL WIDEBAND TRANSMISSION SYSTEM (DWTS) - UHF LINE-OF-SIGHT RADIO SYSTEM, SHIP-TO-SHIP AND SHIP-TO-SHORE COMMUNICATIONS INTEROPERABLE WITH FIELDDED ARMY AND MARINE CORPS RADIOS.</p> <p>SHIPBOARD INTEGRATED COMMUNICATIONS SYSTEMS (SHINCOMM) - THIS SYSTEM INTEGRATES THE COMMAND AND CONTROL FUNCTIONS OF THE ORBITAL AIR OPERATIONS. THE SYSTEM IS USED BY PERSONNEL SUCH AS THE AIR OFFICER, THE AIR OPERATIONS OFFICER, STRIKE OPERATIONS, ETC. DURING ALL PHASES OF AIR OPERATIONS.</p>								

BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE Feb-97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				Ship Tactical Comms			52DN	
JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:								
FY97/99 - CONTINUED PROCUREMENT OF HF RADIO GROUP (HFRG) AND HF TILT MECHANISM EQUIPMENT.								
NOTE: BUDGET REFLECTS THE TRANSFER OF DESIGN SERVICES INTO THE APPROPRIATE EQUIPMENT P-1 LINE ITEM BEGINNING IN FY 1998.								
INSTALLING AGENTS: INSTALLATION WILL BE BY ALTERATION INSTALLATION TEAMS (AIT FROM SPAWAR FIELD ACTIVITIES).								
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs. (\$M):								
EQUIPMENT	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
HFRG	6.0	7.2	14.4	29.5	31.6	46.1	53.2	67.1
TILT MECHANISM			1.1	2.9	2.9	3.8	5.2	7.4
DWTS		1.3	8.4	10.9	7.9	1.7	1.6	2.1

UNCLASSIFIED
CLASSIFICATION

Weapon System Cost Analysis							DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Ship Tactical Comms			52DN		
COST CODE	ELEMENT OF COST	IDENT CODE	QTY	TOTAL COST IN THOUSANDS OF DOLLARS						
				FY 96	FY 97	FY 98	FY 99			
				TOTAL COST	TOTAL COST	TOTAL COST	TOTAL COST	TOTAL COST	TOTAL COST	
DN006	Production Support	A	Var	199	205	207		728		
DN013	HF Tilt Mechanism	A				15	1,121	21	1,680	
DN016	HFRG Broadband	A	Var		2,805	10,468		15,558		
DN019	DWTS	B		3	1,240	8,235	26	8,970		
DN020	SHINCOM	A	Var	6,087	2,225					
DN776	Non-FMP Install (DWTS)	A	Var					Var	152	
DN777	FMP Install	A	Var	6,022	4,281	4,051		Var	16,946	
	FMP Design Service Agent	A				415		Var	2,089	
	TOTAL PROGRAM			12,308	10,756	24,497			46,123	

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Exhibit P-5
UNCLASSIFIED
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Weapon System Procurement History and Planning									A. DATE			
									Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPME					Ship Tactical Comms							52DN
COST CODE	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE	
DN013	98	Various	WX	NRAD	Nov-97	Nov-98	15	\$74,733	Yes	No		
	99	Various	WX	NRAD	Nov-98	Nov-99	21	\$80,000	Yes	No		
DN019	97	Various	WX	SPAWAR	Feb-97	Jul-97	3	\$413,333	Yes	No		
	98	Various	WX	SPAWAR	Feb-98	Jul-98	25	\$330,120	Yes	No		
	99	Various	WX	SPAWAR	Feb-99	Jul-99	26	\$345,000	Yes	No		
D. REMARKS												

UNCLASSIFIED

CLASSIFICATION

MODIFICATION TITLE: HF TILT MECHANISMS (DN013)

Feb-97

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Installed on ships to allow vertical whip antennas to be lowered to a horizontal position during flight operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Non Development Items

FINANCIAL PLAN: (\$ in millions)

	P Y		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity	77	3.8					15	1.1	21	1.7	15	1.2	32	2.6	32	2.6	60	4.8	348	27.6	600	40.6
Installation Kits																						
Installation Kit Nonrecurring Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip	77	3.7																				
FY 96 Equip																						
FY 97 Equip																						
FY 98 Equip									15	1.2												
FY 99 Equip											21	1.7										
FY 00 Equip													15	1.2								
FY 01 Equip															32	2.6						
FY 02 Equip																	32	2.6				
FY 03 Equip																			60	4.8		
FY TC Equip																			348	27.6		
Total Installation Cost	77	3.7							15	1.2	21	1.7	15	1.2	32	2.6	32	2.6	408	32.4	600	42.8
Total Procurement Cost		7.5					1.1		2.9		2.9		3.8		5.2		7.4		60.0		83.4	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 PROCUREMENT LEADTIME: 12 mo.

CONTRACT DATES:

FY 1996 N/A FY 1997 N/A FY 1998 11/97 FY 1999 11/98

DELIVERY DATE:

FY 1996 N/A FY 1997 N/A FY 1998 11/98 FY 1999 11/99

INSTALLATION SCHEDULE:

	PY	FY96				FY97				FY98				FY99				TC	Total		
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT	77															4	6	5			
OUTPUT	62	15															4	6	5		
		FY00				FY01				FY02				FY03							
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT		4	6	6	5	4	6	5			4	10	10	8	4	10	10	8	408	600	
OUTPUT			4	6	6	5	4	6	5			4	10	10	8	4	10	10	416	600	

UNCLASSIFIED

CLASSIFICATION

MODIFICATION TITLE: HIGH FREQUENCY RADIO GROUP (DN016)

####

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Provides for fully automated operation of the High Frequency Communications System.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Non-Development Item

FINANCIAL PLAN: (\$ in millions)

	P Y		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity	Var	40.3			Var	2.8	Var	10.5	Var	15.6	Var	17.0	Var	27.6	Var	27.5	Var	41.4	Var	120.0	Var	302.7
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other	Var	1.6																			Var	1.6
Interim Contractor Support		2.9																				2.9
Installation of Hardware																						
(PY) Equip	Var	26.0	Var	6.0																	Var	32.0
FY 96 Equip					Var	4.4															Var	4.4
FY 97 Equip							Var	3.9													Var	3.9
FY 98 Equip									Var	13.9											Var	13.9
FY 99 Equip											Var	14.6									Var	14.6
FY 00 Equip													Var	18.5							Var	18.5
FY 01 Equip															Var	25.7					Var	25.7
FY 02 Equip																	Var	25.7			Var	25.7
FY 03 Equip																			Var	23.5	Var	23.5
FY TC Equip																			Var	62.0	Var	62.0
Total Installation Cost		26.0		6.0		4.4		3.9		13.9		14.6		18.5		25.7		25.7		85.5		224.2
Total Procurement Cost		70.8		6.0		7.2		14.4		29.5		31.6		46.1		53.2		67.1		205.5		531.4

METHOD OF IMPLEMENTATION: AIT/OVERHAUL ADMINISTRATIVE LEADTIME: 3 mo PROCUREMENT LEADTIME: 14 mo

CONTRACT DATES: FY 1996 N/A FY 1997 4/97 FY 1998 4/98 FY 1999 4/99

DELIVERY DATE: FY 1996 N/A FY 1997 05/99 FY 1998 05/99 FY 1999 05/00

INSTALLATION SCHEDULE:	PY		FY96				FY97				FY98				FY99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT

OUTPUT

INSTALLATION SCHEDULE:	FY00				FY01				FY02				FY03				Total
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	

INPUT

1

OUTPUT

1

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES								A. DATE	
								Feb-97	
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				Ship Tactical Comms				52DN	
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUPLICATED WITH FY 97 AND PRIOR FUND	PLANNED BUDGET YEAR (FY97) ACQUIREMENT	PLANNED BUDGET YEAR (FY98) ACQUIREMENT	PLANNED BUDGET YEAR (FY99) ACQUIREMENT	BALANCE	PHASING RATIONALE
DN013 HF TILT	600		77			15	21	487	Duty year Funded
DN019 DWTS	87				3	25	26	33	Duty year Funded
MEMO ENTERED									
ITEM #1 DN013 HF TILT	hull/location qty	hull/location qty	ITEM #2 DN019 DWTS	hull/location qty	hull/location qty	ITEM #3	hull/location qty	hull/location qty	
AUXILIARY 48			AMPHIB 55		SHORE SIT 14				
CG/CGN 60			CV/CVN 12						
CV/CVN 156			TAH 2						
DD/FF 228			AGF 2						
AMPHIB 108			T-LKA 2						
TOTAL I/O 600			TOTAL I/O 87			TOTAL I/O			
ITEM #4	hull/location qty	hull/location qty	ITEM #5	hull/location qty	hull/location qty	ITEM #6	hull/location qty	hull/location qty	
TOTAL I/O			TOTAL I/O			TOTAL I/O			

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BUDGET ITEM JUSTIFICATION SHEET					DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIP			BLI: 3033 Portable Radios			52T7		
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$1.4	\$1.4	\$2.4	\$11.2	\$12.2	\$12.7	\$13.0	\$13.3
<p>PROGRAM COVERAGE: Funds procure portable and mobile radios to support the unique air, sea, and land environment of the Navy Explosive Ordnance Disposal Units, Construction Battalions, Beach Jumper Units, Tactical Air Control Units, Boats and Small Craft, and other Navy units involved in amphibious operations and other special operations. Hierarchical Yet Dynamic Radio Architecture (HYDRA) will replace all stovepipe wireless shipboard systems (DCWIFCOM, MOMCOM, PVPGS, FDOS) with an integrated system. HYDRA is a wireless digital voice and data communications system utilizing COTS trunking technology. HYDRA is capable of interfacing with PBX/BG Cellular/RF systems.</p> <p>Requirements include:</p> <ul style="list-style-type: none"> a. High Frequency Single Sideband (HF SSB) radios (10 watt portable manpack, 125 and 400 watt vehicular and base station units). These radios are used where communications beyond line of sight is required. b. Very High Frequency (VHF) and Ultra High Frequency (UHF) and UHF satellite radios (manpack and vehicular). c. SINCGARS VHF FM units, both manpack and vehicular for anti-jam communications. d. Digital voice, data GPS capable hand held survival radios. e. Digital Video Imaging Transmission systems. f. Integrated wireless shipboard communications (HYDRA). <p>Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>								

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				Portable Radios			52T7	
CONTINUATION.								
JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: CNO LTR SER N61/4U559690 of 15 Apr 94								
EXPLANATION OF PROGRAM CHANGES: New starts represent updated equipment versions to meet existing requirements.								
INSTALLING AGENTS: NOT APPLICABLE.								
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted (\$M):								
EQUIPMENT	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
HYDRA			0.9	8.6	10.1	10.6	10.5	11.4

**UNCLASSIFIED
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Weapon System Cost Analysis							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Portable Radios			52T7		
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
T7003	RF-5000 Series	A	26	920	20	829	3	172	12	516
T7016	SINGARS Manpack	A	6	52	8	69	8	114		
T7029	SINGARS Vehicle	A	12	271	16	361	13	299		
T7039	CSEL	A					69	345	400	2,000
T7040	AN/PRC-117 or Equiv.	A					3	78		
T7041	DVITS (Port)	A					4	260		
T7045	Production Support	A	Var	154	Var	143	Var	190	Var	105
T7046	HYDRA	A					Var	730	Var	7,196
T7777	FMP Installation	A					Var	100	Var	1,200
	FMP Design Service Agent	A					Var	87	Var	197
TOTAL PROGRAM				1,397		1,402		2,375		11,214

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						Portable Radios 52T7						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACT BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILBL
T7003	RF-5000	96	Harris, Rochester, NY	WX/FFP	NAWC-AD	Dec-96	Dec-96	26	\$35,384	Yes	No	
		97	Harris, Rochester, NY	WX/FFP	NAWC-AD	Dec-97	Dec-97	20	\$41,450	Yes	No	
		98	Harris, Rochester, NY	WX/FFP	NAWC-AD	Dec-98	Dec-98	3	\$57,333	Yes	No	
		99	Harris, Rochester, NY	WX/FFP	NAWC-AD	Dec-99	Dec-99	12	\$43,000	Yes	No	
T7016	SINCGARS Manpack	96	ITT, Ft. Wayne, Ind.	WX/FFP	Army	Mar-96	Jun-97	6	\$8,667	Yes	No	
		97	ITT, Ft. Wayne, Ind.	WX/FFP	Army	Mar-97	Jun-98	8	\$8,625	Yes	No	
		98	ITT, Ft. Wayne, Ind.	WX/FFP	Army	Mar-98	Jun-99	8	\$14,250	Yes	No	
T7029	SINCGARS Vehicle	96	ITT, Ft. Wayne, Ind.	WX/FFP	Army	Mar-96	Dec-97	12	\$22,583	Yes	No	
		97	ITT, Ft. Wayne, Ind.	WX/FFP	Army	Mar-97	Dec-98	16	\$22,563	Yes	No	
		98	ITT, Ft. Wayne, Ind.	WX/FFP	Army	Mar-98	Dec-99	13	\$23,000	Yes	No	
T7039	CSEL	98	Motorola, Tempe AZ	WX/FFP	Air Force	Mar-98	Sep-98	69	\$5,000	Yes	No	
		99	Motorola, Tempe AZ	WX/FFP	Air Force	Mar-99	Sep-99	400	\$5,000	Yes	No	
T7040	AN/PRC-117 or Equiv	98	agnavox, Ft Wayne,	WX/FFP	Army	Dec-97	Apr-98	3	\$26,000	Yes	No	
T7041	DVITS (Port)	98	TBD	WX/TBD	NAWC-AD	Dec-97	Apr-98	4	\$65,000	Yes	No	
D. REMARKS T7003 and T7016 - Unit cost varies depending on the type of unit procured.												

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MODIFICATION TITLE: Hierarchical Yet Dynamic radio Architecture (HYDRA)

February 1997

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: HYDRA provides a wireless digital voice and data communications system utilizing COTS trunking technology.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity							1	0.7	6	7.2	7	8.4	8	7.9	8	8.3	9	9.2	111	81.3	150	123.1
Installation Kits																						
Installation Kit Nonrecurring Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip																						
FY 96 Equip																						
FY 97 Equip																						
FY 98 Equip							1	0.2														1 0.2
FY 99 Equip									5	1.4	1	0.5										6 1.9
FY 00 Equip											4	1.2	3	0.9								7 2.1
FY 01 Equip													8	1.8								8 1.8
FY 02 Equip															8	2.2						8 2.2
FY 03 Equip																	9	2.2				9 2.2
FY TC Equip																						
Total Installation Cost							1	0.2	5	1.4	5	1.7	11	2.7	8	2.2	9	2.2	111	81.3	150	10.4
Total Procurement Cost								0.9		8.6		10.1		10.6		10.5		11.4		81.3		133.5

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES: FY 1996 FY 1997 FY 1998 Mar-98 FY 1999 Mar-99

DELIVERY DATE: FY 1996 FY 1997 FY 1998 Jun-98 FY 1999 Jun-00

PY	FY96				FY97				FY98				FY99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INSTALLATION SCHEDULE:

INPUT 1 6

OUTPUT 1 5

	FY00				FY01				FY02				FY03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INSTALLATION SCHEDULE:

INPUT 7 8 8 9 111 150

OUTPUT 1 4 3 8 8 9 111 150

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES								A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE Portable Radios 52T7					
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE
T7003 RF-5000	1,164		302	26	20	3	12	801	Outyear Funded
T7016 SINGGARS-MP	2,148		859	6	8	8		1,267	Outyear Funded
T7029 SINGGARS-Vehicle	1,057		407	12	16	13		609	Outyear Funded
T7039 CSEL	1,980		374			69	400	1,137	Outyear Funded
T7040 AN/PRC-117	330		265			3		62	Outyear Funded
T7041 DVITS (Port)	98		57			4		37	Outyear Funded
MEMO ENTERED									
ITEM #1 T7003 RF-5000	hull/location qty	hull/location qty	ITEM #2 T7016 SINGGARS-MP	hull/location qty	hull/location qty	ITEM #3 T7029 SINGGARS-Vehicle	hull/location qty	hull/location qty	
NCF 364			NCF 866			NBG 46			
EOD 188			NBG 222			NCF 992			
NBG 36			TACGRU 20			TACGRU 19			
TACGRU 33			SBA 1,040						
SBA 543									
TOTAL I/O 1,164			TOTAL I/O 2,148			TOTAL I/O 1,057			
ITEM #4 T7039 CSEL	hull/location qty	hull/location qty	ITEM #5 T7040 AN/PRC-117	hull/location qty	hull/location qty	ITEM #6 T7041 DVITS (Port)	hull/location qty	hull/location qty	
EOD 105			NCF 7			EOD 98			
NSW 1,875			NBG 16						
			TACGRU 13						
			EOD 173						
			NSW 78						
			SBA 43						
TOTAL I/O 1,980			TOTAL I/O 330			TOTAL I/O 98			

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Exhibit P-23B

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES								A. DATE February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE Portable Radios 52T7							
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE		
T7036	AN/PRC-126	2,533	1,191					1,342	Outyear Funded		
T7037	SABER	3,191	1,601					1,590	Outyear Funded		
T7039	CSEL	344	237					107	Outyear Funded		
T7040	AN/PRC-117	350	265					85	Outyear Funded		
T7041	DVITS (Port)	68	57					11	Outyear Funded		
T7042	DVITS (Base)	30	10					20	Outyear Funded		
MEMO ENTERED											
ITEM #1	T7036	AN/PRC-126	qty	ITEM #2	T7037	SABER	qty	ITEM #3	T7039	CSEL	qty
	hull/location	hull/location	qty		hull/location	hull/location	qty		hull/location	hull/location	qty
	NBG		304		EOD		1,759		EOD		344
	Assault Cra		1,332		Assault Craft		1,432				
	NCF		897								
			TOTAL I/O				TOTAL I/O				TOTAL I/O
			2,533				3,191				344
ITEM #4	T7040	AN/PRC-117	qty	ITEM #5	T7041	DVITS (Port)	qty	ITEM #6	T7042	DVITS (Base)	qty
	hull/location	hull/location	qty		hull/location	hull/location	qty		hull/location	hull/location	qty
	EOD		285		EOD		68		EOD		30
	NBG		17								
	NCF		48								
			TOTAL I/O				TOTAL I/O				TOTAL I/O
			350				68				30

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BUDGET ITEM JUSTIFICATION SHEET						DATE		
						Feb-97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUI				BLI: 3040 SINCGARS 52D5				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$3.0	\$4.6	\$7.4	\$12.6	\$15.2	\$8.4	\$8.5	\$9.6
<p>PROGRAM COVERAGE: The Shipboard SINCGARS (Single Channel Ground and Airborne Radio System) provides tactical anti-jam radios to enable Ship to Ground Forces communication. Systems are being procured in various configurations as follows: TYPE 1 - This configuration will provide the capability of operating the SINCGARS radio in the Anti-Jam Mode. VRC-46 - Replacement - This configuration will provide SINCGARS radios to replace the current AN/VRC-46 family of VHF-FM radios. Although these radios are identical to the TYPE 1 radios, no provisions are provided to operate in the Anti-Jam mode. CV/CVN System - Systems being procured for CVN class ships are VRC-46 replacement systems without multicouplers. RELAY SYSTEM - The two channel relay system to allow beyond line of sight communications between ground, air, and ship units was procured in FY 1995. Follow on procurement is planned for FY 1998 through FY 2002.</p> <p>EXPLANATION OF PROGRAM CHANGE: N/A</p> <p>INSTALLING AGENTS: Alteration Installation Teams by all SPAWAR field activities.</p> <p>Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>								

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE Feb-97																				
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE																						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SINGARS			52D5																			
<p>Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted (\$M):</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 15%;">EQUIPMENT</th> <th style="width: 10%;">FY 1996</th> <th style="width: 10%;">FY 1997</th> <th style="width: 10%;">FY 1998</th> <th style="width: 10%;">FY 1999</th> <th style="width: 10%;">FY 2000</th> <th style="width: 10%;">FY 2001</th> <th style="width: 10%;">FY 2002</th> <th style="width: 10%;">FY 2003</th> </tr> </thead> <tbody> <tr> <td>SHIP SYSTEM</td> <td style="text-align: center;">3.0</td> <td style="text-align: center;">4.6</td> <td style="text-align: center;">6.0</td> <td style="text-align: center;">11.0</td> <td style="text-align: center;">10.9</td> <td style="text-align: center;">7.5</td> <td style="text-align: center;">7.6</td> <td style="text-align: center;">8.5</td> </tr> </tbody> </table>									EQUIPMENT	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	SHIP SYSTEM	3.0	4.6	6.0	11.0	10.9	7.5	7.6	8.5
EQUIPMENT	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																		
SHIP SYSTEM	3.0	4.6	6.0	11.0	10.9	7.5	7.6	8.5																		

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WEAPON SYSTEM COST ANALYSIS							DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					SINGARS			52D5		
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
D5001	Ship System	A			45	2,611	96	3,123	161	5,550
D5002	Relay System	B					2	1,292	2	1,330
D5005	TD-1456/GRC FH Multicoupl	A					1	60	20	1,233
D5006	Interference Mitigation Devic	A					18	1,526	20	1,744
D5007	ANGRM-122 Radio Test Se	A					12	667	15	859
D5777	FMP Installation	A	Var	3,032	Var	1,985	Var	614	Var	1,619
	FMP Design Service Agent	A					Var	144	Var	237
TOTAL PROGRAM				3,032		4,596		7,426		12,572

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING											A. DATE Feb-97	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SINCGARS						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	52D5
												IF YES, WHEN AVAILABLE
D5001	SINCGARS Ship System	97	Various	Various	Various	Mar-97	Jul-98	45	\$58,022	Yes	No	
		98	Various	Various	Various	Mar-98	Jul-99	96	\$32,531	Yes	No	
		99	Various	Various	Various	Mar-99	Jul-00	161	\$34,472	Yes	No	
D5002	Relay System	98	Hughes Aircraft	WX	NAVAIR	Dec-97	Jun-98	2	\$646,000	Yes	No	
		99	Hughes Aircraft	WX	NAVAIR	Dec-98	Jun-99	2	\$665,000	Yes	No	
D5005	TD-1456/GRC FH Multicou	98	Various	Various	Various	Mar-98	Jul-99	1	\$60,000	Yes	No	
		99	Various	Various	Various	Mar-99	Jul-00	20	\$61,650	Yes	No	
D5006	Interference Mitigation Dev	98	Various	Various	Various	Mar-98	Jul-99	18	\$84,778	Yes	No	
		99	Various	Various	Various	Mar-99	Jul-00	20	\$87,200	Yes	No	
D5007	ANGRM-122 Radio Test Se	98	Various	Various	Various	Mar-98	Jul-99	12	\$55,583	Yes	No	
		99	Various	Various	Various	Mar-99	Jul-00	15	\$57,267	Yes	No	

D. REMARKS

A shipboard SINCGARS terminal will consist of equipment procured from various sources; i.e. SINCGARS radios from the Army, and Data Terminals, Ship Interface Units and Multicouplers procured by the navy. Depending on the ship class, the number of terminals per ship will vary from 1 to 15. The unit cost will also vary depending on what components are used and how many of each are installed.

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MODIFICATION TITLE: SINGGARS SHIP SYSTEM

Feb-97

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Provide ships engaged in amphibious operations and naval gunfire support missions the capability to communicate with ground forces in a VHF-FM anti-jam mode. Ship System procurement cost in each year is the total for cost codes D5001, D5005, D5006 and D5007: which are combined to produce the configurations required for various platforms.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity	310	12.1			45	2.6	96	5.4	161	9.4	27	8.5	60	5.6	38	6.8	114	7.6	155	10.2	1,006	68.2
Installation Kits																						
Installation Kit Nonrecurring Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment	8	0.3																				0.3
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip	135	3.7	120	3.0	55	2.0															310	8.7
FY96 Equip																						
FY97 Equip							23	0.6	22	0.5												45
FY98 Equip									48	1.1												96
FY99 Equip											81	1.5	80	1.6								161
FY00 Equip													14	0.3	13	0.2						27
FY01 Equip															30	0.6						60
FY02 Equip																	19	0.3	19	0.9		38
FY03 Equip																			114	5.6	114	5.6
FY TC Equip																			155	11.1	155	11.1
Total Installation Cost	135	3.7	120	3.0	55	2.0	23	0.6	70	1.6	129	2.4	94	1.9	43	0.8	49	0.9	288	17.6	1,006	34.5
Total Procurement Cost		16.1		3.0		4.6		6.0		11.0		10.9		7.5		7.6		8.5		27.8		103.0

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

CONTRACT DATES: FY 1995 3/95 FY 1996 N/A FY 1997 3/97 FY 1998 3/98 FY 1999 3/99

DELIVERY DATE: FY 1995 7/96 FY 1996 N/A FY 1997 7/98 FY 1998 7/99 FY 1999 7/00

INSTALLATION SCHEDULE:	PY	FY96				FY97				FY98				FY99										
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4							
INPUT	135				120				55							23				22				48
OUTPUT	60		75		60				60	55						23				22				48

INSTALLATION SCHEDULE:	FY00				FY01				FY02				FY03				TC	Total												
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4														
INPUT		48				81				80				14				13				30				30		19	288	1,006
OUTPUT		48				81				80				14				13				30				30		19	288	1,006

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE Feb-97		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE					
				SINGGARS			52D5		
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE
D5001 SINGGARS	1,006		135	175	45	96	161	394	Outyear Funded
D5002 RELAY	15			3		2	2	8	Outyear Funded
D5005 TD-1456/GRC FH Multico	76					1	20	55	Outyear Funded
D5006 Inteference Mitigation De	146					18	20	108	Outyear Funded
D5007 ANGRM-122 Radio Test	58					12	15	31	Outyear Funded
MEMO ENTERED									
ITEM #1 D5001 SINGGARS		ITEM #2 D5002 RELAY		ITEM #3 D5005 TD-1456/GRC FH Multico					
hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty
CV/CVN 4	MINE 26								
CG/CGN 58	AUX 23		Various	15		CG/CVN 29			
DD/DDG/FF 140	TAH 4					DD/DDG/FFG 47			
LCC 30	TLKA 4								
AMPHIBS 480	SSN 55								
	LCAC/LCU/I 182								
TOTAL I/O	1,006	TOTAL I/O	15	TOTAL I/O	76				
ITEM #4 D5006 Inteference Mitigation Device		ITEM #5 D5007 ANGRM-122 Radio Test Set		ITEM #6 SHORE SITES					
hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty	hull/location qty
LCC 8		CV/CVN 12							
AMPHIBS 138		LCC 2							
		AMPHIBS 40							
		MCS 1							
TOTAL I/O	146	TOTAL I/O	58	TOTAL I/O					

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BUDGET ITEM JUSTIFICATION SHEET					DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				BLI: 3050 SHIP COMM AUTO		52PQ		
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$5.9	\$14.7	\$25.8	\$60.6	\$66.6	\$55.3	\$59.9	\$53.9

PROGRAM COVERAGE: The Naval Modular Automated Communication System II (NAVMACS II) is a system based on Versa Module Europe (VME) architecture to automate and increase the speed and efficiency of handling message traffic aboard ships. 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.

SURFACE SHIP AUTOMATED COMMUNICATIONS CONTROL SYSTEM (SSACCS): SSACCS provides automated control and management of equipment status/inventory, user and frequency assignments, circuit configuration and mode of operation while monitoring ship's communication support services. Allows for full supervisory control over the Exterior Communications System with two operators.

HIGH SPEED FLEET BROADCAST (HSFB): Replaces current outmoded Satellite and HF Broadcast equipment with a system that allows higher transmission speeds, greater efficiency, and is more flexible.

Items procured under this program provide interconnectivity with the ADNS and JMCOMS architectures.

FY 1996: Procure 11 additional SSACCS systems .

FY 1997: Procure 6 NAVMACS II systems for 1 battlegroup and 11 additional SSACCS systems and continue procurement of HSFB.

FY 1998: Procure 4 NAVMACS II systems and 18 additional SSACCS systems and continue procurement of HSFB.

FY 1999: Procure 27 NAVMACS II systems and 25 additional SSACCS systems and continue procurement of HSFB.

INSTALLING AGENTS: Installation will be by Alteration Installation Teams (AIT) from SPAWAR field activities.

Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE SHIP COMM AUTO 52PQ				
HARDWARE/INSTALL FUNDING PROFILE (\$000): Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that associated installation costs budgeted (\$M):								
EQUIPMENT	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003
NAVMACS	0.0	5.1	5.6	27.7	36.0	22.5	30.7	31.4
SSACCS	3.5	5.1	7.6	11.2	13.5	17.1	18.1	18.5
HSFB	1.9	4.0	10.5	17.5	12.7	11.8	6.8	0.0

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**UNCLASSIFIED
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WEAPON SYSTEM COST ANALYSIS	DATE: February 1997
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B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	C. P-1 ITEM NOMENCLATURE SHIP COMM AUTO 52PQ
---	--

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
PQ065	NAVMACS II Upgrade	A			7	2,588	10	4,092	55	19,090
PQ069	SSACCS	A	11	3,300	11	3,318	18	5,438	25	7,802
PQ071	HSFB	B			39	3,873	85	8,734	118	12,399
PQ099	Production Support	A	Var	507	Var	648	Var	732	Var	2,051
PQ777	FMP Install	A	Var	2,091	Var	4,242	Var	5,480	Var	17,106
	FMP Design Service Agent	A					Var	1,323	Var	2,161
	TOTAL PROGRAM			5,898		14,669		25,799		60,609

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**UNCLASSIFIED
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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SHIP COMM AUTO 52PQ						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
PQ065	NAVMACS II	97	NISE EAST	SOW	SPAWAR	Oct-96	Nov-96	7	\$369,714	Yes	No	
		98	NISE EAST	SOW	SPAWAR	Oct-97	Nov-97	10	\$409,200	Yes	No	
		99	NISE EAST	SOW	SPAWAR	Oct-98	Nov-98	55	\$347,091	Yes	No	
PQ069	SSACCS	96	Various	Option	SPAWAR	Dec-95	Dec-96	11	\$300,000	Yes	No	
		97	Various	Option	SPAWAR	Dec-96	Dec-97	11	\$301,636	Yes	No	
		98	Various	Option	NISE EAST	Dec-97	Dec-98	18	\$302,112	Yes	No	
		99	Various	Option	NISE EAST	Dec-98	Dec-99	25	\$312,080	Yes	No	
PQ071	HSFB	97	RJO, Lanham MD	C/FFP	SPAWAR	Dec-96	Oct-97	39	\$99,307	Yes	No	
		98	RJO, Lanham MD	C/FFP	SPAWAR	Dec-97	Oct-98	85	\$102,752	Yes	No	
		99	RJO, Lanham MD	C/FFP	SPAWAR	Dec-98	Oct-99	118	\$105,076	Yes	No	
D. REMARKS												
PQ065 - FY98 unit cost increase due to Flag ship configurations, complete LAN outfitting, and procurement of Technical Training Equipment.												
PQ069 - Unit costs are an average of systems that cost from \$200K to \$1.2M depending on the type of ship the system will be installed in.												

**UNCLASSIFIED
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MODIFICATION TITLE: NAVMACS II/DMS AFLOAT (PQ065)

February 1997

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: The Naval Modular Automated Communication System will automate and increase the speed and efficiency of handling message traffic aboard ships.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Non-Development Item

FINANCIAL PLAN: (\$ in millions)

	P Y		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity	33	21.0			7	2.5	10	4.1	55	19.1	71	24.3	69	13.2	93	19.3	71	23.6	250	25.2	659	152.3
Installation Kits																						
Installation Kit Nonrecurring Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment	10	7.7																			10	7.7
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip	38	5.3																			38	5.3
FY96 Equip																						
FY97 Equip					12	2.6															12	2.6
FY98 Equip							10	1.5													10	1.5
FY99 Equip									55	8.6											55	8.6
FY00 Equip											71	11.7									71	11.7
FY01 Equip													69	9.3							69	9.3
FY02 Equip															93	11.4					93	11.4
FY03 Equip																	71	7.8			71	7.8
FY TC Equip																			250	5.2		5.2
Total Installation Cost	38	5.3			12	2.6	10	1.5	55	8.6	71	11.7	69	9.3	93	11.4	71	7.8	250	5.2	419	63.4
Total Procurement Cost		34.0				5.1		5.6		27.7		36.0		22.5		30.7		31.4		30.4		223.4

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

1 Mo.

CONTRACT DATES:

FY 1996

FY 1997

FY1998

FY1999

DELIVERY DATE:

FY 1996

FY 1997

FY1998

FY1999

INSTALLATION SCHEDULE:

PY	FY96				FY97				FY98				FY99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	43				2	5			1	3	3	3	10	18	20	7
OUTPUT	38				2	3	5	2	1	3	3	3	4	20	22	9

INSTALLATION SCHEDULE:

	FY00				FY01				FY02				FY03				Total
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	15	25	27	4	12	27	25	5	15	37	30	11	12	18	29	12	419
OUTPUT	10	20	20	21	6	18	27	18	8	32	40	13	8	22	34	7	419

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MODIFICATION TITLE: SURFACE SHIP AUTOMATED COMMUNICATIONS CONTROL SYSTEM (SSACCS) (PQ069)

MODELS OF SYSTEMS AFFECTED:

February 1997

DESCRIPTION/JUSTIFICATION: Provides automated control and management of installed communications assets.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Non-Development Item

FINANCIAL PLAN: (\$ in millions)

	P Y		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		T C		Tot al			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
RDT&E																								
PROCUREMENT																								
Kit Quantity	11	11.1	11	3.3	11	3.4	18	5.4	25	7.8	28	8.6	38	11.6	33	10.6	36	11.9	4	1.5	215	75.2		
Installation Kits																								
Installation Kit Nonrecurring Equipment																								
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interim Contractor Support																								
Installation of Hardware																								
(PY) Equip	8	3.6	1	0.2	2	0.2															11	4.0		
FY96 Equip					11	1.5																11	1.5	
FY97 Equip							11	2.2															11	2.2
FY98 Equip									18	3.4													18	3.4
FY99 Equip										25	4.9												25	4.9
FY00 Equip											28	5.5											28	5.5
FY01 Equip												38	7.5										38	7.5
FY02 Equip													33	6.6									33	6.6
FY03 Equip														36	7.3								36	7.3
FY TC Equip															4								4	
Total Installation Cost	8	3.6	1	0.2	13	1.7	11	2.2	18	3.4	25	4.9	28	5.5	38	7.5	33	6.6	40	7.3	215	36.3		
Total Procurement Cost		14.7		3.5		5.1		7.6		11.2		13.5		17.1		18.1		18.5		8.8		99.6		

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 mo

PROCUREMENT LEADTIME: 12 mo

CONTRACT DATES:

FY 1996 12/95 FY 1997 12/96 FY1998 12/97 FY1999 12/98

DELIVERY DATE:

FY 1996 12/96 FY 1997 12/97 FY1998 12/98 FY1999 12/99

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99								
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT	8	1						4	4	5		3	3	3	2			3	6	6	3
OUTPUT	8		1					4	4	5			6	3	2				9	6	3

INSTALLATION SCHEDULE:

	FY 00				FY 01				FY 02				FY 03				TC	Total				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT		3	6	8	8		3	8	9	8		3	12	12	11		3	10	10	10	40	215
OUTPUT			9	8	8			11	9	8			15	12	11			13	10	10	40	215

**UNCLASSIFIED
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MODIFICATION TITLE: HIGH SPEED FLEET BROADCAST (PQ071)

February 1997

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Replaces the current outmoded system with a system that is much faster, more flexible and provides and much more efficient use of transmission media such as satellite and HF.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity	39	10.5			39	4.0	85	8.7	118	12.4	61	6.3	76	8.0	19	2.0			7	0.8	444	52.7
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other		1.1																				
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip	1	0.1	38	1.9																	39	2.0
FY96 Equip																						
FY97 Equip							39	1.8													39	1.8
FY98 Equip									85	5.1											85	5.1
FY99 Equip											118	6.4									118	6.4
FY00 Equip													61	3.8							61	3.8
FY01 Equip															95	4.8					95	4.8
FY02 Equip																						
FY03 Equip																						
FY TC Equip																			7	0.5	7	0.5
Total Installation Cost	1	0.1	38	1.9			39	1.8	85	5.1	118	6.4	61	3.8	95	4.8			7	0.5	444	24.4
Total Procurement Cost		11.7		1.9		4.0		10.5		17.5		12.7		11.8		6.8				1.3		78.2

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MO

PROCUREMENT LEADTIME:

9 MO

CONTRACT DATES:

FY 1996 FY 1997 12/96 FY1998 12/97 FY1999 12/98

DELIVERY DATE:

FY 1996 FY 1997 10/97 FY1998 10/98 FY1999 10/99

INSTALLATION SCHEDULE:

	PY	FY 96				FY 97				FY 98				FY 99				TC	Total				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT	1	24	14											10	10	11	8	23	23	23	16		
OUTPUT		11	10	10	8									10	10	11	8	23	23	23	16		
INSTALLATION SCHEDULE:		FY 00				FY 01				FY 02				FY 03									
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		30	30	30	28	20	20	21		30	46	19										7	444
OUTPUT		30	30	30	28	20	20	21		30	46	19										7	444

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TIME PHASED REQUIREMENTS SCHEDULE		A. APPROPRIATION/BUDGET ACTIVITY												B. P-1 ITEM NOMENCLATURE				C. DATE															
		OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT												SHIP COMM AUTO 52PQ				February 1997															
COST CODE AND NAME		FY 96				FY 97				FY 98				FY 99				FY 00				FY 01				Ltr							
PQ069 SSACCS		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	Yrs			
ACTIVE FORCE INVENTORY	(P)OP,N (P)SC,N	1		1	1	2	1	1		1		1			3		1	2															
SCHOOLS/OTHER TRAINING OTHER	(P)				2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3				
TOTAL PHASED REQ	(C)	1	1	2	5	10	14	18	21	25	28	32	35	38	44	47	51	56	59	62	65	68	71	74	77					77			
ASSETS ON HAND	(BP)																																
DELIVERY	FY95/PRIOR OP,N (P) 11 FY95/PRIOR SC,N (P) 6 FY95/PRIOR OTHER (P)																																
	FY96 OP,N (P) 11 FY96 SC,N (P) FY96 OTHER (P)	A				3	8																										
	FY97 OP,N (P) 11 FY97 SC,N (P) FY97 OTHER (P)					A				3	8																						
	FY98 OP,N (P) 18 FY98 SC,N (P) FY98 OTHER (P)									A				3	9	6																	
	FY99 OP,N (P) 25 FY99 SC,N (P) FY99 OTHER (P)													A				3	9	9	4												
TOTAL ASSETS	(C)					3	11	11	11	14	22	22	22	25	34	40	40	43	52	61	65	65	65	65	65					65			
QTY OVER (+) OR SHORT (-)		-1	-1	-2	-5	-7	-3	-7	-10	-11	-6	-10	-13	-13	-10	-7	-11	-13	-7	-1		-3	-6	-9	-12					-12			
D. REMARKS		E.												TOTAL RQMT				INSTALLED				ON HAND				FY 94 & PRIOR UNDELIVERED				UNFUNDED			
OTHER Quantities indicate installations performed by Alteration Installation teams (AIT).		RQMT (QTY)												TOTAL RQMT				INSTALLED				ON HAND				FY 94 & PRIOR UNDELIVERED				UNFUNDED			
		1. APPN. OPN												132				8				3				121							
		2. APPN. Other (SCN)												6				4															
		3. PRCRMT LEADTIME												ADMIN 4 mo.				INIT ORDER 24 mo.				REORDER 12 mo.											

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TIME PHASED REQUIREMENTS SCHEDULE										DATE February 1997					
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE				COST CODE AND NAME			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								SHIP COMM AUTO				PQ069 SSACCS			
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY-2000								FY-2001							
CV-63	1														
CVN-75	1														
TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	
	2		0		0		0		0		0		0		0
FY-2002								FY-2003							
TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	
	0		0		0		0		0		0		0		0

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Exhibit P-23A

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES										A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE SHIP COMM AUTO 52PQ						
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE		
PQ069 SSACCS	215	2	9	11	11	18	25	139	Outyear Funded		
PQ065 NAVMACS II	419	5	38		7	10	55	304	Outyear Funded		
PQ071 HSFBS	444		56		39	85	118	146	Outyear Funded		
MEMO ENTERED											
ITEM #1 PQ069 SSACCS	hull/location	qty	hull/location	qty	ITEM #2	hull/location	qty	ITEM #3 PQ071 HSFBS	hull/location	qty	
CG/DDG	73		SSN	55	CV/CVN	12	DD	31	CG/CGN	29	
CVN	9		FFG	28	LCC	2	AS	3	CV/CVN	12	
Flags/LHA/AU	30		LSD	17	LHP	5	LPD	11	DD/FF/FFG	117	
LCC	2				LHD	4	FFG/LSD	155	Amphib	39	
Test	1				MCS	1	Traomomg	10	MCM	14	
					CG	27	Tech Upgrades	141	USNS	130	
					DDG	17					
	TOTAL I/O	215			TOTAL I/O	419			TOTAL I/O	444	
ITEM #4	hull/location	qty	hull/location	qty	ITEM #5	hull/location	qty	hull/location	qty	ITEM #6	
										hull/location	
										qty	
	TOTAL I/O				TOTAL I/O					TOTAL I/O	

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CODE "B" ITEM DESCRIPTION	DATE February 1997	REPORT CONTROL SYMBOL DD-COMP(AR)1092				
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		P-1 ITEM NOMENCLATURE SHIP COMM AUTO				52PQ
1. CURRENT DEVELOPMENT AND TEST STATUS						
			PQ071 HSF SCHEDULE DATE			
			CURRENT (1)	LAST REPORT (2)	REASON FOR DELAY* (3)	
a. DEV TEST & EVAL (DT&E)	PLAN/ACTUAL	DATES	a. Mar-93		Software availability	
b. INITIAL OPER TEST & EVAL (IOTE)	PLAN/ACTUAL					
c. OPER TEST & EVAL (OT&E)	PLAN/ACTUAL		Jul-93	Jun-93		
d. AVAIL DATE OF TECH DATA PKG (TDP) OR PERFORMANCE SPECIFICATIONS	PLAN/ACTUAL		Jan-93			
2. ESTIMATED DATE OF APPROVAL FOR SERVICE USE Aug-96						
3. EQUIPMENT ITEM(S) TO BE REPLACED The High Speed Fleet Broadcast program will provide Time Division Multiplex equipment to replace existing Frequency Division Multiplex equipment such as the AN/UC						
4. EXTENT OF IMPROVEMENT OVER ITEMS(S) EQUIPMENT TO BE REPLACED HSFB will allow higher data rate, more efficient use of resources, and greatly increased flexibility in communications configuration by using systems based on Versa Multi Eurocard architecture.						
5. DEVELOPMENT CONTRACT INFORMATION (dollars in millions)						
CONTRACTOR NAME (1)	PLANT LOCATION (2)	COMPONENT (3)	THROUGH PY (4)	CY (5)	BY (6)	BEYOND BY (7)
RJO	Lanham MD	N/A	10.2	4		
TOTAL RDT&E FUNDING			10.2	4		
6. REMARKS						

*Reference entries on attachment to P-19 if additional space is required to adequately explain delay from previous date.

Exhibit P-19

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BUDGET ITEM JUSTIFICATION SHEET					DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				BLI: 3055 SHIP COMM ITEMS UNDER \$2M 52NG				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$10.1	\$9.3	\$12.4	\$18.0	\$17.7	\$18.3	\$19.0	\$19.3
<p>PROGRAM COVERAGE: Funds the continued procurement of items of lesser visibility but required for the necessary integration and completion of communications suites aboard ship. The R-2368/URR will replace all existing HF receivers and will provide a capability for automated operation. The Red and Black Digital Switches are essential elements of the JMCOMS/COPERNICUS 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. 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. AIT coordination supports alterations that are made outside scheduled availabilities and integrates AIT installation with TYCOM pier side availability schedules. FMP Management Support in San Diego and the Washington liaison office maintains FMPMIS and other FMP databases that ensures material acquisition, timely delivery, correct quantities and configuration of hardware in support of SHIPALT installations.</p> <p>BG Cellular provides cellular phones for intra-Battle Group communications as well as connectivity to phones worldwide.</p> <p>Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>								

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE			
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SHIP COMM ITEMS UNDER \$2M			52NG
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted (\$M):									
EQUIPMENT	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
AN/SSQ-88	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
R-2368/URR	2.2	2.0	0.7	2.2	3.2	3.6	2.2	0.2	
LWCA	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
BLACK SWITCH	0.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	
RED/BLACK DIGITA	4.1	1.8	4	6.8	6.2	6.1	6.2	6.3	
BG CELLULAR	1.5	1.3	1.6	1.4	1.4	1.5	3.7	4.5	

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Weapon System Cost Analysis								DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SHIP COMM ITEMS UNDER \$2M			52NG		
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 96		FY 97		FY 98		FY 99		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
NG184	2368/URR	A	194	1,550	194	1,524	26	214	250	2,146	
NG237	Red/Black DGTL SW	A	3	3,189	1	1,380	4	3,571	5	3,969	
NG238	BG Cellular	A	VAR	1,047	VAR	1,177	Var	1,448	Var	1,304	
NG777	FMP Installation	A	Var	4,331	Var	5,264	Var	6,397	Var	9,514	
	FMP Design Service Agent	A					Var	744	Var	1,099	
TOTAL PROGRAM				10,117		9,345		12,374		18,032	

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SHIP COMM ITEMS UNDER \$2M 52NG						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
NG184	R-2368	96	HARRIS	C-OPT	SPAWAR	Jan-96	Jan-97	194	\$8,021	YES	NO	
		97	HARRIS	C-OPT	SPAWAR	Jan-97	Jan-98	194	\$7,856	YES	NO	
		98	HARRIS	C-OPT	SPAWAR	Jan-98	Jan-99	26	\$8,231	YES	NO	
		99	HARRIS	C-OPT	SPAWAR	Jan-99	Jan-00	250	\$8,584	YES	NO	
NG237	RED/BLACK DIGITAL SWITCH	96	ECI Virginia Beach, VA	SS/FFP	SPAWAR	Jun-96	May-97	3	\$1,063,000	YES	NO	
		97	ECI Virginia Beach, VA	SS/FFP/OPT	SPAWAR	Jan-97	Jan-98	1	\$1,400,000	YES	NO	
		98	ECI Virginia Beach, VA	SS/FFP/OPT	SPAWAR	Jan-98	Jan-99	4	\$892,750	YES	NO	
		99	ECI Virginia Beach, VA	SS/FFP/OPT	SPAWAR	Jan-99	Jan-00	5	\$793,800	YES	NO	
D. REMARKS NG237 UNIT COST VARIES DEPENDING ON DIFFERENT CONFIGURATION FOR EACH SHIP PLATFORM.												

MODIFICATION TITLE: FIELD CHANGES

February 1997

MODELS OF SYSTEMS AFFECTED: Various

DESCRIPTION/JUSTIFICATION: FCIP installs field changes to correct safety hazards, improve equipment reliability, change operating parameters, correct interoperability problems and to replace obsolete components and manage configuration control for deployed SPAWAR equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		IC		Total			
	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	Var	\$4.1																				Var	\$4.1	
FY 96 EQUIP			Var	\$2.1																			Var	\$2.1
FY 97 EQUIP					Var	\$3.6																	Var	\$3.6
FY 98 EQUIP							Var	\$5.3															Var	\$5.3
FY 99 EQUIP									Var	\$6.5													Var	\$6.5
FY 00 EQUIP										Var	\$5.9												Var	\$5.9
FY 01 EQUIP												Var	\$6.0										Var	\$6.0
FY 02 EQUIP														Var	\$5.4								Var	\$5.4
FY 03 EQUIP																Var	\$6.9						Var	\$6.9
FY TC EQUIP																								
TOTAL INSTALLATION COST		\$4.1		\$2.1		\$3.6		\$5.3		\$6.5		\$5.9		\$6.0		\$5.4		\$6.9					\$45.8	
TOTAL PROCUREMENT COST		\$4.1		\$2.1		\$3.6		\$5.3		\$6.5		\$5.9		\$6.0		\$5.4		\$6.9					\$45.8	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES:

FY 1996:

FY 1997:

FY 1998:

FY 1999:

DELIVERY DATES:

FY 1996:

FY 1997:

FY 1998:

FY 1999:

INSTALLATION SCHEDULE:

INPUT
OUTPUT

	PY	FY 96				FY 97				FY 98				FY 99			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT																	
OUTPUT																	

INSTALLATION SCHEDULE:

INPUT
OUTPUT

	FY 00				FY 01				FY 02				FY 03				TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT																	
OUTPUT																	

Unclassified
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MODIFICATION TITLE: AN/SSQ-88

February 1997

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Quality Monitoring System. Enables the communications operator to monitor the quality and performance of the installed communications equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Non-developmental Item

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																							
PROCUREMENT																							
Kit Quantity	87	3.3																			87	3.3	
Installation Kits																							
Installation Kit Nonrecurring Equipment																							
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interim Contractor Support																							
Installation of Hardware																							
(PY) Equip	86	0.6	1	0.1																	87	0.7	
FY 96 EQUIP																							
FY 97 EQUIP																							
FY 98 EQUIP																							
FY 99 EQUIP																							
FY 00 EQUIP																							
FY 01 EQUIP																							
FY 02 EQUIP																							
FY 03 EQUIP																							
FY TC EQUIP																							
Total Installation Cost	86	0.6	1	0.1																	87	0.7	
Total Procurement Cost		3.9		0.1																			4.0

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 5 mo

PROCUREMENT LEADTIME: 12 mo

CONTRACT DATES:

FY 1996: FY 1997: FY 1998: FY 1999:

DELIVERY DATE:

FY 1996: FY 1997: FY 1998: FY 1999:

INSTALLATION SCHEDULE:

<u>PY</u>		<u>FY 96</u>					<u>FY 97</u>					<u>FY 98</u>					<u>FY 99</u>			
		1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4

INPUT

86 1

OUTPUT

82 4 1

INSTALLATION SCHEDULE:

<u> </u>		<u>FY 00</u>					<u>FY 01</u>					<u>FY 02</u>					<u>FY 03</u>				<u>Total</u>
		1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4	

INPUT

87

OUTPUT

87

NOTE: 58 Prior Year units were procured and installed with NAVSEA funds.

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MODIFICATION TITLE: R-2368/URR HF RECIEVER

February 1997

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Will replace 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)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity	1,952	8.9	194	1.6	194	1.5	26	0.2	250	2.1	270	2.4	284	2.6	40	0.4			18	0.2	3,228	19.9
Installation Kits																						
Installation Kit Nonrecurring Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip	1,827	5.1	125	0.6																	1,952	5.7
FY 96 EQUIP					194	0.5															194	0.5
FY 97 EQUIP							194	0.5													194	0.5
FY 98 EQUIP									26	0.1											26	0.1
FY 99 EQUIP											250	0.8									250	0.8
FY 00 EQUIP													270	1.0							270	1.0
FY 01 EQUIP															284	1.8					284	1.8
FY 02 EQUIP																	40	0.2			40	0.2
FY 03 EQUIP																			18	0.1	18	0.1
FY TC EQUIP																						
Total Installation Cost	1,827	5.1	125	0.6	194	0.5	194	0.5	26	0.1	250	0.8	270	1.0	284	1.8	40	0.2	18	0.1	3,228	10.7
Total Procurement Cost		14.0		2.2		2.0		0.7		2.2		3.2		3.6		2.2		0.2		0.3		30.4

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

12 mo.

CONTRACT DATES:

FY 1996: 1/96 FY 1997: 1/97 FY 1998: 01/98 FY 1999: 01/99

DELIVERY DATE:

FY 1996: 1/97 FY 1997: 1/98 FY 1998: 01/99 FY 1999: 01/00

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

1,827	125				150	44			150	44			26			
-------	-----	--	--	--	-----	----	--	--	-----	----	--	--	----	--	--	--

OUTPUT

1,827	40	40	45	50	50	50	44	50	50	50	44	26			
-------	----	----	----	----	----	----	----	----	----	----	----	----	--	--	--

INSTALLATION SCHEDULE:

	FY 00				FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

INPUT

	150	100			150	120			150	134			40				18	3,228
--	-----	-----	--	--	-----	-----	--	--	-----	-----	--	--	----	--	--	--	----	-------

OUTPUT

	65	65	65	55	70	70	70	60	95	96	93	40				18	3,228
--	----	----	----	----	----	----	----	----	----	----	----	----	--	--	--	----	-------

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Unclassified
CLASSIFICATION

P3-A Exhibit

MODIFICATION TITLE: LIGHT WEIGHT COMMUNICATIONS ANTENNA

February 1997

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Provides a lightweight, survivable, and logistically supportable HF antenna

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																							
PROCUREMENT																							
Kit Quantity	78	1.6																					78 1.6
Installation Kits																							
Installation Kit Nonrecurring Equipment																							
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interim Contractor Support																							
Installation of Hardware																							
(PY) Equip	62	0.6	16	0.3																			78 0.9
FY 96 EQUIP																							
FY 97 EQUIP																							
FY 98 EQUIP																							
FY 99 EQUIP																							
FY 00 EQUIP																							
FY 01 EQUIP																							
FY 02 EQUIP																							
FY 03 EQUIP																							
FY TC EQUIP																							
Total Installation Cost	62	0.6	16	0.3																			78 0.9
Total Procurement Cost		2.2		0.3																			2.5

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 9 mo PROCUREMENT LEADTIME: 12 mo

CONTRACT DATES:

FY 1996: FY 1997: FY 1998: FY 1999:

DELIVERY DATE:

FY 1996: FY 1997: FY 1998: FY 1999:

INSTALLATION SCHEDULE:

<u>PY</u>		FY 96					FY 97					FY 98					FY 99			
		1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4

INPUT

62 8 8

OUTPUT

47 15 8 8

INSTALLATION SCHEDULE:

		FY 00					FY 01					FY 02					FY 03					Total
		1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4		

INPUT

78

OUTPUT

78

Unclassified
CLASSIFICATION

MODIFICATION TITLE: BLACK AUDIO SWITCH

February 1997

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: The Black Audio Switch will allow audio circuits to be configured automatically and from remote locations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES Non-Development Item

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity	7	4.1																			7	4.1
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip	4	0.9	1	0.3	2	0.6															7	1.8
FY 96 EQUIP																						
FY 97 EQUIP																						
FY 98 EQUIP																						
FY 99 EQUIP																						
FY 00 EQUIP																						
FY 01 EQUIP																						
FY 02 EQUIP																						
FY 03 EQUIP																						
FY TC EQUIP																						
Total Installation Cost	4	0.9	1	0.3	2	0.6															7	1.8
Total Procurement Cost		5.0		0.3		0.6																5.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME 9 mo

PROCUREMENT LEADTIME:

14 mo

CONTRACT DATES:

FY 1996:

FY 1997:

FY 1998:

FY 1999:

DELIVERY DATE:

FY 1996:

FY 1997:

FY 1998:

FY 1999:

INSTALLATION SCHEDULE:

<u>PY</u>		<u>FY 96</u>				<u>FY 97</u>				<u>FY 98</u>				<u>FY 99</u>			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

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

OUTPUT

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

INSTALLATION SCHEDULE:

	<u>FY 00</u>				<u>FY 01</u>				<u>FY 02</u>				<u>FY 03</u>				<u>Total</u>
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	

INPUT

7

OUTPUT

7

Unclassified
CLASSIFICATION

MODIFICATION TITLE: RED/BLACK BASEBAND SWITCH

February 1997

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Will provided automated and remote control of digital circuits

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Non-Developmental Item

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
RDT&E																								
PROCUREMENT																								
Kit Quantity	3	4.1	3	3.2	1	1.4	4	3.5	5	4.0	3	2.7	5	4.0	3	2.7	5	4.2	4	5.0	36	34.8		
Installation Kits																								
Installation Kit Nonrecurring Equipment																								
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interim Contractor Support																								
Installation of Hardware																								
(PY) Equip			3	0.9																	3	0.9		
FY 96 EQUIP					3	0.4															3	0.4		
FY 97 EQUIP							1	0.5													1	0.5		
FY 98 EQUIP									4	2.8											4	2.8		
FY 99 EQUIP											5	3.5									5	3.5		
FY 00 EQUIP													3	2.1						3	2.1			
FY 01 EQUIP														5	3.5					5	3.5			
FY 02 EQUIP																3	2.1			3	2.1			
FY 03 EQUIP																		5	3.5		5	3.5		
FY TC EQUIP																				4	4.2		4	4.2
Total Installation Cost			3	0.9	3	0.4	1	0.5	4	2.8	5	3.5	3	2.1	5	3.5	3	2.1	9	7.7	36	21.4		
Total Procurement Cost	4.1		4.1		1.8		4.0		6.8		6.2		6.1		6.2		6.3		12.7		52.0			

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

3 mo

PROCUREMENT LEADTIME:

12 mo

CONTRACT DATES:

FY 1996: 5/96 FY 1997: 1/97 FY 1998: 01/98 FY 1999: 01/99

DELIVERY DATE:

FY 1996: 5/97 FY 1997: 1/98 FY 1998: 01/99 FY 1999: 01/00

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT			3					3			1					3
OUTPUT				3								3				1

INSTALLATION SCHEDULE:

	FY 00				FY 01				FY 02				FY 03				TC	Total	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT		3	2			1	1	1		2	3				3			9	36
OUTPUT			3	2			1	1	1	2	2	1				3		9	36

MODIFICATION TITLE: BATTLE GROUP CELLULAR TELEPHONE

February 1997

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Provide an administrative communications link via ships administrative telephones.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Non-Developmental Item

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity			Var	1.5	Var	1.2	Var	1.5	Var	1.3	Var	1.3	Var	1.4	Var	3.6	Var	4.1			Var	15.9
Installation Kits																						
Installation Kit Nonrecurring Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip																						
FY 96 EQUIP																						
FY 97 EQUIP					Var	0.1															Var	0.1
FY 98 EQUIP						Var	0.1														Var	0.1
FY 99 EQUIP								Var	0.1												Var	0.1
FY 00 EQUIP										Var	0.1										Var	0.1
FY 01 EQUIP											Var	0.1									Var	0.1
FY 02 EQUIP												Var	0.1								Var	0.1
FY 03 EQUIP													Var	0.4							Var	0.4
FY TC EQUIP																						
Total Installation Cost						0.1		0.1		0.1		0.1		0.1		0.1		0.4				1.0
Total Procurement Cost				1.5		1.3		1.6		1.4		1.4		1.5		3.7		4.5				16.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

3 mo

PROCUREMENT LEADTIME:

12 mo

CONTRACT DATES:

FY 1996:

FY 1997:

FY 1998:

FY 1999:

DELIVERY DATE:

FY 1996:

FY 1997:

FY 1998:

FY 1999:

PY

FY 96

FY 97

FY 98

FY 99

1 2 3 4

1 2 3 4

1 2 3 4

1 2 3 4

INSTALLATION SCHEDULE:

INPUT

OUTPUT

FY 00

FY 01

FY 02

FY 03

Total

1 2 3 4

1 2 3 4

1 2 3 4

1 2 3 4

INSTALLATION SCHEDULE:

INPUT

OUTPUT

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Unclassified
CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES								A. DATE		
								February 1997		
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SHIP COMM ITEMS UNDER \$2M						52NG
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE	
NG183 AN/SSQ-88	87		86	1					Complete	
NG184 R-2368/URR	3,228		1,952	194	194	26	250	612	Dutyyear Funded	
NG237 RED/BLACK DIG	36		3	3	1	4	5	20	Dutyyear Funded	
MEMO ENTERED										
ITEM #1 NG183 AN/SSQ-88	hull/location qty	hull/location qty	ITEM #2 NG184 R-2368/URR	hull/location qty	hull/location qty	ITEM #3 NG237 RED/BLACK DIG	hull/location qty	hull/location qty	hull/location qty	
CG/CGN 29			Auxilliary 560		SSN/SSBN 156	CG 6		MCS 1		
CV/CVN 12			CG/CGN 456			AGF 3				
DD/FFG 46			CV/CVN 312			CVN 11				
			DD/FF 535			LHA 6				
			AMPHIB 729			LHD 6				
			MCM 120			CV 1				
			USNS 360			LCC 2				
	TOTAL I/O 87			TOTAL I/O 3,228			TOTAL I/O 36			
ITEM #4			ITEM #5	hull/location qty	hull/location qty	ITEM #6	hull/location qty	hull/location qty	hull/location qty	
	TOTAL I/O			TOTAL I/O			TOTAL I/O			

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET					DATE FEB 1997			
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				BLI: 3107 SHORE LF/VLF COMMUNICATIONS 52W4				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$4.2	\$4.0	\$7.8	\$16.2	\$19.7	\$19.6	\$20.0	\$4.2
<p>PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS: The Shore Low Frequency (LF)/Very Low Frequency (VLF) program was established to improve the reliability, efficiency, and performance of transmitting components of the submarine broadcast system. These transmitters comprise the primary line of Fleet Ballistic Missile Command Control Communications (FBMC3). Four (4) VLF and six (6) LF transmitting sites provide Emergency Action Message (EAM) relay points providing primary connectivity between National Command Authorities (NCA) and SSBNs. Tasks are ongoing to improve performance of LF/VLF broadcast system capabilities consistent with changing operational requirements.</p> <p>(1) FVLF/LF Upgrade: Upgrades and replaces FVLF/LF transmitter and antenna components at shore stations worldwide.</p> <p>(2) FVLF/LF Solid State Transmitter (SST): Program procures energy efficient Solid State Power Transmitter and associated ancillary equipment for the VLF/LF Shore based transmitters of the Submarine Broadcast system.</p> <p>(3) NON-FMP Equipment Installation: Provides installation support, such as Base Electronic System Engineering Plans (BESEP).</p> <p>Structure of the FVLF/LF Solid State Transmitter procurement.</p> <p>INSTALLING AGENTS: NISE East Charleston</p>								

**UNCLASSIFIED
CLASSIFICATION**

BUDGET ITEM JUSTIFICATION SHEET (Continuation						DATE FEB 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SHORE LF/VLF COMMUNICATIONS 52W4				
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted (\$M):								
<u>EQUIPMENT</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>	<u>FY1999</u>	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
LF/VLF Upgrade	1.60	0.90	7.80	0.2				4.0
F/VLF Solid State Xrr	2.70	3.20	0.10	16.0	19.7	19.6	20.0	0.2
Total:	4.3	4.1	7.9	16.2	19.7	19.6	20.0	4.2

**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM COST ANALYSIS							DATE: FEB 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE SHORE LF/VLF COMMUNICATIONS 52W4					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
W4008	FVLF/LF UPGRADE	A	1	1,463	1	834	3	7,657		
W4010	FVLF/LF SOLID STATE XMITTE	A	1	2,601	1	3,119			1	16,001
W4776	NON-FMP INSTALLATION	A	VAR	105	VAR	96	VAR	94	VAR	158
TOTAL PROGRAM				4,169		4,049		7,751		16,159

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

Exhibit P-5

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**UNCLASSIFIED
CLASSIFICATION**

**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE FEB 1997		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE SHORE LF/VLF COMMUNICATIONS 52W4						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABL NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
W4008	FVLF/LF Upgrade	96	TBD	C/FFP	SPAWAR HQ	Feb-96	Jan-97	1	\$1,463	Yes	No	
		97	TBD	C/FFP-O	SPAWAR HQ	Mar-97	Nov-98	1	\$834	Yes	No	
		98	TBD	C/FFP	SPAWAR HQ	Jan-98	Mar-99	3	\$2,552	Yes	No	
W4010	FVLF/LF Transmitter	96	TBD	C/FFP	SPAWAR HQ	Feb-96	Jan-97	1	\$2,601	Yes	No	
		97	TBD	C/FFP-O	SPAWAR HQ	Mar-97	Nov-98	1	\$3,119	Yes	No	
		99	TBD	C/FFP	SPAWAR HQ	Jan-99	Sep-00	1	\$16,001	Yes	No	
D. REMARKS - The FY 97 transmitter and upgrade lines are for the AN/FRT-95, a 250 KW LF/VLF transmitter system. FY 98 funding is for procurement of saturable reactors for the SSPAR, a 1-2 MW VLF transmitter. FY 99 funding will be used to procure a SSPAR transmitter.												

MODIFICATION TITLE: LF/VLF Upgrade/Shore LF/VLF
 MODELS OF SYSTEMS AFFECTED: Various
 DESCRIPTION/JUSTIFICATION: Upgrades and replaces LF/VLF transmitter and antenna components worldwide.

FEB 1997

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

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		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	2.1	1	1.5	1	0.8	3	7.7									1	4.0			10	16.1		
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware *	3	0.06	1	0.05																	4	0.11		
PRIOR YR EQUIP					1	0.05															1	0.05		
FY 96 EQUIP							1	0.05													1	0.05		
FY 97 EQUIP									3	0.2											3	0.20		
FY 98 EQUIP																								
FY 99 EQUIP																								
FY 00 EQUIP																								
FY 01 EQUIP																								
FY 02 EQUIP																								
FY 03 EQUIP																			1	0.05	1	0.05		
FY TC EQUIP																								
TOTAL INSTALLATION COST	3	0.06	1	0.05	1	0.05	1	0.05	3	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.05	10	0.46
TOTAL PROCUREMENT COST		2.2		1.6		0.9		7.8		0.2		0.0		0.0		0.0		4.0		0.05		16.56		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 3 mo. PROCUREMENT LEADTIME: 14 mo.

CONTRACT DATES: FY 1996: VAR. FY 1997: 3/97. FY 1998: 1/98. FY 1999:

DELIVERY DATES: FY 1996: VAR. FY 1997: 9/98. FY 1998: 3/99. FY 1999:

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	3		1				1					1			3	
OUTPUT	3			1			1							1		3

INSTALLATION SCHEDULE:

PY	FY 00				FY 01				FY 02				FY 03				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																	1	10
OUTPUT																	1	10

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Exhibit P-3A

* Quantity reflects shore sites.

MODIFICATION TITLE: FVLF Solid State Transmitter/Shore LF/VLF Comm
 MODELS OF SYSTEMS AFFECTED: Various
 DESCRIPTION/JUSTIFICATION: Provides energy efficient solid state power transmitter and associated equipment for LF/VLF shore based transmitters.

FEB 1997

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

	<u>PY</u>		<u>FY 96</u>		<u>FY 97</u>		<u>FY 98</u>		<u>FY 99</u>		<u>FY 00</u>		<u>FY 01</u>		<u>FY 02</u>		<u>FY 03</u>		<u>TC</u>		<u>Total</u>		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	2	8.0	1	2.6	1	3.1			1	16.0	1	19.5	1	19.4	1	19.8					8	88.4	
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware																							
PRIOR YR EQUIP	1	0.07	1	0.05																		2	0.12
FY 96 EQUIP					1	0.05																1	0.05
FY 97 EQUIP							1	0.05														1	0.05
FY 98 EQUIP																							
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	0.2					1	0.2
FY TC EQUIP																							
TOTAL INSTALLATION COST	1	0.07	1	0.05	1	0.05	1	0.05	0	0.0	1	0.2	1	0.2	1	0.2	1	0.2	0	0.0	8	1.02	
TOTAL PROCUREMENT COST		8.1		2.7		3.2		0.1		16.0		19.7		19.6		20.0		0.2		0.0		89.4	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 3 mo PROCUREMENT LEADTIME: 2 mo

CONTRACT DATES: FY 1996: VAR FY 1997: 3/97 FY 1998: FY 1999: 1/99

DELIVERY DATES: FY 1996: VAR FY 1997: 9/98 FY 1998: FY 1999: 9/00

INSTALLATION SCHEDULE:

	<u>PY</u>	<u>FY 96</u>				<u>FY 97</u>				<u>FY 98</u>				<u>FY 99</u>			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	1	1							1								1
OUTPUT	1	1							1								1

INSTALLATION SCHEDULE:

		<u>FY 00</u>				<u>FY 01</u>				<u>FY 02</u>				<u>FY 03</u>				<u>TC</u>	<u>TOTAL</u>	
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT					1				1				1					1	0	8
OUTPUT						1								1				1	1	8

P-1 SHOPPING LIST
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* Quantity reflects shore sites.

Exhibit P-3A

UNCLASSIFIED
CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE				
							FEB 1997				
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SHORE LF/VLF COMMUNICATIONS 52W4							
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE		
W4008 FVLF/LF Transmitter	8			3	1		1	3	Duty year Funded		
W4010 FVLF/LF Upgrade	10			5	1	3		1	Duty year Funded		
MEMO ENTERED											
ITEM #1	W4008 FVLF/LF Transmitters			ITEM #2	W4010 FVLF/LF Upgrade			ITEM #3			
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty
Aguada, Puerto Rico	1	Lualualei, HI	1	Aguada, Puerto Rico	1	Cutler, ME	2				
Grindavik, Iceland	1	Cutler, ME	1	Grindavik, Iceland	1	Lualualei, HI	2				
Awase, Japan	1	H.E. Holt, Australi	1	Awase, Japan	1	H.E. Holt, Australia	1				
Nicemi, Italy	1			Nicemi, Italy	1	TBD	1				
Jim Creek, WA	1										
	TOTAL I/O		8		TOTAL I/O		10		TOTAL I/O		
ITEM #4				ITEM #5				ITEM #6			
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty
	TOTAL I/O				TOTAL I/O				TOTAL I/O		

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P-1 SHOPPING LIST

Exhibit P-23B

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CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET						DATE		
						FEB 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				313000		SUBMARINE COMMUNICATIONS		52L0
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$12.8	\$25.4	\$37.2	\$50.9	\$61.1	\$64.3	\$66.2	\$85.9

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 in FY 98.

BASEBAND DISTRIBUTION SYSTEM - Consists of switching hardware and controller that will allow flexible distribution of baseband signals throughout the submarine. The Baseband Switch is a Non-Developmental Item (NDI) that will automate SSN 688 class assets, provide remotely control switching operation, allow preset configurations for quick reaction times, reduce needed rack space, and recover fleet configuration control.

ANTENNA MODIFICATIONS - Modifications to antenna systems in order to provide Very Low Frequency (VLF) performance, Mid Frequency/High Frequency (MF/HF) efficiency, and control unit reliability. All SSN classes are affected by these modifications.

SUBMARINE MESSAGE BUFFER - The SMB will provide a means of non-volatile message storage, generation and processing. It is NDI and will use existing commercial and military software. The system will be capable of performing all messages handling functions on four channels simultaneously.

Exhibit P-40

P-1 SHOPPING LIST

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**UNCLASSIFIED
CLASSIFICATION**

UNCLASSIFIED

CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET		DATE	FEB 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE		
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	313000	SUBMARINE COMMUNICATIONS	52L0
<p>TIME and FREQUENCY DISTRIBUTION SYSTEM - The TFDS provide inputs required by equipment's in communications, electronic warfare, periscope, navigation, combat and ship control systems aboard SSN 688 class submarines. The TFDS hardware will be capable of automatic or manual selection of inputs from one of two cesium beam standards.</p> <p>HIGH SPEED BUOYANT CABLE ANTENNA - THE HBSCA provides submarines with the capability to receive Extremely Low Frequency (ELF) through Very High Frequency (VHF) and transmit in the MF/HF ranges via a fully deployed antenna system while operating across the full range of depth and speed.</p> <p>OE - 538/BRC ANTENNA GROUP (IMPROVED AN/BRA-34) - 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.</p> <p>SUBMARINE COMMUNICATIONS SUPPORT SYSTEM RADIO ROOM - The CSS 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 Submarine;s communication equipment.</p> <p>JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM - JTIDS is an advanced information distribution system that provides secure, integrated communications, navigation and identification capabilities for application to military tactical users. The procurement of the Link-16 consists of the JTIDS terminal and the Command and Control Processor (C2P). The configuration for submarines will be different and will require additional engineering. Starting in FY 98 JTIDS will be replaced by the Multifunction Information Distribution System (MIDS).</p> <p>SHF/EHF HIGH DATA RATE SATELLITE COMMUNICATIONS ANTENNAS (HDA) - 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 bands.</p> <p>MULTIBAND ANTENNA - The Multiband Antenna will provide Pre-Planned Product Improvements (P3I) to the High Data Rate (HDR) SHF/EHF communications capability to the Submarine Force. The Global Boradcast System (GBS) capability is the improvement that has been identified ast this time as an upgrade to HDR.</p> <p>SUBMARINE ANTENNA DISTRIBUTION SYSTEM (SADS) - The SADS program will replace 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 environmant. The ADS will allow highly flexible and automated routing of signals and information between the radio room and various antenna systems.</p>			

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BUDGET ITEM JUSTIFICATION SHEET						DATE	FEB 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				313000		SUBMARINE COMMUNICATIONS		52L0	
Note: Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.									
<u>MODIFICATION SUMMARY</u>									
Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:									
<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	
BASEBAND SWITCH	7.7	12.9	12.2	11.1	10.2	7.3	1.1		
SMB	1.00	0.4							
TFDS	0.3	1.9	2.4	2.1	2.3	1.0	0.1		
HSBCA	0.24	0.08							
OE - 538/BRC		2.5	6.3	8.0	9.3	9.6	6.1	0.6	
JTIDS/LINK-16		1.4							
SADS			2.7	5.9	5.4	4.5	5.6	6.5	
MIDS				3.4	4.6	5.6	7.7	7.7	
Sub HDA			5.8	14.7	20.9	29.1	32.7	34.1	
MULTIBAND ANTENNA							2.6	5.6	
TRIDENT SCSS									24.6

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PROGRAM COST BREAKDOWN	DATE: FEB 1997
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B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	C. P-1 ITEM NOMENCLATURE SUBMARINE COMMUNICATIONS 52L0
--	---

COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
L0027	BASEBAND SWITCH	N/A	12	6,723	14	8,008	12	6,430	8	5,974
L0035	ANTENNA MODIFICATIONS	N/A	VAR	1,438	VAR	2,092	VAR	2,109	VAR	2,594
L0077	SUB MESSAGE BUFFER	N/A	4	100						
L0078	T/F DISTRIBUTION SYSTEM	N/A	VAR	250	15	1,900	15	1,957	12	1,588
L0079	HIGH SPEED BUOYANT CABLE	N/A	24	200						
L0080	OE - 538/BRC	N/A			4	2,450	10	5,833	12	7,072
L0084	SCSS RADIO ROOM	N/A	VAR	2,245	VAR	4,345	VAR	5,072	VAR	3,141
L0086	SADS	B					10	2,740	12	3,381
L0087	HIGH DATA RATE ANTENNA	B					4	5,848	8	11,270
L0091	MIDS	N/A							7	3,363
L0777	FMP INSTALL	N/A	VAR	1,851	VAR	6,646	VAR	6,692	VAR	12,330
	DESIGN SERVICE AGENT	N/A					VAR	558	VAR	225
	TOTAL PROGRAM			12,807		25,441		37,239		50,938

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BUDGET PROCUREMENT HISTORY AND PLANNING										A. DATE FEB 1997		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE SUBMARINE COMMUNICATIONS 52L0						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV RQUIRED	IF YES, WHEN AVAILABLE
L0027	Baseband Switch	96	Various	C/FFP	SPAWAR	Aug-96	Mar-97	12	\$560,250	YES	NO	N/A
		97	Various	C/FFP/OPT	SPAWAR	Dec-96	Nov-97	14	\$572,000	YES	NO	N/A
		98	Various	C/FFP/OPT	SPAWAR	Dec-97	Nov-98	12	\$535,833	YES	NO	N/A
		99	Various	C/FFP/OPT	SPAWAR	Dec-98	Nov-99	8	\$746,750	YES	NO	N/A
L0077	Submarine Message Buffer	96	CYBERCHRON,NY	C/FFP/OPT	SPAWAR	Nov-95	Feb-96	4	\$25,000	YES	NO	N/A
L0078	T/F Distribution System	97	TBD	C/FFP	SPAWAR	Feb-97	Oct-97	15	\$126,666	YES	NO	N/A
		98	TBD	C/FFP/OPT	SPAWAR	Dec-97	Aug-98	15	\$130,466	YES	NO	N/A
		99	TBD	C/FFP/OPT	SPAWAR	Dec-98	Aug-99	12	\$132,333	YES	NO	N/A
L0079	High Speed Buoyant Cable	96	Spears, MA	C/FFP/OPT	SPAWAR	Jan-96	Jan-97	24	\$8,333	YES	NO	N/A
L0080	OE - 538/BRC	97	TBD	C/FFP	SPAWAR	Dec-96	May-98	4	\$612,500	YES	NO	N/A
		98	TBD	C/FFP/OPT	SPAWAR	Dec-97	May-99	10	\$583,300	YES	NO	N/A
		99	TBD	C/FFP/OPT	SPAWAR	Dec-98	May-00	12	\$589,330	YES	NO	N/A
L0086	SADS	98	TBD	C/FFP	SPAWAR	Jan-98	Sep-98	10	\$274,000	TBD	TBD	TBD
		99	TBD	C/FFP/OPT	SPAWAR	Jan-99	Sep-99	12	\$281,750	TBD	TBD	TBD
L0087	HDA Antenna	98	TBD	C/FFP	SPAWAR	Jan-98	Jan-99	4	\$1,462,000	TBD	TBD	TBD
		99	TBD	C/FFP/OPT	SPAWAR	Jan-99	Jan-00	8	\$1,408,750	TBD	TBD	TBD
L0091	MIDS	99	TBD	C/FFP	SPAWAR	TBD	TBD	7	\$480,429	TBD	TBD	TBD
D. REMARKS L0027 FY 99 Baseband switch unit cost includes P31 for procurements to maintain state of the art.												

MODIFICATION TITLE: Baseband Switch (BBS) L0027
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of Baseband Switch.

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

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment	4	6.9	12	6.7	14	8.0	12	6.4	8	6.0	8	6.1	2	3.1							60	43.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip	2	1.1	2	1.0																	4	2.1
FY96 Equip					12	4.9															12	4.9
FY97 Equip							14	5.8													14	5.8
FY98 Equip									12	5.1											12	5.1
FY99 Equip											8	4.1									8	4.1
FY00 Equip													8	4.2							8	4.2
FY01 Equip															2	1.1					2	1.1
FY02 Equip																						
FY03 Equip																						
FY TC Equip																						
Total Installation Cost	2	1.1	2	1.0	12	4.9	14	5.8	12	5.1	8	4.1	8	4.2	2	1.1	0	0.0			60	27.3
Total Procurement Cost		8.0		7.7		12.9		12.2		11.1		10.2		7.3		1.1		0.0				70.5

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

10mos.

PROCUREMENT LEADTIME:

11mos.

CONTRACT DATES:

FY 1996: 8/96

FY 1997: 12/96

FY 1998: 12/97

FY 1999: 12/98

DELIVERY DATE:

FY 1996: 3/97

FY 1997: 11/97

FY 1998: 11/98

FY 1999: 11/99

INSTALLATION SCHEDULE:

	PY				FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT		2			2					2	6	4		4	6	4		4	4	4
OUTPUT		2			1	1					6	6		4	6	4		2	6	4
INSTALLATION SCHEDULE:	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				Total

INPUT

4 4

4 4

2

60

OUTPUT

2 6

2 6

2

60

MODIFICATION TITLE: Submarine Message Buffer (SMB) L0077

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Installation of Submarine Message Buffer.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment	60	1.8	4	0.1																	64	1.9
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip	60	1.8																			60	1.8
FY96 Equip			3	0.9	1	0.4															4	1.3
FY97 Equip																					0	0.0
FY98 Equip																					0	0.0
FY99 Equip																					0	0.0
FY00 Equip																					0	0.0
FY01 Equip																					0	0.0
FY02 Equip																					0	0.0
FY03 Equip																					0	0.0
FY TC Equip																						
Total Installation Cost	60	1.8	3	0.9	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0			64	3.1
Total Procurement Cost		3.6		1.0		0.4		0.0		0.0		0.0		0.0		0.0		0.0				5

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 12mos.

PROCUREMENT LEADTIME: 4-9 mos.

CONTRACT DATES:

FY 1996:11/95 FY 1997: N/A FY 1998: N/A FY 1999: N/A

DELIVERY DATE:

FY 1996: 2/96 FY 1997: N/A FY 1998: N/A FY 1999: N/A

INSTALLATION SCHEDULE:

	PY				FY 96				FY 97				FY 98				FY 99				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Total
INPUT							3					1									
OUTPUT											1	2									
INSTALLATION SCHEDULE:	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Total

INPUT

64

OUTPUT

64

MODIFICATION TITLE: High Speed Buoyant Cable Antenna (HBCA) L0079
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of High Speed Buoyant Cable Antenna.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
 FINANCIAL PLAN: (\$ in millions)

RDT&E PROCUREMENT	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment	276	2.3	24	0.2																	300	2.50
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip			120	0.04	156	0.07															276	0.11
FY96 Equip					24	0.01															24	0.01
FY97 Equip																					0	0.00
FY98 Equip																					0	0.00
FY99 Equip																					0	0.00
FY00 Equip																					0	0.00
FY01 Equip																					0	0.00
FY02 Equip																					0	0.00
FY03 Equip																					0	0.00
FY TC Equip																						
Total Installation Cost	0	0.0	120	0.04	180	0.08	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0			300	0.12
Total Procurement Cost	2.30		0.24		0.08		0.0		0.0		0.0		0.0		0.0		0.0					2.62

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME: 12mos.

CONTRACT DATES:

FY 1996 1/96 FY 1997: N/A FY 1998: N/A FY 1999: N/A

DELIVERY DATE:

FY 1996 1/97 FY 1997: N/A FY 1998: N/A FY 1999: N/A

INSTALLATION SCHEDULE:

PY		FY 96		FY 97		FY 98		FY 99							
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

50 70 76 80 24

OUTPUT

50 70 76 80 24

INSTALLATION SCHEDULE:

FY 00		FY 01		FY 02		FY 03		Total
1	2	3	4	1	2	3	4	

INPUT

OUTPUT

300

300

MODIFICATION TITLE: JTIDS/LINK-16

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION/JUSTIFICATION: Installation of JTIDS/LINK-16.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment	10	7.3																			10	7.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip					10	1.4															10	1.4
FY96 Equip																					0	0.0
FY97 Equip																					0	0.0
FY98 Equip																					0	0.0
FY99 Equip																					0	0.0
FY00 Equip																					0	0.0
FY01 Equip																					0	0.0
FY02 Equip																					0	0.0
FY03 Equip																						
FY TC Equip																						
Total Installation Cost	0	0.0	0	0.0	10	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0			10	1.4
Total Procurement Cost		7.3		0.0		1.4		0.0		0.0		0.0		0.0		0.0		0.0				8.7

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES:

FY 1996: N/A FY 1997: N/A FY 1998: N/A FY 1999: N/A

DELIVERY DATE:

FY 1996: N/A FY 1997: N/A FY 1998: N/A FY 1999: N/A

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99						
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

4 6

OUTPUT

2 4 4

INSTALLATION SCHEDULE:

FY 00				FY 01				FY 02				FY 03				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

10

OUTPUT

10

MODIFICATION TITLE: Submarine Antenna Distribution System (SADS) L0086
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of Submarine Antenna Distribution System.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
 FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring Equipment							10	2.7	12	3.4	8	2.3	8	2.4	11	3.4	11	3.5			60	17.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip																					0	0.0
FY96 Equip																					0	0.0
FY97 Equip																					0	0.0
FY98 Equip																					0	0.0
FY99 Equip								10	2.5												10	2.5
FY00 Equip										12	3.1										12	3.1
FY01 Equip												8	2.1								8	2.1
FY02 Equip														8	2.2						8	2.2
FY03 Equip																	11	3.0			11	3.0
FY TC Equip																			11	3.0	11	3.0
Total Installation Cost			0	0.0	0	0.0	0	0.0	10	2.5	12	3.1	8	2.1	8	2.2	11	3.0	11	3.0	60	15.9
Total Procurement Cost	0.0		0.0		0.0		2.7		5.9		5.4		4.5		5.6		6.5		3.0		33.6	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME: 8mos.

CONTRACT DATES:

FY 1996: N/A

FY 1997: N/A

FY 1998: 1/98

FY 1999: 1/99

DELIVERY DATE:

FY 1996: N/A

FY 1997: N/A

FY 1998: 9/98

FY 1999: 9/99

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT																
OUTPUT																

INPUT

3 3 4

OUTPUT

1 3 3 3

INSTALLATION SCHEDULE:

	FY 00				FY 01				FY 02				FY 03				TC		Total
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
INPUT	4	4	4		4	4			4	4			4	4	3		11	60	
OUTPUT	2	4	4	2	2	4	2		2	4	2		2	4	4	1	11	60	

INPUT

OUTPUT

MODIFICATION TITLE: High Data Rate Antenna L0087
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of High Data Rate Antenna.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
 FINANCIAL PLAN: (\$ in millions)

RDT&E PROCUREMENT	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment							4	5.8	8	11.3	9	13.9	14	20.9	13	19.8	14	21.8			62	93.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip																					0	0.0
FY96 Equip																					0	0.0
FY97 Equip																					0	0.0
FY98 Equip							4	3.4													4	3.4
FY99 Equip																					8	7.0
FY00 Equip									8	7.0											9	8.2
FY01 Equip											9	8.2									14	12.9
FY02 Equip													14	12.9							13	12.3
FY03 Equip																	13	12.3			0	0.0
FY TC Equip																					14	13.6
Total Installation Cost			0	0.0	0	0.0	0	0.0	4	3.4	8	7.0	9	8.2	14	12.9	13	12.3	14	13.6	62	57.4
METHOD OF Total Procurement Cost	0.0		0.0		0.0		5.8		14.7		20.9		29.1		32.7		34.1		13.6		14	13.6

CONTRACT DATES:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

12mos.

DELIVERY DATE:

FY 1996: N/A

FY 1997: N/A

FY 1998: 1/98

FY 1999: 1/99

FY 1996: N/A

FY 1997: N/A

FY 1998: 1/99

FY 1999: 1/00

INSTALLATION SCHEDULE:

PY

FY 96
1 2 3 4

FY 97
1 2 3 4

FY 98
1 2 3 4

FY 99
1 2 3 4

INPUT

OUTPUT

2 2

INSTALLATION SCHEDULE:

FY 00
1 2 3 4

FY 01
1 2 3 4

FY 02
1 2 3 4

FY 03
1 2 3 4

TC

Total

INPUT

OUTPUT

2 3 3

2 3 4

4 4 6

4 4 5

14

62

2 3 3

2 3 4

4 4 6

4 4 5

14

#REF!

P-3A Exhibit

MODIFICATION TITLE: Multifunction Information Distribution System (MIDS) L0091
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Installation of Multifunctional Information Distribution System.
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
 FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
RDT&E																								
PROCUREMENT																								
Kit Quantity																								
Installation Kits																								
Installation Kit Nonrecurring																								
Equipment									7	3.4		12	4.6		12	4.8		12	6.9		2	1.2	57	27.8
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interim Contractor Support																								
Installation of Hardware																								
(PY) Equip																							0	0.0
FY96 Equip																							0	0.0
FY97 Equip																							0	0.0
FY98 Equip																							0	0.0
FY99 Equip																							0	0.0
FY00 Equip																							0	0.0
FY01 Equip													7	0.8									7	0.8
FY02 Equip															12	0.8							12	0.8
FY03 Equip																	12	0.8					12	0.8
FY TC Equip																					26	1.7	26	1.7
Total Installation Cost			0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	0.8	12	0.8	12	0.8	26	1.7	26	1.7	57	4.1
Total Procurement Cost	0.0		0.0		0.0		0.0		3.4		4.6		5.6		7.7		7.7		2.9		2.9		31.9	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES:

FY 1996: N/A

FY 1997: N/A

FY 1998: N/A

FY 1999: TBD

DELIVERY DATE:

FY 1996: N/A

FY 1997: N/A

FY 1998: N/A

FY 1999: TBD

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT

OUTPUT

INSTALLATION SCHEDULE:

	FY 00				FY 01				FY 02				FY 03				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT					7				12				12				26	57
OUTPUT					2	2	3		4	4	4		4	4	4		26	57

**UNCLASSIFIED
CLASSIFICATION**

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE FEB 1997				
B. APPROPRIATION/BUDGET ACTIVITY OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE SUBMARINE COMMUNICATIONS 52L0						
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY97 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY 98) PROCUREMENT	PLANNED BUDGET YEAR (FY 99) PROCUREMENT	BALANCE	PHASING RATIONALE			
L0027 Baseband Switch	60		4	26	12	8	10	Outyear Funded			
L0077 Sub Msg Buffer	64	3	61					Complete			
L0078 T/F Dist. System	60			15	15	12	18	Outyear Funded			
L0080 OE-538/BRC	68			4	10	12	42	Outyear Funded			
L0085 JTIDS/LINKS-16	10			10				Complete			
L0086 SADS	60				10	12	38	Outyear Funds			
MEMO ENTERED											
ITEM # 1 L0027 Baseband Switch				ITEM # 2 L0077 Sub Msg Buffer				ITEM # 3 L0078 T/F Dist. System			
hull/location	qty			hull/location	qty			hull/location	qty		
SSN 688 Class	54	Trainers	1	SSN 688 Class	54	First Article	1	SSN Class	54		
ISEA	1			Trainers	4			Trainers	3		
SSA	1			Syst Test Site	3			Test Sites	2		
LBSRR	1			ISEA	1			LBSRR	1		
SSN Class 21	2			SSA	1						
			TOTAL I/O	60				TOTAL I/O	64		
ITEM #4 L0080 OE-538/BRC				ITEM #5 L0085 JTIDS/LINKS-16				ITEM #6 L0086 SADS			
hull/location	qty			hull/location	qty			hull/location	qty		
SSN 688 Class	54	Rotatable Tycom Pool	6	SSN 688 Class	10			SSN 688 Class	54	Trainers	
Trainers	3	(Emergent Req)						SSN 21 Class	2		
TDA	1							ISEA	1		
Syst. Test Site	1							SSA	1		
ISEA	1										
SSN 21 Class	2										
			TOTAL I/O	68				TOTAL I/O	10		
			TOTAL I/O	60				TOTAL I/O	60		

DD FORM 2447-1, JUN 86

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UNCLASSIFIED

CLASSIFICATION

**UNCLASSIFIED
CLASSIFICATION**

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE FEB 1997	
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE SUBMARINE COMMUNICATIONS 52L0			
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY97 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY 98) PROCUREMENT	PLANNED BUDGET YEAR (FY 99) PROCUREMENT	BALANCE	PHASING RATIONALE
L0087 HDA Antenna	62				4	8	50	Outyear Funded
L0091 MIDS	57					7	50	Outyear Funded
MEMO ENTERED								
ITEM # 7 L0087 HDA Antenna				ITEM #8 L0091 MIDS				
hull/location qty				hull/location qty				
SSN 688 Class 54				SSN 688 Class 54				
SSN 21 Class 2				SSN 21 Class 3				
Trainers 4								
Test Site 2								
TOTAL I/O 62				TOTAL I/O 57				

BUDGET ITEM JUSTIFICATION SHEET					DATE			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					314700 SUBMARINE LF/VLF VME RECEIVER 52XX			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)			\$7.6	\$18.5	\$20.4	\$18.4	\$3.0	\$0
<p>PROGRAM COVERAGE: The Submarine Low Frequency (LF) / Very Low (VLF) Modular (VME) bus Receiver (SLVR) is an open architecture hybrid system consisting of Commercial Off The Shelf (COTS), Non-Developmental Items (NDI) and custom components. The SLVR design shall maximize the simplicity of implementing future technology upgrades through the incorporation of new generation VMEbus modules and the use of Navy Standard and other available software to the maximum extent possible. The SLVR system will replace 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 is a Mission Critical piece of C3I equipment onboard submarines.</p>								

PROGRAM COST BREAKDOWN	DATE: FEB 1997
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B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	C. P-1 ITEM NOMENCLATURE SUBMARINE LF/VLF VME RECEIVER 52XX
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COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)
XX001	Submarine LF/VLF VME Reciever	B					10	7,643	44	17,186
XX776	Installation (Shore)	A								315
XX777	Installation (Ships)	A								276
XX002	SLVR KG P3I	A							6	696
	TOTAL PROGRAM							7,643		18,473

UNCLASSIFIED
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BUDGET PROCUREMENT HISTORY AND PLANNING											A. DATE FEB 1997	
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						C. P-1 ITEM NOMENCLATURE SUBMARINE LF/VLF VME RECEIVER 52XX						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV RQUIRED	IF YES, WHEN AVAILABLE
XX001	Submarine LF/VLF VME Reciever	98	TBD	C/FFP	SPAWAR	Feb-98	Jan-99	10	\$764.3*	No		
		99	TBD	FFP/OPT	SPAWAR	Oct-98	Jul-99	44	\$390.6	No		
XX002	SLVR KG P3I	99	TBD	C/FFP	SPAWAR	Oct-98	Jul-99	6	\$116*	No		
D. REMARKS (*) Unit cost includes nonrecurring												

MODIFICATION TITLE: SLVR
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Shore Installations

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

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																						
PROCUREMENT																						
Kit Quantity																						
Installation Kits																						
Installation Kit Nonrecurring																						
Equipment							10	7.6	3	1.2	1	0.4	13	5.4							27	14.6
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(PY) Equip																						0 0.0
FY96 Equip																						0 0.0
FY97 Equip																						0 0.0
FY98 Equip									10	0.2												10 0.2
FY99 Equip									3	0.1												3 0.1
FY00 Equip																						0 0.0
FY01 Equip												1	0.04									1 0.04
FY02 Equip														13	0.5							13 0.50
FY03 Equip																						
FY TC Equip																						
Total Installation Cost	0	0.0	0	0.0	0	0.0	0	0.0	13	0.3	0	0.0	1	0.04	13	0.5	0	0.0			27	0.84
Total Procurement Cost	0	0.0	0	0.0	0	0.0	7.6		1.5		0.4		5.5		0.5		0.0					15.45

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES: FY 1996: N/A FY 1997: N/A FY 1998: 2/98 FY 1999: 10/98 FY 2000: 10/99

DELIVERY DATE: FY 1996: N/A FY 1997: N/A FY 1998: 1/99 FY 1999: 7/99 FY 2000: 7/00

INSTALLATION SCHEDULE:

	<u> PY </u>		<u> FY 96 </u>		<u> FY 97 </u>		<u> FY 98 </u>		<u> FY 99 </u>
			1 2 3 4		1 2 3 4		1 2 3 4		1 2 3 4

INPUT 4 4 5

OUTPUT 4 4 5

INSTALLATION SCHEDULE:

	<u> FY 00 </u>		<u> FY 01 </u>		<u> FY 02 </u>		<u> FY 03 </u>		<u> Total </u>
	1 2 3 4		1 2 3 4		1 2 3 4		1 2 3 4		

INPUT 1 6 4 3 27

OUTPUT 1 6 4 3 27

MODIFICATION TITLE: SLVR KG P3I
 MODELS OF SYSTEMS AFFECTED:
 DESCRIPTION/JUSTIFICATION: Shore Installations

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

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																							
PROCUREMENT																							
Kit Quantity																							
Installation Kits																							
Installation Kit Nonrecurring																							
Equipment									6	0.7		21	0.5									27	1.2
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interim Contractor Support																							
Installation of Hardware																							
(PY) Equip																						0	0.0
FY96 Equip																						0	0.0
FY97 Equip																						0	0.0
FY98 Equip																						0	0.0
FY99 Equip												6	0.05									6	0.05
FY00 Equip															21	0.18						21	0.18
FY01 Equip																						0	0.00
FY02 Equip																						0	0.00
FY03 Equip																							
FY TC Equip																							
Total Installation Cost	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.05	21	0.18	0	0.0	0	0.0				27	0.23
Total Procurement Cost	0.0		0.0		0.0		0.0		0.7		0.55		0.18		0.0		0.0						1.43

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES: FY 1996: N/A FY 1997: N/A FY 1998: N/A FY 1999: 10/98 FY 2000: 10/99

DELIVERY DATE: FY 1996: N/A FY 1997: N/A FY 1998: N/A FY 1999: 7/99 FY 2000: 7/00

INSTALLATION SCHEDULE:

PY		FY 96		FY 97		FY 98		FY 99
1	2	3	4	1	2	3	4	1
		1	2	3	4	1	2	3

INPUT

OUTPUT

INSTALLATION SCHEDULE:

FY 00		FY 01		FY 02		FY 03		Total
1	2	3	4	1	2	3	4	
		1	2	3	4	1	2	3

INPUT	6	6	6	6	3																		27	
OUTPUT	6		6	6	6	3																		27

**UNCLASSIFIED
CLASSIFICATION**

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE		
							FEB 1997		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					SUBMARINE LF/VLF VMA RECEIVER 52XX				
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY 97) PROCUREMENT	PLANNED BUDGET YEAR (FY 98) PROCUREMENT	PLANNED BUDGET YEAR (FY 99) PROCUREMENT	BALANCE	PHASING RATIONALE
XX001 Sub LF/VLF VME Rcvr	129					10	44	75	
XX002 SLVR KG P3I	129						6	123	
MEMO ENTERED									
ITEM # 1 XX001 Sub LF/VLF VME Rcvr hull/location qty SSN 688 Class 54 TRIDENT 42 Shore sites 11 LBTF 2 Sub Tenders 3 Training Facility 12 Training 2 SSN 21 Class 3 TOTAL I/O 129									
ITEM # 2 XX002 SLVR KG P3I hull/location qty SSN 688 Class 54 TRIDENT 42 Shore sites 11 LBTF 2 Sub Tenders 3 Training Facility 12 Training 2 SSN 21 Class 3 TOTAL I/O 129									

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**UNCLASSIFIED
CLASSIFICATION**

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET						DATE		
						Feb-97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SATCOM Ship Terminals 33210C52NN				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$109.7	\$141.6	\$107.6	\$144.7	\$152.5	\$133.3	\$158.5	\$156.0
<p>PROGRAM COVERAGE: The 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 CNO in the Fleet Communications Planning and Programming documents. These programs are part of the Joint Maritime Communications Strategy (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).</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>DAMA/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. The FY96 and FY97 funds procure AN/USC-42(V)1 submarine transceivers and ancillary interface equipment, Pre Faulted Modules for training schools, Test Program Sets, documentation and continued production support.</p>								

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE Feb-97
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Ship Terminals	33210C52NN
<p>SI COMMS: The TACINTEL II+ has been designated as an evolutionary acquisition program allowing for continued growth and expansion paralleling technological changes. TACINTEL II+ provides the mechanism for phased implementation of both planned improvements and those which surface through advancing technology. Funding identified in FY96 provided for continued procurement of the TAC-4 workstation as the system processor. Total workstation requirements are approximately 189 units afloat. The premise of utilizing Non Developmental Items (NDI), Commercial off the Shelf (COTS), Government off the Shelf (GOTS) and existing systems to meet the requirements for Integrated Special Intelligence (S I) Communications requirements will continue to be followed; however, the cornerstone of this program is the versatility and growth potential of the TAC-4 and associated Versa Module Eurocard (VME) chassis. Prior year's funds provided two tiers of growth. First, it continued fielding of the TAC-3 and TAC-4 workstations. This is a key facet of realizing the Joint Maritime Communications Strategy (JMCOMS)/Automated Digital network Systems (ADNS) architecture in that a common processor will have been fielded allowing for expanded capabilities. This will include the TACINTEL II and INTELNET portions of TACINTEL II+. Funds in FY97 through FY99 will continue to procure TAC-N ancillary equipment to provide the full capability of SI-Communications and implementation of JMCOMS/ADNS by the end of the century. The gradual upgrade of hardware will support the improved system capability of the new software being developed with RDT&E funds and infuse new technology into the Fleet.</p> <p>SATCOM EQUIPMENT: 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. FY96 and FY97 funds include procurement of UHF radio transceivers with DAMA capability and antenna systems for mine warfare platforms (MHC and MCM ships). FY97 funds also procure modification kits for upgrading AN/WSC-3 transceivers and OE-82 antennas to meet a 5KHz capability and provides funds for procurement of enhanced manpack UHF transceivers (EMUT) from the Army. FY98 funds begin procurement of the NDI digital modular radio (DMR) follow-on to the AN/WSC-3 transceivers in support of the Slice program. Slice 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 JROC validated Milstar ORD of Jun 92. There is a requirement to procure 319 operational ship and submarine terminals (OPN and SCN), plus five life cycle support systems already bought. This requirement is documented in OPNAV letter Ser N631/6U561112 of 16 Jan 96. Phase II of the NESP program procures Navy EHF Communications Controllers (NECCs), which provide for the exchange of computer-to-computer tactical communications</p>		

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE Feb-97
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Ship Terminals	33210C52NN
<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 (OTA) 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. All of these Phase III efforts will provide essential EHF operational communications capabilities with the current Milstar satellites. Similarly, IBCs will provide interoperable voice communication (UFO), and FLTSAT EHF Package (FEP)).</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 capability (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 appliqué terminals and the balance of the requirements will be procured as part of a combined LDR/MDR terminal follow-on contract beginning in FY 98. Follow-on terminals will also have Phase III upgrades to their baseline. The requirement for MDR is outlined in the JROC validated Milstar ORD and OPNAV letter Ser N631/6U561112 of 16 Jan 96 and must be fielded by FY 99 in order to support the MDR satellite. 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>FY 97 funds will be used to continue the procurement of NECCs and FMLOC equipment. FY 98 funds will be used to procure two (2) combined LDR/MDR follow-on NDI models and provide for the continued procurement of NECCs and FMLOC equipment. FY 99 funds will be used to begin procurement of combined LDR/MDR follow-on terminals and for continued procurement of FMLOC equipment. These procurements will continue in FY00.</p> <p>SHF SHIP SYSTEMS: This line provides SHF equipment for operating through the Defense Satellite Communication System (DSCS) satellites. The procurements and installations are as follows: Step 1 provides backfit kits and additional seven foot antennas, step 2 provides new AN/WSC-6(V)X full up terminals and step 3 provides outfitting for the remainder of the planned total operational capability (IOC) is FY97, step 2 IOC is FY98 with full operational capability (FOC) for both scheduled in FY06. FY96 funds procured mod kits and miscellaneous equipment to allow dual channel capability. Existing Navy and Army contracts were used. A new production contract will be awarded in FY97 for SHF AN/WSC-6(V)X terminals including non-terminating of three units. FY97 funds also procure four seven foot antennas to replace existing four foot antennas and will procure mod kits for installation on 9 AN/WSC-6(V)2 and AN/WSC-6(V)4 procurement is a separate contract; the mod kits are bought on the antenna contract and two existing Army and NRAD contracts. FY98 and FY99 funds procure additional AN/WSC-6(V)4 mod kits, additional seven foot antennas and production support.</p>		

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE Feb-97
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Ship Terminals	33210C 52NN
<p>COMMERCIAL SATELLITES: Lessons learned from Desert Storm documented the necessity of an alternate commercial communications service for logistics and operational 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 MILSATCOM systems. This will relieve the congestion on military tactical satellite communications systems while enhancing the overall Navy tactical communications capacity and reduce 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 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 and smaller ships. There will also be INMARSAT "B" upgrade mod kits to modify some of the earlier "A" versions. The FY96 procurements included INMARSAT terminals and commercial C and Ku wide band SATCOM terminals in support of Challenge Athena demonstration and shipboard television receive terminals. FY98 and FY99 funds will continue procurement of C and Ku wide band SATCOM Terminals, TV at Sea, ancillary hardware such as Automated Digital Multiplexing System (ADMS) Video Information Exchange Subsystem (VIXS), Automated Network Control Center (ANCC), Global network Initiative, INMARSAT terminals, production support and personal communications systems which are miniaturized portable satellite radios.</p> <p>GLOBAL BROADCAST SYSTEM (GBS): This is the Navy 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. FY97, FY98 and FY99 funds procure receiving equipment in various configurations customized to each type ship for Phase II of the GBS program in support of UHF follow-on Satellite launches numbers 8, 9 and 10. There will be a total of 318 ships and 74 submarine terminals procured through the GBS program. For ship and sub procurements, the terminal components will be procured as follows: Antenna from Navy contract; GBS receiver from Army contract; Data processor from Navy contract. A Mission Need Statement for GBS was signed, 3 AUG 1995, and a DRAFT Operational Requirements Document (ORD) was written and is in the review process.</p> <p>INSTALLATION OF EQUIPMENT: This subline 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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BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE		
						Feb-97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SATCOM Ship Terminals 33210C52NN				
<p>Note: Budget reflects transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p> <p>Listed below are the costs (i.e. hardware plus installation) for equipment being procured in this line item that have associated installation costs budgeted:</p>								
EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
UHF Terminals	21.4	43.1	31.9	18.8	9.0	12.6	29.0	33.7
SHF Terminals	25.2	18.7	15.3	32.4	33.4	27.2	31.5	30.2
EHF Terminals	44.2	55.3	36.3	58.7	73.5	54.4	58.7	47.4
Commercial	18.9	14.4	12.0	20.4	20.2	23.1	24.0	27.0
Global Broadcast System	0.0	10.1	8.2	9.6	10.2	8.9	8.3	10.8

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WEAPON SYSTEM COST ANALYSIS							DATE: Feb-97				
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					SATCOM Ship Terminals 3321000 52NN						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 96		FY 97		FY 98		FY 99		
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
NN101	DAMA/Mini-DAMA	A	33	8,236	43	9,030					
NN103	SI Comms--TACINTEL II	A	9	1,630			7	1,404			
NN103	SI Comms--SCI/JMCOMS/ADN	A	7	1,092	18	2,939			15	2,392	
NN105	SATCOM Equip.-- GFCP	A	13	338	13	338					
NN105	SATCOM Equip-- AN/USC-42	A	8	1,933	18	4,349					
NN105	SATCOM Equip.--AN/PSC-5 EN	A			180	4,755	98	2,646			
NN105	SATCOM Equip.--AN/WSC-3 M	A					174	870			
NN105	SATCOM Equip.--OE-82 Mod K	A			122	2,568	104	1,664	144	2,304	
NN105	SATCOM Equip.--Modems	A			113	7,309	174	8,352			
NN105	SATCOM Equip.--DMR	A					64	5,203	133	10,533	
NN106	SHF Terminals--AN/WSC-6(V)4	A	4	11,681	6	5,525	7	5,604	11	6,501	
NN106	SHF Terminals--7Ft. Antenna	A			2	2,000	2	2,000	8	5,000	
NN106	AN/WSC-6(V)X	A				3	5,799	1	1,945	12	15,660
NN107	EHF Terminals-AN/USC-38(V)	A	7	20,055	VAR	12,595	2	14,890	8	21,993	
NN107	EHF Terminals--NECC	A	14	1,540	39	4,309	19	2,100	39	4,200	
NN107	EHF Terminals--MDR	A					27	11,400	27	11,400	
NN112	Comm. Satellite--INMARSAT M	A	8	245			7	224	10	328	
NN112	Comm. Satellite--INMARSAT B	A	16	1,306	15	482	24	1,232	67	3,248	
NN112	Comm. Satellite--C band/CWSP	A	8	11,802	6	8,286	4	5,292	6	8,024	
NN112	Comm. Satellite--Personal Comm	A					75	337	75	337	
NN117	Global Broadcast System	A			42	8,885	17	2,620	43	6,459	
NN777	Install Equipment FMP	A	VAR	49,837	VAR	62,388	VAR	35,945	VAR	41,520	
	Design Service Agent						VAR	3,880	VAR	4,826	
TOTAL PROGRAM				109,695		141,557		107,608		144,725	

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE		
										Feb-97		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SATCOM Ship Terminals 3321000			52NN			
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
NN101	DAMA/Mini-DAMA	FY96	Titan, San Diego, CA	FPI(Opt)	SPAWAR	Apr-96	Apr-97	33	\$249,576	Yes	No	N/A
NN101	DAMA/Mini-DAMA	FY97	Titan, San Diego, CA	FPI(Opt)	SPAWAR	Jan-97	Jan-98	43	\$210,000	Yes	No	N/A
NN103	TACINTEL II	FY96	NRAD, San Diego, CA	WX	SPAWAR	Apr-96	Jul-96	9	\$181,111	Yes	No	N/A
NN103	TACINTEL II	FY98	NRAD, San Diego, CA	WX	SPAWAR	Dec-97	Mar-98	7	\$200,571	Yes	No	N/A
NN103	SCI/JMCOMS/ADNS	FY96	NRAD, San Diego, CA	WX	SPAWAR	Apr-96	Jul-96	7	\$156,000	Yes	No	N/A
NN103	SCI/JMCOMS/ADNS	FY97	NRAD, San Diego, CA	WX	SPAWAR	Dec-96	Mar-97	18	\$163,277	Yes	No	N/A
NN103	SCI/JMCOMS/ADNS	FY99	NRAD, San Diego, CA	WX	SPAWAR	Dec-98	Mar-99	15	\$159,467	Yes	No	N/A
NN105	SATCOM Equipment - GFCP	FY96	Texas Instr., San Jose, CA	IDIQ	NAVAIR	Apr-96	Oct-96	13	\$26,000	Yes	No	N/A
NN105	SATCOM Equipment - GFCP	FY97	Texas Instr., San Jose, CA	IDIQ	NAVAIR	Jan-97	Jun-97	13	\$26,000	Yes	No	N/A
NN105	SATCOM Equipment - DMR	FY98	TBD	FFP-C	NRAD	Oct-97	Jun-99	64	\$81,297	No	Yes	Mar-97
NN105	SATCOM Equipment - DMR	FY99	TBD	FFP-C(Opt)	NRAD	Oct-98	Jun-00	133	\$79,195	No	Yes	Mar-97
NN105	AN/PSC-5 - EMUT	FY97	HDC (Magnavox) Ft.Wayne, IN	FP Req.	PM SATCOM	Dec-96	Dec-98	180	\$26,417	Yes	No	N/A
NN105	AN/PSC-5 - EMUT	FY98	HDC (Magnavox) Ft.Wayne, IN	FP Req.	PM SATCOM	Dec-98	Dec-00	98	\$27,000	Yes	No	N/A
NN105	AN/USC-42(V)1	FY96	Titan, San Diego, CA	FPI(Opt)	SPAWAR	Apr-96	Apr-97	8	\$241,625	Yes	No	N/A
NN105	AN/USC-42(V)1	FY97	Titan, San Diego, CA	FPI(Opt)	SPAWAR	Apr-97	Apr-98	18	\$241,611	Yes	No	N/A
NN105	AN/WSC-3(V) Mod Kits (5KHZ)	FY98	E-Systems, St Petersburg, FL	FFP-SS	NRAD	Nov-97	Apr-98	174	\$5,000	Yes	No	N/A
NN105	OE-82) Mod Kits (5KHZ)	FY97	NRAD, San Diego, CA	WX	SPAWAR	Nov-96	Feb-97	122	\$21,049	Yes	No	N/A
NN105	OE-82) Mod Kits (5KHZ)	FY98	NRAD, San Diego, CA	WX	SPAWAR	Nov-97	Feb-98	104	\$16,000	Yes	No	N/A
NN105	OE-82) Mod Kits (5KHZ)	FY99	NRAD, San Diego, CA	WX	SPAWAR	Nov-98	Feb-99	144	\$16,000	Yes	No	N/A
NN105	SATCOM Equipment - Modems	FY97	Titan, San Diego, CA	FFP-SS	NRAD	Nov-96	Apr-97	113	\$64,681	Yes	No	N/A
NN105	SATCOM Equipment - Modems	FY98	Titan, San Diego, CA	FFP-SS	NRAD	Nov-97	Apr-98	174	\$48,000	Yes	No	N/A
NN106	SHF AN/WSC-6(V)4 Mod Kits	FY96	NRAD, San Diego, CA	VAR	SPAWAR	Feb-96	Feb-97	4	\$2,920,250	Yes	No	N/A
NN106	SHF AN/WSC-6(V)4 Mod Kits	FY97	NRAD, San Diego, CA	VAR	SPAWAR	Feb-97	Feb-98	6	\$920,833	Yes	No	N/A
NN106	SHF AN/WSC-6(V)4 Mod Kits	FY98	NRAD, San Diego, CA	VAR	SPAWAR	Feb-98	Feb-99	7	\$800,570	Yes	No	N/A
NN106	SHF AN/WSC-6(V)4 Mod Kits	FY99	NRAD, San Diego, CA	VAR	SPAWAR	Feb-99	Feb-00	11	\$591,000	Yes	No	N/A
NN106	SHF AN/WSC-6(V)X	FY97	TBD (Recompele)	FFP-C	SPAWAR	Jul-97	Jul-98	3	\$1,933,000	Yes	No	N/A
NN106	SHF AN/WSC-6(V)X	FY98	TBD	FFP (Opt)	SPAWAR	Mar-98	Mar-99	1	\$1,945,000	Yes	No	N/A
NN106	SHF AN/WSC-6(V)X	FY99	TBD	FFP (Opt)	SPAWAR	Mar-99	Mar-00	12	\$1,305,000	Yes	No	N/A
NN106	SHF Terminals/ 7' Antenna	FY97	Raytheon, Boston, MA	FFP-C	SPAWAR	Jan-97	Oct-97	2	\$1,000,000	Yes	No	N/A
NN106	SHF Terminals/ 7' Antenna	FY98	Raytheon, Boston, MA	FFP (Opt)	SPAWAR	Jan-98	Oct-98	2	\$1,000,000	Yes	No	N/A
NN106	SHF Terminals/ 7' Antenna	FY99	Raytheon, Boston, MA	FFP (Opt)	SPAWAR	Jan-99	Oct-99	8	\$625,000	Yes	No	N/A

D. REMARKS

All unit prices include funds for production support and ancillary hardware.
Unit costs for NN103 vary across FYDP. They are based on specific platform requirements and include integration costs and production support.

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY										C. P-1 ITEM NOMENCLATURE		
OP.N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT										SATCOM Ship Terminals 3321000		52NN
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
NN107	EHF Terminals	FY96	Raytheon, Boston, MA	C-MY (Opt)	SPAWAR	Mar-96	Mar-98	7	\$2,865,000	Yes	No	N/A
NN107	EHF Terminals	FY98	TBD (recompete)	C-MY	SPAWAR	Nov-97	Jul-98	2	*	No	Yes	Mar-97
NN107	EHF Terminals	FY99	TBD (recompete)	C-MY (Opt)	SPAWAR	Nov-98	Nov-00	8	\$2,749,125	No	No	N/A
NN107	MDR	FY98	Raytheon, Boston, MA	SS	SPAWAR	Jan-98	Jan-00	27	\$422,222	Yes	Yes	Apr-97
NN107	MDR	FY99	Raytheon, Boston, MA	SS (Opt)	SPAWAR	Jan-99	Jan-01	27	\$422,222	Yes	Yes	Apr-97
NN107	NECC	FY96	NRAD, San Diego, CA	WX	SPAWAR	Mar-96	Jul-96	14	\$110,000	Yes	No	N/A
NN107	NECC	FY97	NRAD, San Diego, CA	WX	SPAWAR	Nov-96	Jun-97	39	\$110,487	Yes	No	N/A
NN107	NECC	FY98	NRAD, San Diego, CA	WX	SPAWAR	Nov-97	Jun-98	19	\$110,526	Yes	No	N/A
NN107	NECC	FY99	NRAD, San Diego, CA	WX	SPAWAR	Nov-98	Jun-99	39	\$107,692	Yes	No	N/A
NN112	INMARSAT M	FY96	Mackay Comm. Edison, NJ	SS-FP	NRAD	Jul-96	Sep-96	8	\$30,625	Yes	No	N/A
NN112	INMARSAT M	FY98	TBD	C-FP	NRAD	Oct-97	Nov-97	7	\$32,000	Yes	No	N/A
NN112	INMARSAT M	FY99	TBD	C-FP	NRAD	Oct-99	Nov-99	10	\$32,800	Yes	No	N/A
NN112	INMARSAT B	FY96	Mackay Comm. Edison, NJ	SS-FP	NRAD	Jul-96	Sep-96	16	\$81,625	Yes	No	N/A
NN112	INMARSAT B	FY97	Mackay Comm. Edison, NJ	SS-FP	NRAD	Mar-97	Apr-97	15	\$32,133	Yes	No	N/A
NN112	INMARSAT B	FY98	Mackay Comm. Edison, NJ	SS-FP	NRAD	Nov-97	Dec-97	24	\$51,333	Yes	No	N/A
NN112	INMARSAT B	FY99	Mackay Comm. Edison, NJ	SS-FP	NRAD	Nov-98	Dec-98	67	\$48,477	Yes	No	N/A
NN112	C Band/CWSP	FY96	Harris, Melbourne, FL	C-FP	NRAD	Feb-96	Jun-96	8	\$1,475,250	Yes	No	N/A
NN112	C Band/CWSP	FY97	TBD	C-FP	NRAD	Jun-97	Oct-97	6	\$1,381,000	Yes	No	N/A
NN112	C Band/CWSP	FY98	TBD	C-FP	NRAD	Feb-98	Jun-98	4	\$1,323,000	Yes	No	N/A
NN112	C Band/CWSP	FY99	TBD	C-FP	NRAD	Feb-99	Jun-99	6	\$1,337,333	Yes	No	N/A
NN112	Personal Communication System	FY98	TBD	C-FP	NRAD	Feb-98	Jun-98	75	\$4,493	Yes	No	N/A
NN112	Personal Communication System	FY99	TBD	C-FP	NRAD	Feb-99	Jun-99	75	\$4,493	Yes	No	N/A
NN117	GBS Equip Suite/Antenna	FY97	TBD	C-FP	GBS-JPO/NRAD	Jul-97	Nov-97	42	\$211,548	Yes	No	N/A
NN117	GBS Equip Suite/Antenna	FY98	TBD	C-FP	GBS-JPO/NRAD	Nov-97	Mar-98	17	\$154,118	Yes	No	N/A
NN117	GBS Equip Suite/Antenna	FY99	TBD	C-FP	GBS-JPO/NRAD	Nov-98	Mar-99	43	\$150,209	Yes	No	N/A

D. REMARKS

Unit Prices include ancillary interface hardware and production support. Unit prices for NN112 vary due to start up costs in FY96 and procurement of INMARSAT A to B conversion kits in FY98 and FY99
 Unit prices for EHF Terminals in NN107 includes prime hardware, Phase III procurements identified on the P-40, reliability incentives & warranty costs, follow on complete first article test, baseband equipment, and production support. These vary from fiscal year to fiscal year. Quantities include only AN/USC-38(V) terminals.
 * NN107 FY98 funds will be used to procure NDI models from two competitors for follow-on terminal downselect award.

UNCLASSIFIED

MODIFICATION TITLE: **SATCOM Ship Terminals/ UHF Terminals (NN101, NN103, NN105)**

Feb-97

MODELS OF SYSTEMS AFFECTED: AN/USC-42(V); TAC-3, 4 & N; VME chassis; DAMA CKA boards; DAMA SAC Mod kits; AN/WSC-3 mod kits; OE-82 mod kits; amplifiers; diplexers; EMUTS; Slice DMR Transceivers etc.

DESCRIPTION/JUSTIFICATION: Ship and Shore tactical satellite communications equipment for data, message traffic and secure voice.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Various stages of software development, full production and off the shelf NDI

FINANCIAL PLAN: (\$ in millions)

	P Y	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	T C	Total
RDT&E										0 0.0
PROCUREMENT										0 0.0
Kit Quantity										0 0.0
Installation Kits										0 0.0
Installation Kit Nonrecurring										0 0.0
Equipment	VAR 13.2	VAR 31.3	VAR 20.1	VAR 15.2	VAR 8.5	VAR 12.1	VAR 28.2	VAR 31.2		VAR 159.8
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
Interim Contractor Support										0 0.0
Installation of Hardware										0 0.0
(PY) Eqpt	VAR 8.2	VAR 11.8								VAR 20.0
FY97 Eqpt			VAR 11.8							VAR 11.8
FY98 Eqpt				VAR 3.6						VAR 3.6
FY99 Eqpt					VAR 0.5					VAR 0.5
FY00 Eqpt						VAR 0.5				VAR 0.5
FY01 Eqpt							VAR 0.8			VAR 0.8
FY02 Eqpt								VAR 2.5		VAR 2.5
FY03 Eqpt										0 0.0
FY TC Eqpt										0 0.0
Total Installation Cost	0 8.2	0 11.8	0 11.8	0 3.6	0 0.5	0 0.5	0 0.8	0 2.5	0 0.0	0 39.7
Total Procurement Cost	21.4	43.1	31.9	18.8	9.0	12.6	29.0	33.7	0.0	0 199.5

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

Various

PROCUREMENT LEADTIME:

Various

CONTRACT DATES:

FY 1997:

FY 1998

FY 1999

DELIVERY DATE:

FY 1997:

FY 1998

FY 1999

PY

FY 97

FY 98

FY 99

FY 00

1 2 3 4

1 2 3 4

1 2 3 4

1 2 3 4

INSTALLATION SCHEDULE:

INPUT
OUTPUT

FY 01

FY 02

FY 03

TC

Total

1 2 3 4

1 2 3 4

1 2 3 4

INSTALLATION SCHEDULE:

INPUT
OUTPUT

UNCLASSIFIED

MODIFICATION TITLE: **SATCOM Ship Terminals/ SHF Terminals (NN106)**

Feb-97

MODELS OF SYSTEMS AFFECTED: AN/WSC-6(V)2/4 restructured program with misc. backfit kits and antennas

DESCRIPTION/JUSTIFICATION: Provides high data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception

Mod kit procurement runs through FY99 and antenna procurement runs through FY01

Funding is for complete AN/WSC-6 (V) X terminals plus mod kits to upgrade AN/WSC-6 (V)2 and (V)4 terminals to the AN/WSC-6(V)X configuration and for seven foot replacement antennas.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Full production and off the shelf NDI

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	VAR	75.8	VAR	13.3	VAR	9.5	VAR	27.2	VAR	14.7	VAR	16.6	VAR	17.6	VAR	19.3	VAR	197.4	VAR	391.4
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
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Eqpt	VAR	35.0	VAR	5.4														VAR		40.4
FY97 Eqpt					VAR	5.8												VAR		5.8
FY98 Eqpt							VAR	5.2										VAR		5.2
FY99 Eqpt									VAR	18.7								VAR		18.7
FY00 Eqpt											VAR	10.6						VAR		10.6
FY01 Eqpt													VAR	13.9				VAR		13.9
FY02 Eqpt															VAR	10.9		VAR		10.9
FY03 Eqpt																	VAR	10.9	VAR	10.9
FY TC Eqpt																	VAR	163.5	VAR	163.5
Total Installation Cost	0	35.0	0	5.4	0	5.8	0	5.2	0	18.7	0	10.6	0	13.9	0	10.9	0	174.4	0	279.9
Total Procurement Cost		110.8		18.7		15.3		32.4		33.4		27.2		31.5		30.2		371.8		671.3

METHOD OF IMPLEMENTATION:

AIT ADMINISTRATIVE LEADTIME: Various PROCUREMENT LEADTIME: Various

CONTRACT DATES:

FY 1997: FY 1998: FY 1999:

DELIVERY DATES:

FY 1997: FY 1998: FY 1999:

INSTALLATION SCHEDULE:

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT
OUTPUT

INSTALLATION SCHEDULE:

FY 01				FY 02				FY 03				TC	Total
1	2	3	4	1	2	3	4	1	2	3	4		

INPUT
OUTPUT

UNCLASSIFIED

MODIFICATION TITLE: **SATCOM Ship Terminals/EHF Terminals, Full Milstar LDR Operational Capabilities (FMLOC), Navy EHF Communications Controllers (NECCs), and Medium Data Rate (MDR) Appliqués (NN107)**

Feb-97

MODELS OF SYSTEMS AFFECTED: AN/USC-38(V) 1&2 including reliability incentives & warranty costs, Follow-On Recompete First Article Inspection, LDR baseband equipment, EHF FMLOC, NECC units, MDR appliqués retrofits, and production support

DESCRIPTION/JUSTIFICATION: Jam resistant, low probability of intercept satellite communications connectivity between shore stations, submarines, and surface ships in a electromagnetic threat.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: VAR

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring Equipment	VAR	342.8	VAR	16.9	VAR	28.4	VAR	37.6	VAR	44.2	VAR	27.2	VAR	26.0	VAR	30.8	VAR	88.3	VAR	642.2	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Equip	VAR	143.2	VAR	34.7	VAR	6.9	VAR	17.2	VAR	22.3	VAR	6.6								VAR	230.9
FY97 Equip			VAR	3.7	VAR	0.2															
FY98 Equip					VAR	0.8	VAR	1.1	VAR	3.7	VAR	1.2									
FY99 Equip							VAR	2.8	VAR	1.2	VAR	17.4	VAR	2.8						VAR	24.2
FY00 Equip									VAR	2.1			VAR	27.4	VAR	2.8				VAR	32.3
FY01 Equip											VAR	2.0			VAR	10.7	VAR	9.1	VAR	21.8	
FY02 Equip													VAR	2.5			VAR	17.9	VAR	20.4	
FY03 Equip															VAR	3.1	VAR	18.0	VAR	21.1	
FY TC Equip																	VAR	63.7	VAR	63.7	
Total Installation Cost	VAR	143.2	VAR	38.4	VAR	7.9	VAR	21.1	VAR	29.3	VAR	27.2	VAR	32.7	VAR	16.6	VAR	108.7	VAR	425.1	
Total Procurement Cost		486.0		55.3		36.3		58.7		73.5		54.4		58.7		47.4		197.0			1067.3

METHOD OF IMPLEMENTATION: VAR ADMINISTRATIVE LEADTIME: VAR PROCUREMENT LEADTIME: LDR/MDR: 24 mos. NECC: 6 mos.

CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

DELIVERY DATE: FY 1997: VAR FY 1998: VAR FY 1999: VAR

PY	FY 97				FY 98				FY 99				FY 00			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INSTALLATION SCHEDULE:																

INPUT	FY 01				FY 02				FY 03				TC	Total
OUTPUT	1	2	3	4	1	2	3	4	1	2	3	4		
INSTALLATION SCHEDULE:														

INPUT OUTPUT

UNCLASSIFIED

MODIFICATION TITLE: **SATCOM Ship Terminals/Commercial (NN112)**

Feb-97

MODELS OF SYSTEMS AFFECTED: Various commercial SATCOM equipment installed aboard Navy ships operating through leased and owned satellite systems
 DESCRIPTION/JUSTIFICATION: Commercial equipment based on Challenge Athena demonstration, INMARSAT variations for logistic support to relieve strain on tactical SATCOM systems and installation of terminal equipment
 Equipment includes different type INMARSAT terminals and X, C and Ku wideband terminals.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Equipment is all Commercial off the shelf (COTS). Development is not required.

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment	VAR	13.4	VAR	8.8	VAR	7.1	VAR	11.9	VAR	11.9	VAR	13.7	VAR	14.4	VAR	16.2	VAR	11.1	VAR	108.5
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
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Eqpt	VAR	5.5																	VAR	5.5
FY97 Eqpt			VAR	5.6															VAR	5.6
FY98 Eqpt					VAR	4.9													VAR	4.9
FY99 Eqpt							VAR	8.5											VAR	8.5
FY00 Eqpt									VAR	8.3									VAR	8.3
FY01 Eqpt											VAR	9.4							VAR	9.4
FY02 Eqpt												VAR	9.6						VAR	9.6
FY03 Eqpt														VAR	10.8				VAR	10.8
FY TC Eqpt																VAR	3.8		VAR	3.8
Total Installation Cost	0	5.5	0	5.6	0	4.9	0	8.5	0	8.3	0	9.4	0	9.6	0	10.8	0	3.8	0	66.4
Total Procurement Cost		18.9		14.4		12.0		20.4		20.2		23.1		24.0		27.0		14.9		174.9

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: Various PROCUREMENT LEADTIME: Various

CONTRACT DATES: FY 1997: FY 1998 FY 1999

DELIVERY DATE: FY 1997: FY 1998 FY 1999

PY	FY 97			FY 98			FY 99			FY 00						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INSTALLATION SCHEDULE:

INPUT	FY 01			FY 02			FY 03			TC	Total			
OUTPUT	1	2	3	4	1	2	3	4	1	2	3	4		

INSTALLATION SCHEDULE:

INPUT	FY 01			FY 02			FY 03			TC	Total			
OUTPUT	1	2	3	4	1	2	3	4	1	2	3	4		

UNCLASSIFIED

MODIFICATION TITLE:

SATCOM Ship Terminals/Global Broadcast Systems (NN117)

Feb-97

MODELS OF SYSTEMS AFFECTED:

Commercial off the shelf (COTS) receive only satellite communications terminals with antennas, modems, and ancillary hardware to process data, message traffic and voice.

DESCRIPTION/JUSTIFICATION:

Navy portion of a joint services program to deliver high speed satellite data to shipboard and special operations users.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Equipment is all Commercial off the shelf (COTS). Development is not required.

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
Kit Quantity																			0	0.0
Installation Kits																			0	0.0
Installation Kit Nonrecurring																			0	0.0
Equipment			VAR	8.9	VAR	2.6	VAR	6.5	VAR	3.5	VAR	5.9	VAR	5.9	VAR	2.8	VAR	31.4	VAR	67.5
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
Interim Contractor Support																			0	0.0
Installation of Hardware																			0	0.0
(PY) Eqpt																			0	0.0
FY97 Eqpt			VAR	1.2															VAR	1.2
FY98 Eqpt					VAR	5.6													VAR	5.6
FY99 Eqpt							VAR	3.1											VAR	3.1
FY00 Eqpt									VAR	6.7									VAR	6.7
FY01 Eqpt											VAR	3.0							VAR	3.0
FY02 Eqpt													VAR	2.4					VAR	2.4
FY03 Eqpt															VAR	8.0			VAR	8.0
FY TC Eqpt																	VAR	17.9	VAR	17.9
Total Installation Cost	0	0.0	0	1.2	0	5.6	0	3.1	0	6.7	0	3.0	0	2.4	0	8.0	0	17.9	0	47.9
Total Procurement Cost	0.0		10.1		8.2		9.6		10.2		8.9		8.3		10.8		49.3		0	115.4

METHOD OF IMPLEMENTATION:

AIT ADMINISTRATIVE LEADTIME: Various PROCUREMENT LEADTIME: Various

CONTRACT DATES:

FY 1997: FY 1998: FY 1999:

DELIVERY DATE:

FY 1997: FY 1998: FY 1999:

INSTALLATION SCHEDULE:



INPUT
OUTPUT

INSTALLATION SCHEDULE:



INPUT
OUTPUT

**UNCLASSIFIED
CLASSIFICATION**

TIME PHASED REQUIREMENTS SCHEDULE		A. APPROPRIATION/BUDGET ACTIVITY																B. P-1 ITEM NOMENCLATURE				C. DATE												
		OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT																SATCOM Ship Terminals 52NN				Feb-97												
COST CODE AND NAME		FY 96				FY 97				FY 98				FY 99				FY 00				FY 01				FY 02				Ltr				
		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	Yrs
ACTIVE FORCE INVENTORY (P)OP,N		11	10	3	4	9	7	11	9	4	6	0	0	8	4	1	4	3	5	4	0	3	2	2	1	2	4	4	5	65				
(P)SC,N		5	2	0	2	1	2	3	3	0	3	0	0	1	2	1	1	1	1	1	1	1	2	4		2	2	2	9					
SCHOOLS/OTHER TRAINING (P)																																		
OTHER (P)																																		
TOTAL PHASED REQ (C)		16	28	31	37	47	56	70	82	86	95	95	95	104	110	112	117	121	127	132	133	136	139	143	148	150	156	162	169	243				
ASSETS ON HAND (BP)		52																																
DELIVER FY95/PRIOR OP,N (P)	47	8	8	8	8	4	4	4	3																									
FY95/PRIOR SC,N (P)	24	6	6	6	5					1																								
FY95/PRIOR OTHER (P)	0																																	
FY96 OP,N (P)	7									2	2	2	1																					
FY96 SC,N (P)	3									1	1	1																						
FY96 OTHER (P)	0																																	
FY97 OP,N (P)	0																																	
FY97 SC,N (P)	0																																	
FY97 OTHER (P)	0																																	
FY98 OP,N (P)	0																																	
FY98 SC,N (P)	0																																	
FY98 OTHER (P)	0																																	
FY99 OP,N (P)	8																					2	2	2	2									
FY99 SC,N (P)	7																					2	2	2	1									
FY99 OTHER (P)	0																																	
FY00 & OUT OP,N (P)	79																									4	4	4	3	64				
FY00 & OUT SC,N (P)	16																					2	2	2	2	4	4	4	2	8				
FY00 & OUT OTHER (P)	0																																	
TOTAL ASSETS (C)		66	80	94	107	111	115	119	122	126	129	132	133	133	133	133	133	133	133	133	133	137	141	145	148	154	160	166	171	243				
QTY OVER (+) OR SHORT (-)		50	52	63	70	64	59	49	40	40	34	37	38	29	23	21	16	12	6	1	0	1	2	2	0	4	4	4	2	0				
D. REMARKS																		TOTAL RQMT		INSTALLED		ON HAND		FY 99 PRIOR UNDELIVERED		UNFUNDED								
Quantity installed as of Sept 1996																		262		73		48		62		79								
Total OPN rqmt. includes four trainers and one life cycle support unit (depot)																		0		8		4		34		16								
																		ADMIN		2		INIT ORDER		24		REORDER		24						

DD FORM 2447, JUN 86

P-1 SHOPPING LIST
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Exhibit P-23

**UNCLASSIFIED
CLASSIFICATION**

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TIME PHASED REQUIREMENTS SCHEDULE										DATE Feb-97					
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE				COST CODE AND NA			
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								SATCOM Ship Terminals 3321000				NN107 EHF Terminals			
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY-1996								FY-1997							
LHD-6 S	1	DDG-76 S	1	SSN-715 A	1	CG-73 A	1	DD-967	1	DDG-80 G	1	DDG-81 G	1	DDG-82 G	1
CVN-75 S	2	SSN-763 AX	1	CG-71	1	CG-65 A	1	DD-972	1	SSN-683 A	1	SSBN-732 A	1	DD-984 A	1
SSBN-743 S	1	SSN-760 A	1	DD-983	1	CG-70 A	1	DDG-56 A	1	DDG-67 A	1	SSN-764 A	1	SSBN-739 A	1
DDG-75 S	1	LHD-3 AX	1			DDG-79 S	1	SSBN-740 A	1	CG-52	1	SSN-762 A	1	SSBN-731 A	1
CG-48 X	1	DDG-53	1			DDG-69 P	1	DDG-55	1	DDG-58	1	SSN-773 A	1	SSN-765 A	1
CG-50	1	DD-981	1			SSN-717 A	1	DD-979	1	DD-975	1	DDG-66 A	1	SSN-705 A	1
DDG-57 A	1	DDG-78 S	1					DDG-68 P	1	DD-980	1	DDG-993 A	1	MCS-12	1
DDG-77 S	1	SSN-761 A	1					DD-987	1	SSBN-742 S	1	DD-991	1	SSBN-741 S	1
DDG-51	1	DDG-61 X	1					DDG-65	1	SSBN-734 A	1	DD-985 A	1	DD-992 A	1
LHD-4 A	1	CG-68	1					DDG-64 A	1			DDG-59 A	1	DDG-60	1
LHD-2 A	1	DDG-54	1									DDG-70 P	1	DDG-83 S	1
CG-55	1	CG-57	1									DDG-71 P	1	SSN-771 A	1
SSN-690 A	1											SSBN-737	1		
LCC-19 DAX	1											SSBN-729	1		
CG-53 A	1														
TOTAL	16	TOTAL	12	TOTAL	3	TOTAL	6	TOTAL	10	TOTAL	9	TOTAL	14	TOTAL	12
FY-1998								FY-1999							
CG-47	1	DDG-84 S	1					LHA-1 DA	1	SSN-724 A	1	LHD-6 DA	1	DD-976	1
DDG-62	1	CVN-76 S	2					DD-986	1	SSBN-728 A	1	DDG-87 G	1	DD-971	1
SSN-758 A	1	DDG-63	1					SSBN-727 A	1	SSBN-726 A	1			SSBN-738 A	1
SSN-711 A	1	LHD-7 S	2					AGF-3 DA	1	DDG-86 G	1			DDG-88 G	1
		SSN-723 A	1					DDG-85 G	1	SSN-770 A	1			SSBN-736 A	1
		SSBN-733 A	1					SSN-772 A	1	SSN-23 S	1				
		SSBN-735	1					SSBN-730 A	1						
								SSN-719 A	1						
								SSN-757 A	1						
TOTAL	4	TOTAL	9	TOTAL	0	TOTAL	0	TOTAL	9	TOTAL	6	TOTAL	2	TOTAL	5

DD FORM 2447S, JUN 86

P-1 SHOPPING LIST

Exhibit P-23A

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**UNCLASSIFIED
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TIME PHASED REQUIREMENTS SCHEDULE										DATE Feb-97					
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT								P-1 ITEM NOMENCLATURE SATCOM Ship Terminals 3321000				COST CODE AND NA NN107 EHF Terminals			
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY-2000								FY-2001							
LHA-5 DA	1	LPD-5	1	DDG-996	1	DD-968 RA		SSN-769	1	SSN-750 A	1	LPD-13	1	NSSN-XX1 S	1
LHD-1 DA	1	LHD-4 DA	1	LHD-5 DA	1	DD-974 RA		LPD-4	1	SSN-767 A	1	DD-982	1	DDG-96 S	1
DD-965	1	AGF-11 DA	1	LHA-3 DA	1	DDG-92 G	1	SSN-768 A	1	DDG-93 S	1	DDG-94 S	1	LHD-2 DA	1
DDG-89 G	1	DDG-90 G	1	SSN-699 RA						DD-988 RA		DDG-95 S	1	DDG-97 S	1
		LPD-6	1	DD-990	1									NSSN-XX2 S	1
		DD-969	1	DDG-91 G	1										
TOTAL	4	TOTAL	6	TOTAL	5	TOTAL	1	TOTAL	3	TOTAL	3	TOTAL	4	TOTAL	5
FY-2002								FY-2003							
SSN-718 A	1	DDG-100 S	1	DDG-101 S	1	LSD-53	1	DDG-103 S	1	DDG-104 S	1	LSD-54	1	DDG-106 S	1
SSN-691 A	1	DDG-98 S	1	DDG-99 S	1	DDG-102 S	1	NSSN-XX3 S	1	LSD-46	1	LSD-51	1	LSD-42	1
		LPD-13	1	LSD-41	1	LPD-9	1	SSN-755 A	1	SSN-700 A	1	DDG-105 S	1	LHA-2 DA	1
		LHD-7 DA	1	LHD-3 DA	1	LSD-52	1	DDG-995	1	SSN-756 A	1	LPD-15	1	DDG-107 S	1
		LSD-50	1	LPD-12	1	LPD-14	1					LPD-7	1	LSD-45	1
		SSN-52 A	1	SSN-707 A	1	LPD-17 S	1								
						LSD-48	1								
												Notes: A= Programmed for Alteration Installation Teams (AIT) S= SCN Units X= Ships funded in FY 95 but installed in FY 96 P= PDA installs (SCN install & OPN procurement funds)			
												G= Procured with OPN, Installed as GFE with SCN funds D= Install of 2nd unit, dual system R= Re-install of x-decked equipment O&MN funded-shown for info or			
TOTAL	2	TOTAL	6	TOTAL	6	TOTAL	7	TOTAL	4	TOTAL	4	TOTAL	5	TOTAL	5

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES										A. DATE Feb-97	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					SATCOM Ship Terminals 3321000 52NN						
ITEM	TOTAL I/O REQUIREMENTS	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUPLICATED WITH FY97 AND PRIOR FUND	PLANNED BUDGET YEAR (FY97)	PLANNED BUDGET YEAR (FY98)	PLANNED BUDGET YEAR (FY99)	BALANCE	PHASING RATIONALE		
NN101	Mini-DAMA	176	0	0	56	43	0	0	77	uty year Fundec	
NN103	TACINTEL II	99	5	73	0	0	7	0	14	uty year Fundec	
NN103	SCI/JMCOMS/ADNS	99	0	7	0	18	0	15	59	uty year Fundec	
NN105	SATCOM Equipment - G	26	0	0	13	13	0	0	0	Complete	
NN105	SATCOM Equipment - D	397	0	0	0	0	110	16	271	uty year Fundec	
NN105	AN/PSC-5 - EMUT	278	0	0	0	180	98	0	0	Complete	
NN105	AN/USC-42(V)1	26	0	0	8	18	0	0	0	Complete	
NN105	AN/WSC-3(V) Mod Kits	385	0	0	0	0	174	0	211	uty year Fundec	
NN105	OE-82 Mod Kits (5KHZ)	458	0	0	0	122	104	144	88	uty year Fundec	
MEMO ENTERED											
ITEM #1 NN101 Mini-DAMA				ITEM #2 NN103 TACINTEL II				ITEM #3 NN103 SCI/JMCOMS/ADNS			
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty
SSN/SSBN(Tenders)	172		4	AGF/LCC	4	DD/DDG	37	AGF/LCC	4	DD/DDG	37
	4			CV/CVN	11	T-AGOS	3	CV/CVN	11	T-AGOS	3
				LHA/LHD/LF	15			LHA/LHD/LF	15		
				CG/CGN	29			CG/CGN	29		
TOTAL I/O 176				TOTAL I/O 99				TOTAL I/O 99			
ITEM #4 NN105 SATCOM Equipment - G				ITEM #5 NN105 SATCOM Equipment - D				ITEM #6 NN105 AN/PSC-5 (EMUT)			
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty
MHC	12			Submarines	54	CINCS	125				
MCM	14			Surface Shij	331	Fleet flags	27				
				Trainers	12	SEAL teams	126				
TOTAL I/O 26				TOTAL I/O 397				TOTAL I/O 278			
ITEM #7 NN105 AN/USC-42(V)1				ITEM #8 NN105 AN/WSC-3(V) Mod Kits				ITEM #9 NN105 OE-82 Mod Kits (5KHZ)			
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty
MHC	12			Submarines	54						
MCM	14			Surface Shij	331			Surface Shij	458		
TOTAL I/O 26				TOTAL I/O 385				TOTAL I/O 458			

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES										A. DATE Feb-97	
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE SATCOM Ship Terminals 3321000 52NN						
ITEM	TOTAL I/O REQUIREMENTS	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE WITH FY9 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97)	PLANNED BUDGET YEAR (FY98)	PLANNED BUDGET YEAR (FY99)	BALANCE	PHASING RATIONALE		
NN105	SATCOM Equipment - M	64	0	0	0	64	0	0	0	Complete	
NN106	AN/WSC-6(V) 4 Mod Kit	34	0	0	4	6	7	11	6	uty year Fundec	
NN106	AN/WSC-6(V)	176	1	33	0	3	1	12	126	uty year Fundec	
NN106	SHF 7" Antenna	20	0	0	0	2	2	8	8	uty year Fundec	
NN107	EHF Terminals	277	48	105	39	0	2*	8	77	uty year Fundec	
NN107	MDR	208	0	0	0	0	27	27	154	uty year Fundec	
NN107	NECC	277	0	0	14	39	19	39	166	uty year Fundec	
NN112	INMARSAT	274	8	2	24	15	31	77	117	uty year Fundec	
NN112	C-Band/CWSP	42	1	8	0	6	4	6	17	uty year Fundec	
MEMO ENTERED											
ITEM #1	NN105	SATCOM Equip - Moder	ITEM #2	NN106	AN/WSC-6(V)4 Mod	ITEM #3	NN106	AN/WSC-6(V)X			
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty		
CV/CVN	24		Surface Shij	33		Surface Shij	173				
LHA/LHD	20		Trainers	1		Trainers	3				
AGF/LCC	8										
Shore Sites	12										
TOTAL I/O		64	TOTAL I/O		34	TOTAL I/O		176			
ITEM #4	NN106	SHF 7" Antenna	ITEM #5	NN107	EHF Terminals	ITEM #6	NN107	MDR			
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty		
Surface Shij	20		Submarines	5		Submarines	52				
			Surface Shij	64		Surface Shij	156				
			Trainers/LC:	208							
TOTAL I/O		20	TOTAL I/O		277	TOTAL I/O		208			
ITEM #7	NN107	NECC	ITEM #8	NN112	INMARSAT	ITEM #9	NN112	C-Band/CWSP			
hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty	hull/location	qty		
Submarines	70		Surface shij	270		Surface shij	40				
Surface Shij	207		ISEA/Trainir	4		ISEA/Trainir	2				
TOTAL I/O		277	TOTAL I/O		274	TOTAL I/O		42			

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* Note: NN107 FY98 funds will be used to procure NDI models from two of the following for follow-on terminal downselect award.

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES										A. DATE	
										Sep-96	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					SATCOM Ship Terminals 3321000 52NN						
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUPLICATED WITH FY 9 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97)	PLANNED BUDGET YEAR (FY98)	PLANNED BUDGET YEAR (FY99)	BALANCE	PHASING RATIONALE		
NN112	Personal Comm System	825	0	0	0	75	75	675	1 year funded		
NN117	GBS Equip Suite/Antenn	409	0	0	42	17	43	307	1 year Funded		
MEMO ENTERED											
ITEM #1 NN112 Personal Comm System hull/location qty hull/location qty Surface ship 679 Submarines 126 ISEA/Trainir 20 TOTAL I/O 825				ITEM #2 NN117 GBS Equip Suite hull/location qty hull/location qty Surface ship 335 Submarines 72 ISEA/Trainir 2 TOTAL I/O 409				ITEM #3 hull/location qty hull/location qty TOTAL I/O 0			
ITEM #4 hull/location qty hull/location qty TOTAL I/O 0				ITEM #5 hull/location qty hull/location qty TOTAL I/O 0				ITEM #6 hull/location qty hull/location qty TOTAL I/O 0			
ITEM #7 hull/location qty hull/location qty TOTAL I/O 0				ITEM #8 hull/location qty hull/location qty TOTAL I/O 0				ITEM #9 hull/location qty hull/location qty TOTAL I/O 0			

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BUDGET ITEM JUSTIFICATION SHEET						DATE Feb-97		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE SATCOM Shore Terminals 32200 52NP				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$11.9	\$27.0	\$5.0	\$77.8	\$67.3	\$21.0	\$23.8	\$36.1
<p>PROGRAM COVERAGE: The 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 is an integral part of the Joint Maritime Communications Strategy.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>DAMA/MINI-DAMA: Demand Assigned Multiple Access (DAMA) quadruples the UHF and SHF 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 shore DAMA line provides for procurement of multiplexers, DAMA constant key alarms, control monitor groups, VME integrated communications systems (VICS) and miscellaneous interconnecting hardware for shore sites. Mini-DAMA is the second phase of the UHF DAMA program. It provides a miniaturized version of the TD-1271B/U and incorporates UHF SATCOM and LOS transceiver capabilities and AN/SSR-1A broadcast receiver capabilities. Mini-DAMA also uses 5 KHz or 25 KHz satellite channels, external UHF SATCOM and LOS capabilities, and can operate in DAMA or non-DAMA modes. The Mini-DAMA configuration was transitioned from MIL-SPEC to commercial open system architecture. In the outyears, this line provides funds for the Joint UHF MILSATCOM Network Integrated (JMNI) Control System which will provide an automated Demand Assigned Multiple Access (DAMA) capability, globally optimizing UHF SATCOM assets for the warfighter. FY96 and FY97 continued the previous procurement of Mini-DAMA units with miscellaneous interface support equipment for shore uses and production support.</p> <p>SI COMMS: The shore terminal interface for shipboard TACINTEL II+ will utilize non-development items (NDI), Commercial off the Shelf (COTS), Government off the Shelf (GOTS) and supporting hardware as needed for existing systems to meet the Special Intelligence Communications requirements. Prior year's funds provided two tiers of growth. First, it continued fielding of the TAC-3 and TAC-4 workstations. This is a key facet of realizing the Joint Maritime Communications Strategy (JMCOMS)/Automated Digital network Systems (ADNS) architecture in that a common processor will have been fielded allowing for expanded capabilities. In FY96, the procurement consisted of TAC 4 work stations with the appropriate ancillary equipment to establish the TACINTEL II capability at various shore and training sites. Funds in FY97 through FY98 will continue to procure TAC-N ancillary equipment to provide the full capability of SI-Communications and implementation of JMCOMS/ADNS by the end of the century. This is a phased program to upgrade the present TACINTEL terminals then upgrade the capability with hardware and software improvements to result in TACINTEL II and INTELNET portions of TACINTEL II+.</p>								

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE Feb-97
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Shore Terminals	32200 52NP
<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). The FY99 funds procure one AN/WSC-6(V)X trainer plus mod kits for upgrading existing SHF shore based terminals.</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 JROC validated Milstar ORD of Jun 92. There is a requirement to procure 64 operational shore station terminals (OPN and SCN), plus four life cycle support systems already bought. This requirement is documented in OPNAV letter Ser N631/6U561112 of 16 Jan 96.</p> <p>Phase II of the NESP program procures Navy EHF Communications Controllers (NECCs), which provides a 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 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 will be available in FY 97 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 a combined LDR/MDR terminal follow-on contract beginning in FY 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 OPNAV letter Ser N631/6U561112 of 16 Jan 96 and must be fielded by FY 99 in order to support the launch schedule of the first Milstar II satellite. 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>		

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE Feb-97
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Shore Terminals 32200.52NP	
<p>FY 97 funds will be used to continue the procurement of NECCs and FMLOC equipment. FY 98 funds will be used to begin procurement of combined LDR/MDR follow-on terminals, MDR retrofit appliquéés, and for the continued procurement of NECCs and FMLOC equipment. These procurements will be continued in FY 99 and FY 00.</p> <p>Global Broadcast System: 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 terminal will provide the capability of quickly dissemination large information products to various Navy fixed sites and small combat and combat support elements. FY97 begins procurement of shore site terminals as a result a Congressional budget plus up.. In FY98 and FY99, the shore GBS terminal components will be procured as follows: GBS Antenna & receiver from GBS Joint Program Office (JPO) contract; GBS data processor from Navy contract. transportable terminals will be procured from the GBS-JPO contract. A total of 70 shore and 94 portable terminals will be procured through the GBS program. A Mission Need Statement for GBS was signed, 3 AUG 1995, and a DRAFT Operational Requirements Document (ORD) was developed and is in the review process.</p> <p>JMINI: The JMINI Control System is a joint interest program with the Navy designated as the lead service. The JMINI Control System will provide dynamic centralized control of joint operable 5-kHz and 25-kHz ultra high frequency (UHF) military satellite communications (MILSATCOM) voice and data resources via a globally integrated system of four primary control stations to be located at each of the(Naval Computer and Telecommunications Area Master Stations (NCTAMS) sites. As part of the worldwide system, four additional stations will serve as backup facilities in the event of a catastrophic failure at any site. Funds in FY98 procure two identical sites; each site has two channel capacity. Funds in FY99 procure four primary control stations (each of which are required to form a JMINI control system) and four backup control stations (also required to form a JMINI control system). Each primary control station has a 72 channel capacity. Each back-up control station has a 24 channel capacity.</p> <p>TRAINING SUPPORT AGENT: FY96 funds provided factory training for Mini-DAMA.</p> <p>INSTALLATION AGENT: Various</p>		

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE		
						Feb-97		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SATCOM Shore Terminals 32200 52NP				
EQUIPMENT (Includes installation)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
UHF Terminals	3.1	4.1	2.5	58.5	26.6	0.6	0.7	0.7
SHF Terminals	0.0	0.0	0.0	2.0	1.9	0.9	0.0	0.0
EHF Terminals	8.6	18.1	2.3	15.7	38.3	19.2	21.3	34.5
Global Broadcast System	0.0	4.9	0.2	1.7	0.6	0.2	1.8	0.8

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WEAPON SYSTEM COST ANALYSIS							DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE SATCOM Shore Terminals 322000 52NP					
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
NP101	DAMA/Mini-DAMA	A	7	1,839	3	698				
NP103	SI Comms- TACINTEL II	A	4	854	7	1,583	3	737		
NP103	SI Comms-JMCOMS/ADNS	A			5	275	20	1,100		
NP108	SHF Term.-AN/WSC-6(V)4 Mod kits	A							1	978
NP108	SHF Term.-AN/WSC-6(V)X	A							1	1,000
NP109	EHF Terminals- NECC	A			9	1,024	6	800	6	800
NP109	EHF Terminals- Interim Polar Gateway	A			VAR	5,840				
NP109	EHF Terminals- MDR	A							5	4,300
NP109	EHF Terminals--AN/USC-38(V)X	A	VAR	302	VAR	4,367	VAR	346	5	9,250
NP117	GBS Equip Suite/Antenna	A			5	4,484	1	98	9	900
NP118	JMINI	A					2	555	8	49,132
NP666	Training Support	A	VAR	185						
NP776	Non-FMP Installation	A	VAR	8,768	VAR	8,757	VAR	1,351	VAR	11,447
	TOTAL PROGRAM			11,948		27,028		4,987		77,807

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WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING											A. DATE	
											Feb-97	
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						SATCOM Shore Terminals 322000 52NP						
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILBL NOW	SPECS REV REQUIRE	IF YES, WHEN AVAILBL
NP101	DAMA/Mini DAMA	FY96	Titan, San Diego, CA	C-FPI (Opt)	SPAWAR	Apr-96	Apr-97	7	\$262,714	Yes	No	N/A
NP101	DAMA/Mini DAMA	FY97	Titan, San Diego, CA	C-FPI (Opt)	SPAWAR	Apr-97	Apr-98	3	\$232,667	Yes	No	N/A
NP103	TACINTEL II	FY96	NRAD, San Diego, CA	WX	SPAWAR	Sep-96	Dec-96	4	\$213,500	Yes	No	N/A
NP103	TACINTEL II	FY97	NRAD, San Diego, CA	WX	SPAWAR	Dec-96	Mar-97	7	\$226,143	Yes	No	N/A
NP103	TACINTEL II	FY97	NRAD, San Diego, CA	WX	SPAWAR	Dec-97	Mar-98	3	\$245,666	Yes	No	N/A
NP103	SCI/JMCOMS/ADNS	FY97	NRAD, San Diego, CA	WX	SPAWAR	Dec-96	Mar-97	5	\$55,000	Yes	No	N/A
NP103	SCI/JMCOMS/ADNS	FY98	NRAD, San Diego, CA	WX	SPAWAR	Dec-97	Mar-98	20	\$55,000	Yes	No	N/A
NP108	AN/WSC-6(V)4 Mod Kits	FY99	NRAD, San Diego, CA	WX	SPAWAR	Mar-99	Mar-00	1	\$978,000	Yes	No	N/A
NP108	AN/WSC-6(V)X	FY99	TBD (Recompete)	FFP (Opt)	SPAWAR	Mar-99	Mar-00	1	\$1,000,000	Yes	No	N/A
NP109	EHF Terminals	FY99	TBD (Recompete)	C-FFP	SPAWAR	Nov-98	Nov-00	5	\$1,850,000	No	Yes	Mar-97
NP109	MDR	FY99	Raytheon, Boston, MA	SS-FP	SPAWAR	Jan-99	Jan-01	5	\$860,000	Yes	No	N/A
NP109	NECC	FY97	NRAD, San Diego, CA	WX	SPAWAR	Nov-96	Jun-97	9	\$113,777	Yes	No	N/A
NP109	NECC	FY98	NRAD, San Diego, CA	WX	SPAWAR	Nov-97	Jun-98	6	\$133,333	Yes	No	N/A
NP109	NECC	FY99	NRAD, San Diego, CA	WX	SPAWAR	Nov-98	Jun-99	6	\$133,333	Yes	No	N/A
NP109	Interim Polar Gateway System	FY97	NAVSOC/Raytheon	SS-FP	SPAWAR	Dec-97	Dec-97	*	\$5,840,000	Yes	No	N/A
NP117	GBS Equip Suite/Antenna	FY97	TBD	C-FFP	GBS-JPO/NRaD	Jul-97	Nov-97	5	\$896,800	No	Yes	Jun-97
NP117	GBS Equip Suite/Antenna	FY98	TBD	C-FFP	GBS-JPO/NRaD	Nov-97	Mar-98	1	\$98,000	No	No	N/A
NP117	GBS Equip Suite/Antenna	FY99	TBD	C-FFP	GBS-JPO/NRaD	Nov-98	Mar-99	9	\$100,000	No	No	N/A
NP118	JMINI (See remarks)	FY98	TBD	C-IDIQ	NCCOSC	Oct-97	Jun-98	2	\$277,500	No	No	N/A
NP118	JMINI (See remarks)	FY99	TBD	C-IDIQ	NCCOSC	Oct-98	Jun-99	8	\$6,141,500	No	No	N/A

D. REMARKS

- Unit costs for NP101, NP108 and NP117 include a share of production support and ancillary hardware requirements. Unit prices in NP109 "EHF Terminals" in each year's P-5 exhibit include Phase III procurements identified on the P-40, reliability incentives & warranty costs, baseband equipment and production support. Quantities shown in both the P-5 and P-5A reflect only the number of complete AN/USC-38(V) terminals.
- Unit costs for NP103 vary based on TACINTEL Link Control Facility upgrade and ADNS implementation requirements. Unit prices are average across the FYDP and include both integration costs, and production support.
- NP117 in FY97 includes non-recurring production start up costs plus production support for preparation of specifications and procurement packages.
- For NP118, the unit cost displayed here represents the average cost for each site. FY98 consists of two 2 channel systems for training and ISEA support. FY99 consists of four satellite uplink sites, each with one 72 channel primary insertion system and one 24 channel backup system. Funds include site unique interface hardware and production support.
- * Provides Mod Kits to retrofit EHF ground terminals for interim polar capability.

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**P-1 SHOPPING LIST
ITEM NO PAGE NO.
111 6**

Exhibit P-5A

**UNCLASSIFIED
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MODIFICATION TITLE: **SATCOM Shore Terminals/ UHF Terminals (NP101, NP103 and NP118)**
 MODELS OF SYSTEMS AFFECTED: AN/USC-42(V); TAC-3, 4 & N; VME chassis; DAMA CKA boards; DAMA SAC mod kits; amplifiers; diplexers and JMINI control systems.
 DESCRIPTION/JUSTIFICATION: Shore tactical satellite communications network control equipment for data, message traffic and secure voice.

#####

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment	VAR	2.7	VAR	2.6	VAR	2.4	VAR	49.1	VAR	22.0		0.0		0.0	VAR	0.7		0.0	VAR	79.5	
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware	VAR	0.4	VAR	1.0																VAR	1.4
FY97 Eqpt			VAR	0.5																VAR	0.5
FY98 Eqpt					VAR	0.1	VAR	0.7												VAR	0.8
FY99 Eqpt						0.0	VAR	8.7	VAR	1.2	VAR	0.2								VAR	10.1
FY00 Eqpt									VAR	3.4	VAR	0.4	VAR	0.7						VAR	4.5
FY01 Eqpt																					
FY02 Eqpt																					
FY03 Eqpt																	VAR	0.2	VAR	0.2	
FY TC Eqpt																					
Total Installation Cost	0	0.4	0	1.5	0.0	0.1	0.0	9.4	0.0	4.6	0.0	0.6	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.2	17.5
Total Procurement Cost		3.1		4.1		2.5		58.5		26.6		0.6		0.7		0.7		0.2		0.2	97.0

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: Various PROCUREMENT LEADTIME: Various

CONTRACT DATES: FY 1997: FY 1998: FY 1999:

DELIVERY DATE: FY 1997: PY 1 2 3 4 FY 97 1 2 3 4 FY 98 1 2 3 4 FY 99 1 2 3 4 FY 00 1 2 3 4

INSTALLATION SCHEDULE:

INPUT OUTPUT: FY 01 1 2 3 4 FY 02 1 2 3 4 FY 03 1 2 3 4 TC Total

INSTALLATION SCHEDULE:

INPUT OUTPUT

UNCLASSIFIED

MODIFICATION TITLE: **SATCOM Shore Terminals/GBS (NP117)**

Feb-97

MODELS OF SYSTEMS AFFECTED: Commercial off the shelf (COTS) receive only satellite communications terminals with antennas, modems and ancillary hardware and processing

DESCRIPTION/JUSTIFICATION: Navy portion of a joint services program to deliver high speed satellite data to shipboard and special operations users.

Note: No installation required for the units that are manpackable, therefore there is not a one for one relationship between procurement and install:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Equipment is all commercial off the shelf (COTS). No development required.

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment			VAR	4.5	VAR	0.1	VAR	0.9	VAR	0.3	VAR	0.1	VAR	1.0	VAR	0.4	VAR	13.5	VAR	20.8	
Equipment Not requiring installation																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
FY97 Eqpt			VAR	0.4																VAR	0.4
FY98 Eqpt					VAR	0.1														VAR	0.1
FY99 Eqpt							VAR	0.8												VAR	0.8
FY00 Eqpt									VAR	0.3										VAR	0.3
FY01 Eqpt											VAR	0.1								VAR	0.1
FY02 Eqpt													VAR	0.8						VAR	0.8
FY03 Eqpt															VAR	0.4				VAR	0.4
FY TC Eqpt																	VAR	4.5		VAR	4.5
Total Installation Cost				0.4		0.1		0.8		0.3		0.1		0.8		0.4		4.5		7.4	
Total Procurement Cost				4.9		0.2		1.7		0.6		0.2		1.8		0.8		18.0		28.2	

METHOD OF IMPLEMENTATION: COTS ADMINISTRATIVE LEADTIME: Various PROCUREMENT LEADTIME: Various

CONTRACT DATES: FY 1997: FY 1998: FY 1999:

DELIVERY DATE: FY 1997: FY 1998: FY 1999:

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00				TC	Total		
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT																					
OUTPUT																					
INSTALLATION SCHEDULE:																					
INPUT																					
OUTPUT																					

INSTALLATION SCHEDULE:
INPUT
OUTPUT

UNCLASSIFIED
CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE				
							Feb-97				
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SATCOM Shore Terminals			322000		52NP		
ITEM		TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE	
NP101	Mini-DAMA	34	0	6	7	3	0	0	18	Outyear Funded	
NP103	TACINTEL II	26	0	12	4	7	3	0	0	Complete	
NP103	SCI/JMCOMS/ADNS	32	0	0	0	5	20	0	7	Outyear Funded	
NP108	AN/WSC-6(V)4 Mod Kits	1	0	0	0	0	0	1	0	Complete	
NP108	AN/WSC-6(V)X	2	0	0	0	0	0	1	1	Outyear Funded	
NP109	EHF Terminals	68	10	25	3	0	0	5	25	Outyear Funded	
MEMO ENTERED											
ITEM #1	NP101	Mini-DAMA	qty	ITEM #2	NP103	TACINTEL II	qty	ITEM #3	NP103	SCI/JMCOMS/ADNS	qty
	hull/location	hull/location	qty		hull/location	hull/location	qty		hull/location	hull/location	qty
	Shore sites				8 Shore sites				16 Shore sites		
	Trainers		12						32		
			TOTAL I/O				TOTAL I/O				TOTAL I/O
			34				26				32
ITEM #4	NP108	AN/WSC-6(V)4 Mod Kits	qty	ITEM #5	NP108	AN/WSC-6(V)X	qty	ITEM #6	NP109	EHF Terminals	qty
	hull/location	hull/location	qty		hull/location	hull/location	qty		hull/location	hull/location	qty
	FTC Norfolk		1		FTC Norfolk, VA		1		Shore units		64
					Ft. Gordon, GA		1		Trainers/LCSS		4
			TOTAL I/O				TOTAL I/O				TOTAL I/O
			1				2				68

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Exhibit P-23B

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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES								A. DATE		
								Feb-97		
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				SATCOM Shore Terminals 322000 52NP						
ITEM		TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE
NP109	MDR	43	0	0	0	0	0	5	38	Outyear Funded
NP109	NECC	62	0	0	0	9	6	6	41	Outyear Funded
NP117	GBS Equipment Suite	164	0	0	0	5	1	9	149	Outyear Funded
NP118	JMINI	14	0	0	0	0	2	8	4	Outyear Funded
MEMO ENTERED										
ITEM #1	NP109	MDR	qty	ITEM #2	NP109	NECC	qty	ITEM #3	NP117	GBS Equipment Suite
hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location
Shore units	Shore units	Shore units	Shore units	Shore units	Shore units	Shore units	Shore units	Shore units	Shore units	Shore units
Trainers/LCSS	Trainers/LCSS	Trainers/LCSS	Trainers/LCSS	Trainers/LCSS	Trainers/LCSS	Trainers/LCSS	Trainers/LCSS	Trainers/LCSS	Trainers/LCSS	Trainers/LCSS
		TOTAL I/O	43			TOTAL I/O	62			TOTAL I/O
										164
ITEM #4	NP118	JMINI	qty	ITEM #5			qty	ITEM #6		
hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location	hull/location
Primary sites	Primary sites	Primary sites	Primary sites	Primary sites	Primary sites	Primary sites	Primary sites	Primary sites	Primary sites	Primary sites
Backup sites	Backup sites	Backup sites	Backup sites	Backup sites	Backup sites	Backup sites	Backup sites	Backup sites	Backup sites	Backup sites
Support sites	Support sites	Support sites	Support sites	Support sites	Support sites	Support sites	Support sites	Support sites	Support sites	Support sites
Backup upgrade	Backup upgrade	Backup upgrade	Backup upgrade	Backup upgrade	Backup upgrade	Backup upgrade	Backup upgrade	Backup upgrade	Backup upgrade	Backup upgrade
		TOTAL I/O	14			TOTAL I/O	0			TOTAL I/O
										0

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Exhibit P-23B

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BUDGET ITEM JUSTIFICATION SHEET						DATE Feb-97		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE JCSE Communications Equipment 330200 52L4				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$1.5	\$1.9	\$2.6	\$3.4	\$3.9	\$3.7	\$3.6	\$3.2
<p>PROGRAM COVERAGE: This is the Navy share of the Joint Communications Support Equipment (JCSE) Modernization Program. The total 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, TYC-17A message processing and distribution system software modifications/enhancements, Extremely High Frequency (EHF) satellite terminals (both smart-T and scamp versions), TSEC/KIV-7s Encryption devices, SHF Tri-band advanced range extension terminals (STAR-T), global command and control system (GCCS) package upgrades, joint communications planning & management systems (JCPMS), mobile audodin remote terminal (MART), joint worldwide intellegence communication system (JWICS), GRC239 trupo, satellite support radios (TSSR), AN/TSQ-188(V) communications central, LST-8000 lightweight contingency satellite replacements for UYK-85A tempest ruggedized personal computers, 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 and assorted switches transit cases multiplexers and antennas.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: FY 1998 and FY 1999 funds will be forwarded to the U.S. Air Force as the Navy's JCS required portion of the JCSE Modernization Program.</p> <p>INSTALLATION AGENT: N/A</p>								

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Exhibit P-40

UNCLASSIFIED
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WEAPON SYSTEM COST ANALYSIS							DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					JCSE Communications Equipment 330200			52L4		
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
L4001	JCSE Modernization	A	VAR	1,524	VAR	1,946	VAR	2,603	VAR	3,447
	TOTAL PROGRAM			1,524		1,946		2,603		3,447

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Exhibit P-5
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BUDGET ITEM JUSTIFICATION SHEET					DATE			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY					BLI: 3306 NSIPS EQUIPMENT			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$0.0	\$24.5	\$0.0	\$0.0	\$0	\$0	\$0	\$0
<p>PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS: The Navy Standard Integrated Personnel System (NSIPS) is an 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 operate Navy-wide, ashore, and afloat. NSIPS will provide significant technology enhancement to Navy, provide an integrated approach to customer support of all Active, Reserve, and Retired personnel and will be the Navy's only field-level data collection system for pay and personnel transactions, superseding various Navy and DoD systems.</p> <p>Funding will procure various equipment for the NSIPS program.</p>								

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WEAPON SYSTEM COST ANALYSIS						DATE: Feb-97						
B. APPROPRIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE								
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				BLI: 3306 Navy Standard Integrated Personnel System (NSIPS)								
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS									
			FY 96		FY 97		FY 98		FY 99			
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)		
	NSIPS EQUIPMENT	A		0	VAR	24,477						
	TOTAL PROGRAM			0		24,477			0			0

**OTHER PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION SHEET**

(DOD EXHIBIT P-40)
Feb-97

BUDGET ACTIVITY BA-2 JEDMICS						P-1 ITEM NOMENCLATURE JEDMICS SYSTEM EQUIPMENT		
QUANTITY	FY 96	FY 97	FY 98	FY99	FY00	FY 01	FY02	FY 03
COST (in millions)	\$0	\$4.1	\$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.

JEDMICS was designated the DOD standard system for storing engineering drawings.

In FY 97, JEDMICS intends to upgrade Central Processing Units and Optical Disk Magnetic Storage Devices at 4 JEDMICS Repositories (MCLB Albany, NTSC Orlando, NADEP North Island and Portsmouth NSY).

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APPROPRIATION				PROGRAM COST BREAKDOWN				(DOD Exhibit P-5)			
OTHER PROCUREMENT, NAVY								Feb-97			
BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				SUBHEAD NO.			
BA-2 JEDMICS				JEDMICS				92JE			
TOTAL COST IN THOUSANDS OF DOLLARS											
				FY 1996		FY 1997		FY 1998		FY 1999	
COST CODE	ELEMENT OF COST	IDENT CODE	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
J0001	JEDMICS REPOSITORY COTS/HW UPGRADE	3311	0	0	26	\$4,088	0	0	0	0	

PROCUREMENT HISTORY AND PLANNING

Feb-97

APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-6 SUPPLY SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE JEDMICS SYSTEMS
--	--

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
J0001A FY 1997	Silicon Graphics	GSA Schedule	NAVICP	Jan-97	Apr-97	8	\$357	YES	NO	
J0001B FY 1997	TBD	GSA Schedule	NAVICP	Mar-97	Sep-97	4	\$62	YES	NO	
J0001C FY 1997	PRC	GSA Schedule	NAVICP	Jul-97	Oct-97	3	\$53	YES	NO	
J0001D FY 1997	TBD	GSA Schedule	NAVICP	Apr-97	Jul-97	11	\$75	YES	NO	

BUDGET ITEM JUSTIFICATION SHEET						DATE Feb-97		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE GCCS (#3350) 52NW				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$2.3	\$1.7	\$1.6	\$4.5	\$4.6	\$4.8	\$4.9	\$5.0

PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS:

This funds the equipment to support the World Wide Military Command and Control System (WWMCCS) and Global Command and Control System (GCCS). WWMCCS is an operational multi-service/agency strategic C3 program. GCCS is the emerging replacement for WWMCCS which will encompass both strategic and tactical C3 functions. GCCS supports the National Command Authority (NCA) and the CINCs by providing Command, Control and Communication (C3) data 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 USCINCPAC, CINCPACFLT, CINCUSNAVEUR, CNO, USACOM, CINCLANTFLT, NAVCENTCOM, NAVSPACECOM, NAVSPECWARCOM, and COMUSJAPAN, and the migration to GCCS at these sites. 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 will be 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.

INSTALLATION DATA: All equipment is scheduled for installation at Navy supported GCCS shore sites, Fleet flagships, NAVCENTCOM, USACOM, CNO, COMUSJAPAN, CINCUSNAVEUR, and all CV/CVN and flag configured Amphib ships.

FY 96 funds provided GCCS/Communications equipment, Servers, LAN Servers/Components/Upgrades, replacement of workstations and will provide for FY 97 funds will provide Intelligent Workstations, Servers LAN hardware and software, communications equipment, as well as FMP and Non-FMP installations for equipment installations during FY 97.

FY 98 funds will provide Intelligent Workstations, Servers LAN hardware and software, communications equipment, as well as FMP and Non-FMP installations for equipment installations during FY 98.

MODIFICATION SUMMARY (\$M)

Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:

<u>EQUIPMENT</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>
GCCS	\$2.3	\$1.7	\$1.6	\$4.5	\$4.6	\$4.8	\$4.9	\$5.0

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS							DATE: Feb-97			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					GCCS (#3350)			52NW		
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
NW036	GCCS Supt Equipment	A	VAR	1,278	VAR	937	VAR	898		3,228
NW776	Non-FMP Installation	A	VAR	952	VAR	554	VAR	662		1,281
NW777	FMP Installation	A	N/A	68	VAR	186	VAR	0		0
	TOTAL PROGRAM			2,298		1,677		1,560		4,509

UNCLASSIFIED

Feb-97

MODIFICATION TITLE: Global Command and Control System(GCCS) (52NW) (Non-FMP)

MODELS OF SYSTEMS AFPEC N/A

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 MILI N/A

FINANCIAL PLAN: (\$ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	VAR	13.4	VAR	0.7	VAR	1.0	VAR	3.2	VAR	3.34	VAR	3.5	VAR	3.6	VAR	3.7			N/A			
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware (Non-F	19	6	6	0.6	6	0.7	6	1.3	6	1.26	6	1.3	6	1.3	6	1.3			N/A	N/A		
PRIOR YR EQUIP	19	6																				
FY 95 EQUIP			6	0.6																		
FY 96 EQUIP					6	0.7																
FY 97 EQUIP							6	1.3														
FY 98 EQUIP									6	1.26												
FY 99 EQUIP											6	1.3										
FY 00 EQUIP													6	1.3								
FY 01 EQUIP															6	1.3						
FY TC EQUIP																						
TOTAL INSTALLATION COST	19	6	6	0.6	6	0.7	6	1.3	6	1.3	6	1.3	6	1.3	6	1.3			N/A	N/A	N/A	N/A
TOTAL PROCUREMENT COS	VAR	19.4	VAR	1.3	VAR	1.7	VAR	4.5	VAR	4.6	VAR	4.8	VAR	4.9	VAR	5.0			N/A	N/A	N/A	N/A

METHOD OF IMPLEMENTATIO ADMINISTRATIVE LEA 2 Months PROCUREMENT LEAD 6 months

CONTRACT DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

DELIVERY DATES: FY 1997: VAR FY 1998: VAR FY 1999: VAR

INSTALLATION SCHEDULE:	PY	FY 97				FY 98				FY 99				FY 00				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT	19	3	2	1		4	1	1		1	2	2	1	1	2	2	1	
OUTPUT	19	2	3	1		2	3	1			2	3	1			2	3	1
INSTALLATION SCHEDULE:	---	FY 01				FY 02				FY 03				TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4					
INPUT		1	2	2	1	1	2	2	1	1	2	2	1					N/A
OUTPUT			2	3	1		2	3	1		2	3	1					N/A

* Install Quantity Indicates Sites

BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				BLI: 3368 NAVAL SHORE COMMUNICATIONS 52D6				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$31.8	\$42.3	\$72.5	\$95.1	\$114.2	\$89.2	\$102.6	\$110.7
<p>PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS: 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 from unmanned or minimally manned locatio</p> <p>(1) Information Exchange Systems: The purpose of the information exchange systems, which include both tactical and non-tactical applications of the Defense Message System (DMS) and technical control automation, is to provide a transparent, totally automated, interoperable, and integrated shore communications environment which will expedite an orderly transition to Global Grid. Additionally, information exchange systems efforts will result in increased throughput via faster system processing speeds, more capable end terminal devices, and more efficient and expedient methods of future upgrades and modernization through use of modularity and backward compatible technology applications.</p> <p>(2) Transmission Systems: 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. Digital microwaves and area wideband systems, low speed time diversity modems, enhanced digital terrestrial connectivity, and improved switching and multiplexing methods and equipment, will ensure compatibility and interoperability of Navy tactical links with the DCS of the future.</p> <p>(3) Communications Area Control: Supports shore station communications upgrades, providing technological enhancements to obsolete and manpower-intensive equipment, for stations providing regional area communications coverage. Current efforts are for installation of jointly procured equipment.</p> <p>(4) Miscellaneous Items: Procures miscellaneous equipment necessary to enhance existing equipment or to sufficiently meet operational requirements, including special purpose test equipment, that do not properly fit under the above three categories.</p>								

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET (Continuation)						DATE February 1997																																																																																			
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE																																																																																					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				NAVAL SHORE COMMUNICATIONS																																																																																					
<p>(5) Base Level Information Infrastructure (BLII): Procures outside cable plant, base interconnect point, digital switch, and network management system equipment to provide voice, video, and data connectivity from the Defense Information System Network (DISN) Service Delivery Point (SDP) to the tenant command building entry point.</p> <p>(6) Equipment Installation: Installs the above procured equipment at shore stations worldwide. Installs include base equipment system engineering plans (BESEP) and continues through quality assurance test/evaluation and as-built drawings.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: Defense Communication System Six Year Plan</p> <p>INSTALLING AGENTS: SPAWAR engineering field activities</p> <p>Listed below are the costs (i.e. hardware and installation) for equipment being procured and/or installed in this line item (\$M):</p> <table border="1"> <thead> <tr> <th><u>EQUIPMENT</u></th> <th><u>FY1996</u></th> <th><u>FY1997</u></th> <th><u>FY1998</u></th> <th><u>FY1999</u></th> <th><u>FY2000</u></th> <th><u>FY2001</u></th> <th><u>FY2002</u></th> <th><u>FY2003</u></th> </tr> </thead> <tbody> <tr> <td>Tech Control Upgrade</td> <td>8.9</td> <td>2.1</td> <td>6.8</td> <td>7.9</td> <td>8.3</td> <td>9.6</td> <td>9.8</td> <td>9.8</td> </tr> <tr> <td>Defense Messaging System</td> <td>12.0</td> <td>17.4</td> <td>28.9</td> <td>33.5</td> <td>45.4</td> <td>18.7</td> <td>17.1</td> <td>14.2</td> </tr> <tr> <td>Shore Remote Control Systems</td> <td>2.0</td> <td>2.1</td> <td>3.2</td> <td>4.7</td> <td>4.7</td> <td>5.5</td> <td>5.6</td> <td>5.6</td> </tr> <tr> <td>Terrestrial Connect</td> <td>0.1</td> <td>0.4</td> <td>0.4</td> <td>0.4</td> <td>0.4</td> <td>0.4</td> <td>0.4</td> <td>0.4</td> </tr> <tr> <td>Auto Digital Mux</td> <td>2.9</td> <td>4.3</td> <td>4.4</td> <td>4.2</td> <td>3.2</td> <td>2.8</td> <td>3.0</td> <td>3.0</td> </tr> <tr> <td>Comm Area Control</td> <td>5.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Miscellaneous Items</td> <td>1.0</td> <td>0.8</td> <td>0.3</td> <td>0.7</td> <td>0.6</td> <td>0.6</td> <td>0.7</td> <td>0.7</td> </tr> <tr> <td>Base Level Info Infrastructure</td> <td></td> <td>15.3</td> <td>28.3</td> <td>43.7</td> <td>51.4</td> <td>51.5</td> <td>65.9</td> <td>77.1</td> </tr> </tbody> </table>									<u>EQUIPMENT</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>	<u>FY1999</u>	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>	Tech Control Upgrade	8.9	2.1	6.8	7.9	8.3	9.6	9.8	9.8	Defense Messaging System	12.0	17.4	28.9	33.5	45.4	18.7	17.1	14.2	Shore Remote Control Systems	2.0	2.1	3.2	4.7	4.7	5.5	5.6	5.6	Terrestrial Connect	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Auto Digital Mux	2.9	4.3	4.4	4.2	3.2	2.8	3.0	3.0	Comm Area Control	5.0								Miscellaneous Items	1.0	0.8	0.3	0.7	0.6	0.6	0.7	0.7	Base Level Info Infrastructure		15.3	28.3	43.7	51.4	51.5	65.9	77.1
<u>EQUIPMENT</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>	<u>FY1999</u>	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>																																																																																	
Tech Control Upgrade	8.9	2.1	6.8	7.9	8.3	9.6	9.8	9.8																																																																																	
Defense Messaging System	12.0	17.4	28.9	33.5	45.4	18.7	17.1	14.2																																																																																	
Shore Remote Control Systems	2.0	2.1	3.2	4.7	4.7	5.5	5.6	5.6																																																																																	
Terrestrial Connect	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.4																																																																																	
Auto Digital Mux	2.9	4.3	4.4	4.2	3.2	2.8	3.0	3.0																																																																																	
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Base Level Info Infrastructure		15.3	28.3	43.7	51.4	51.5	65.9	77.1																																																																																	

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS							DAT February 1997			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					NAVAL SHORE COMMUNICATIONS 52D6					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
D6001	INFORMATION EXCHANGE SYS	A	VAR	15,685	VAR	16,289	VAR	28,534	VAR	33,254
D6002	TRANSMISSION SYSTEMS	A	VAR	3,747	VAR	4,119	VAR	5,164	VAR	5,865
D6003	COMM AREA CONTROL	A	VAR	904						
D6004	MISC ITEMS	A	VAR	684	VAR	460	VAR	207	VAR	452
D6005	BASE LEVEL INFO INFRASTRUCT	A			VAR	7,329	VAR	16,217	VAR	23,813
D6776	NON-FMP INSTALLATION	A	VAR	10,755	VAR	14,138	VAR	22,343	VAR	31,721
	TOTAL PROGRAM			31,775		42,335		72,465		95,105

UNCLASSIFIED
CLASSIFICATION

INSTALLATION SUMMARY
(TOA, Dollars In Millions)

February 1997

P-1 Line Item Nam Naval Shore Communications
Subhead: 52D6
P-1 Line Item Num 116

PROGRAM:

<u>System/Modification</u>	FY-1996	Y-1997	Y-1998	Y-1999	Y-2000	Y-2001	Y-2002	Y-2003	Total
Tech Control Upgrade	2.0	0.3	0.6	1.3	1.6	2.3	2.4	2.5	13.0
Defense Messaging System	3.2	2.9	6.6	6.8	9.0	6.0	3.4	2.9	40.8
Shore Remote Control Systems	0.6	0.6	0.8	1.3	1.6	1.9	2.0	2.0	10.8
Terrestrial Connect	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8
Auto Digital Mux	0.5	2.0	2.0	2.0	1.3	1.1	1.2	1.2	11.3
DISN Installation	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
Miscellaneous Items	0.3	0.3	0.1	0.2	0.2	0.2	0.2	0.2	1.7
Base Level Info Infrastructure	0.0	8.0	12.1	19.9	22.9	21.9	28.8	34.1	147.7
TOTAL	10.8	14.2	22.3	31.6	36.7	33.5	38.1	43.0	230.2

UNCLASSIFIED
CLASSIFICATION

MODIFICATION TITLE: Tech Control Upgrade (D6001)

February 1997

MODELS OF SYSTEMS AFFEC ANCCs/ATCs/Patch & Test Facilities Worldwide

DESCRIPTION/JUSTIFICATION Modifications to operational ANCC/ATCs to maintain current technology; modernization of manual patch & test facilities

DEVELOPMENT STATUS/MAJOR DEVELOPMENT N/A

FINANCIAL PLAN: (\$ in millions)

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	6	1.3	4	6.9	4	1.8	4	6.2	4	6.6	4	6.7	4	7.3	4	7.4	4.0	7.3			38	51.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware *																						
PRIOR YR EQUIP	6	1.5																			6	1.5
FY 96 EQUIP			4	2.0																	4	2.0
FY 97 EQUIP					4	0.3															4	0.3
FY 98 EQUIP							4	0.6													4	0.6
FY 99 EQUIP									4	1.3											4	1.3
FY 00 EQUIP											4	1.6									4	1.6
FY 01 EQUIP													4	2.3							4	2.3
FY 02 EQUIP															4	2.4					4	2.4
FY 03 EQUIP																	4.0	2.5			4.0	2.5
FY TC EQUIP																						
TOTAL INSTALLATION COST	6	1.5	4	2.0	4	0.3	4	0.6	4	1.3	4	1.6	4	2.3	4	2.4	4	2.5			38	14.5
TOTAL PROCUREMENT COST	2.8		8.9		2.1		6.8		7.9		8.3		9.6		9.8		9.8					66.0

METHOD OF IMPLEMENTATION EFA Install ADMINISTRATIVE LEAD 2 mo PROCUREMENT LEADTIME: 4 mo

CONTRACT DATES: FY 1996: 2/96 FY 1997: 11/96 FY 1998: ##### FY 1999: 11/98

DELIVERY DATES: FY 1996: 6/96 FY 1997: 3/97 FY 1998: 3/98 FY 1999: 3/99

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99									
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT	6			4			4				4					4							
OUTPUT	4	1	1		2	1	1	1	1	1	1	1	1			1	1	1	1				
INSTALLATION SCHEDULE:	PY	FY 00				FY 01				FY 02				FY 03				TOTAL					
INPUT		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		4				
OUTPUT		1	1	1	1	1	1	1	1	1	1	2	2			2		2				38	

* Quantities reflect areas of coverage (i.e., NCTAMS Med, Lant, EPAC, and WPAC) Costs vary by site requirements and configuration.

UNCLASSIFIED
CLASSIFICATION

MODIFICATION TITLE: Defense Message System/Shore Comm Auto (D6001)
 MODELS OF SYSTEMS AFFEC Various
 DESCRIPTION/JUSTIFICATION State of the Art Technologies for Messaging Functions.

February 1997

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

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	8	13.2	4	8.8	4	14.5	4	22.3	4	26.7	4	36.4	4	12.7	4	13.7	4	11.3			40	159.6	
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware *																							
PRIOR YR EQUIP	8	5.3																				8	5.3
FY 96 EQUIP			4	3.2																		4	3.2
FY 97 EQUIP					4	2.9																4	2.9
FY 98 EQUIP							4	6.6														4	6.6
FY 99 EQUIP									4	6.8												4	6.8
FY 00 EQUIP										4	9.0											4	9.0
FY 01 EQUIP											4	6.0										4	6.0
FY 02 EQUIP												4	3.4									4	3.4
FY 03 EQUIP													4	2.9								4	2.9
FY TC EQUIP																							
TOTAL INSTALLATION COST	8	5.3	4	3.2	4	2.9	4	6.6	4	6.8	4	9.0	4	6.0	4	3.4	4	2.9			40	46.1	
TOTAL PROCUREMENT COST	18.5		12.0		17.4		28.9		33.5		45.4		18.7		17.1		14.2						205.7
METHOD OF IMPLEMENTATION	EFA Install		ADMINISTRATIVE LEAD				4 mo				PROCUREMENT LEADTIME:				2 mo								

CONTRACT DATES: FY 1996: 2/96 FY 1997: 1/97 FY 1998: 1/98 FY 1999: 1/99

DELIVERY DATES: FY 1996: 4/96 FY 1997: 3/97 FY 1998: 3/98 FY 1999: 3/99

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99				TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT	8			4			4				4					4						40
OUTPUT	7	1		1	1	1	2	1	1	1	1	1	1			1	1	1	1			40
INSTALLATION SCHEDULE:	PY	FY 00				FY 01				FY 02				FY 03				TOTAL				
INPUT				4				4				4				4						
OUTPUT		1	1	1	1	1	1	1	1	1	1	1	2		1	1		2				40

* Quantities reflect areas of coverage (i.e., NCTAMS Med, Lant, EPAC, and WPAC). Costs vary by site requirements and configuration.

UNCLASSIFIED
CLASSIFICATION

MODIFICATION TITLE: Shore Remote Control System (SRCS) (D6002)

February 1997

MODELS OF SYSTEMS AFPEC Various Transmission Media

DESCRIPTION/JUSTIFICATION Automates and remotely controls communications, switching, and quality monitoring equipment which eliminates manual operations at worldwide loc

DEVELOPMENT STATUS/MAJOR DEVELOPMENT N/A

FINANCIAL PLAN: (\$ in millions)

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		IC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	1	1.3	4	1.4	4	1.5	4	2.4	4	3.4	4	3.1	4	3.6	4	3.6	4	3.6			33	23.9
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware *																						
PRIOR YR EQUIP	1	0.6																			1	0.6
FY 96 EQUIP			4	0.6																	4	0.6
FY 97 EQUIP					4	0.6															4	0.6
FY 98 EQUIP							4	0.8													4	0.8
FY 99 EQUIP									4	1.3											4	1.3
FY 00 EQUIP											4	1.6									4	1.6
FY 01 EQUIP													4	1.9							4	1.9
FY 02 EQUIP															4	2.0					4	2.0
FY 03 EQUIP																	4	2.0			4	2.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST	1	0.6	4	0.6	4	0.6	4	0.8	4	1.3	4	1.6	4	1.9	4	2.0	4	2.0	0	0.0	33	11.4
TOTAL PROCUREMENT COST	1.9		2.0		2.1		3.2		4.7		4.7		5.5		5.6		5.6		0.0		35.3	

METHOD OF IMPLEMENTATION EFA Install ADMINISTRATIVE LEAD 2 mo PROCUREMENT LEADTIME: 4 mo

CONTRACT DATES: FY 1996: 2/96 FY 1997: #### FY 1998: FY 1999:

DELIVERY DATES: FY 1996: 6/96 FY 1997: 3/97 FY 1998: FY 1999:

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99								
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT	1			4			4				4					4						
OUTPUT	1				2		1	1	1	2		1	1	2			1				1	2
INSTALLATION SCHEDULE:	PY	FY 00				FY 01				FY 02				FY 03				TOTAL				
INPUT		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		33			
OUTPUT		1		1	2	1		1	2	1		2	2		2		2	33				

* Quantities reflect areas of coverage (i.e., NCTAMS Med, Lant, EPAC, and WPAC) Costs vary by site requirements and configuration.

UNCLASSIFIED
CLASSIFICATION

MODIFICATION TITLE: Terrestrial Connectivity (D6002)

February 1997

MODELS OF SYSTEMS AFPEC Various Transmission Media

DESCRIPTION/JUSTIFICATION Enhances current and future C4I operational requirements by providing interoperability/redundant links to enhance survivability and reduce effects of destruction.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT N/A

FINANCIAL PLAN: (\$ in millions)

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		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	0.3			4	0.3	4	0.3	4	0.3	4	0.3	4	0.3	4	0.3	4	0.3			32	2.4
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware *																						
PRIOR YR EQUIP																						
FY 96 EQUIP			4	0.1																		4 0.1
FY 97 EQUIP					4	0.1																4 0.1
FY 98 EQUIP							4	0.1														4 0.1
FY 99 EQUIP									4	0.1												4 0.1
FY 00 EQUIP										4	0.1											4 0.1
FY 01 EQUIP											4	0.1										4 0.1
FY 02 EQUIP												4	0.1									4 0.1
FY 03 EQUIP													4	0.1								4 0.1
FY TC EQUIP														4	0.1							4 0.1
TOTAL INSTALLATION COST			4	0.1	4	0.1	4	0.1	4	0.1	4	0.1	4	0.1	4	0.1	4	0.1				32 0.8
TOTAL PROCUREMENT COST	0.3			0.1		0.4		0.4		0.4		0.4		0.4		0.4		0.4				3.2

METHOD OF IMPLEMENTATION EFA Install ADMINISTRATIVE LEAD 4 mo PROCUREMENT LEADTIME: 2 mo

CONTRACT DATES: FY 1996: 2/96 FY 1997: 1/97 FY 1998: 1/98 FY 1999: 1/99

DELIVERY DATES: FY 1996: 4/96 FY 1997: 3/97 FY 1998: 3/98 FY 1999: 3/99

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99								
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT				4				4				4				4						
OUTPUT					1			2	1	1	2		1	1	2			1			1	2
INSTALLATION SCHEDULE:	PY	FY 00				FY 01				FY 02				FY 03				TOTAL				
INPUT		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		4			
OUTPUT		1		1	2	1		1	2	1		2	2			2	2	2		2		32

* Equipment and installations are site unique. Costs vary by site requirements and configuration.

UNCLASSIFIED
CLASSIFICATION

MODIFICATION TITLE: Auto Digital Mux (D6002)

February 1997

MODELS OF SYSTEMS AFEC Various Transmission and Network Management Systems

DESCRIPTION/JUSTIFICATION Automated network management capability which is fully compatible with various switching technologies and in compliance with national and interna

DEVELOPMENT STATUS/MAJOR DEVELOPMENT N/A

FINANCIAL PLAN: (\$ in millions)

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		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	2.4	4	2.3	4	2.4	4	2.2	4	1.9	4	1.7	4	1.8	4	1.8				32	16.5
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware *																							
PRIOR YR EQUIP																							
FY 96 EQUIP			4	0.5																		4	0.5
FY 97 EQUIP					4	2.0																4	2.0
FY 98 EQUIP							4	2.0														4	2.0
FY 99 EQUIP									4	2.0												4	2.0
FY 00 EQUIP											4	1.3										4	1.3
FY 01 EQUIP													4	1.1								4	1.1
FY 02 EQUIP															4	1.2						4	1.2
FY 03 EQUIP																	4	1.2				4	1.2
FY TC EQUIP																						0	0.0
TOTAL INSTALLATION COST	0	0.0	4	0.5	4	2.0	4	2.0	4	2.0	4	1.3	4	1.1	4	1.2	4	1.2	0	0.0		32	11.3
TOTAL PROCUREMENT COST	0.0		2.9		4.3		4.4		4.2		3.2		2.8		3.0		3.0		0.0			27.8	

METHOD OF IMPLEMENTATION EFA Install ADMINISTRATIVE LEAD 4 mo PROCUREMENT LEADTIME: 2 mo

CONTRACT DATES: FY 1996: 2/96 FY 1997: 1/97 FY 1998: 1/98 FY 1999: 1/99

DELIVERY DATES: FY 1996: 4/96 FY 1997: 3/97 FY 1998: 3/98 FY 1999: 3/99

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99									
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
INPUT				4				4				4					4						
OUTPUT					2		1	1	2	1		1		2	1		1			2	1		
INSTALLATION SCHEDULE:	PY	FY 00				FY 01				FY 02				FY 03				TOTAL					
INPUT		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		4				32
OUTPUT		1		2	1	1		2	1	1		2	2		2				2	2		32	

* Qty = area of coverage stmt
Costs vary by site requirements and configuration.

**UNCLASSIFIED
CLASSIFICATION**

MODIFICATION TITLE: Comm Area Control/DISN Install (D6003/D6776)

February 1997

MODELS OF SYSTEMS AFFE Various

DESCRIPTION/JUSTIFICATION: Installs equipment procured by the DISA, or lead military departments on DISA's behalf, in support of joint initiatives that are voted on by the U.S. Military Communications Electronics Board (USMCEB) and/or the Joint Chiefs of Staff (JCS).

DEVELOPMENT STATUS/MAJOR DEVELOPEME N/A

FINANCIAL PLAN: (\$ in millions)

	FY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		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	4.9	1	0.9																	5	5.8
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware *																						
PRIOR YR EQUIP	4	3.8																			4	3.8
FY 96 EQUIP			1	4.1																	1	4.1
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 TC EQUIP																					0	0.0
TOTAL INSTALLATION CO	4	3.8	1	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	5	7.9
TOTAL PROCUREMENT	4	8.7	1	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	5	13.7

METHOD OF IMPLEMENTATION: EFA Install ADMINISTRATIVE LE/4 mo PROCUREMENT LEADTIME: 2 mo

CONTRACT DATES: FY 1996: 2/96 FY 1997: 1/97 FY 1998: 1/98 FY 1999: 1/99

DELIVERY DATES: FY 1996: 4/96 FY 1997: 3/97 FY 1998: 3/98 FY 1999: 3/99

INSTALLATION SCHEDULE:	FY	FY 96				FY 97				FY 98				FY 99			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	4			1													
OUTPUT	4				1												

INSTALLATION SCHEDULE:	FY	FY 00				FY 01				FY 02				FY 03				TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT																		5
OUTPUT																		5

* Qty = area of coverage stmt
Costs vary by site requirements and configuration.

**UNCLASSIFIED
CLASSIFICATION**

MODIFICATION TITLE: Miscellaneous Items (D6004)

February 1997

MODELS OF SYSTEMS AFFE Various

DESCRIPTION/JUSTIFICATIO Procures miscellaneous equipment necessary to enhance existing equipment or to sufficiently meet operational requirements at shore sites wor

DEVELOPMENT STATUS/MAJOR DEVELOPME N/A

FINANCIAL PLAN: (\$ in millions)

	FY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 02		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	0.7	4	0.5	4	0.2	4	0.5	4	0.4	4	0.4	4	0.5	4	0.5			32	3.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware *																						
PRIOR YR EQUIP																						
FY 96 EQUIP			4	0.3																		4 0.3
FY 97 EQUIP					4	0.3																4 0.3
FY 98 EQUIP							4	0.1														4 0.1
FY 99 EQUIP									4	0.2												4 0.2
FY 00 EQUIP										4	0.2											4 0.2
FY 01 EQUIP											4	0.2										4 0.2
FY 02 EQUIP												4	0.2									4 0.2
FY 03 EQUIP														4	0.2							4 0.2
FY TC EQUIP																						4 0.2
TOTAL INSTALLATION CO			4	0.3	4	0.3	4	0.1	4	0.2	4	0.2	4	0.2	4	0.2	4	0.2			32	1.7
TOTAL PROCUREMENT COS				1.0		0.8		0.3		0.7		0.6		0.6		0.7		0.7				5.4

METHOD OF IMPLEMENTATION: EFA Install ADMINISTRATIVE LE/1 mo PROCUREMENT LEADTIME: 1 mo

CONTRACT DATES: FY 1996: 2/96 FY 1997: 2/97 FY 1998: 2/98 FY 1999: 2/99

DELIVERY DATES: FY 1996: 3/96 FY 1997: 3/97 FY 1998: 3/98 FY 1999: 3/99

INSTALLATION SCHEDULE:	FY	FY 96				FY 97				FY 98				FY 99			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT		4				4				4				4			
OUTPUT				1	2	1		1	2	1		1	2	1		1	2

INSTALLATION SCHEDULE:	FY	FY 00				FY 01				FY 02				FY 03				TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT		4				4				4				4				32				
OUTPUT		1		1	2	1		2	2			2	2			2	2	2	2	2	2	32

* Qty = area of coverage stmt
Costs vary by site requirements and configuration.

UNCLASSIFIED
CLASSIFICATION

MODIFICATION TITLE: Base Level Information Infrastructure (D6005) February 1997
 MODELS OF SYSTEMS AFFE All ship and shore voice, video, and data requirements
 DESCRIPTION/JUSTIFICATIO Procures outside cable plant, base interconnect point, digital switch, and network management system equipment to provide voice, video, and c from the Defense Information System Network (DISN) Service Delivery Point (SDP) to the tenant command building entry point.

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

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		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	7.3	4	16.2	4	23.8	4	28.5	4	29.6	4	37.1	4	43.0			28	####
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware *																						
PRIOR YR EQUIP																						
FY 96 EQUIP																						
FY 97 EQUIP					4	8.0																4 8.0
FY 98 EQUIP							4	12.1														4 12.1
FY 99 EQUIP									4	19.9												4 19.9
FY 00 EQUIP											4	22.9										4 22.9
FY 01 EQUIP													4	21.9								4 21.9
FY 02 EQUIP															4	28.8						4 28.8
FY 03 EQUIP																	4	34.1				4 34.1
FY TC EQUIP																						
TOTAL INSTALLATION CO					4	8.0	4	12.1	4	19.9	4	22.9	4	21.9	4	28.8	4	34.1			28	####
TOTAL PROCUREMENT COS						15.3		28.3		43.7		51.4		51.5		65.9		77.1				####

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LE/3 mo PROCUREMNT LEADTIME: 2 mo

CONTRACT DATES: FY 1996: FY 1997: 1/97 FY 1998: 1/98 FY 1999: 1/99

DELIVERY DATES: FY 1996: FY 1997: 3/97 FY 1998: 3/98 FY 1999: 3/99

INSTALLATION SCHEDULE:	PY	FY 96				FY 97				FY 98				FY 99								
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT							2	2				2	2					2	2			
OUTPUT								2	2				2	2						2	2	

INSTALLATION SCHEDULE:	PY	FY 00				FY 01				FY 02				FY 03				TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT								2	2				2	2					2	2		28
OUTPUT									2	2				2	2					2	2	28

* Qty = area of coverage stmt
 Costs vary by site requirements and configuration.

BUDGET ITEM JUSTIFICATION SHEET					DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE Secure Voice Systems 33341000 52DP				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$6.7	\$15.1						
<p>PROGRAM COVERAGE: The Secure Voice Systems Program provides Navy ships, shore sites, aircraft, and Marine Corps with secure voice communication capabilities. Secure Voice Systems consist of the following equipments:</p> <ul style="list-style-type: none"> o EDRZ Boards: The COMSEC boards used in SINGGARS. o SINGGARS: SINGGARS COMSEC Devices will be procured in sets. A set consists of one KGV-10 and one EDRZ Board. A KGV-10 is a cryptographic component in a plug-in Electronic-Computer-Countermeasure Module (ECCM) in support of USMC SINGGARS. o INDICTOR: Embedded COMSEC Devices for MARCOR procurement of PRC-134, PSC-5, and PRC-117 radios. o UPGRADE: The ANDVT Upgrade Program is a reconfiguration of previously fielded equipment with multiple voice encoding algorithms at increased selectable data rates. <p>(This program transfers to Information Systems Security Program (ISSP), BLI 341500, in FY98.)</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENT: Navy procures this family of equipments in accordance with NSA direction and internally generated Navy implementation plans.</p> <p>EXPLANATION OF PROGRAM CHANGE: N/A</p> <p>INSTALLING AGENT: The STU-III/ANDVT Conference Bridge (SACB) will be installed by the In-Service Engineering Activity (ISEA).</p>								

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Secure Voice Systems 33341000			52DP		
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
DP001	EDRZ BOARDS	A	997	1,497						
DP003	SINCGARS	A	3606	3,357	2040	1,937				
DP013	STE	A	VAR		4716	11,319				
DP030	PRODUCTION SUPPORT	A	VAR	1,845	VAR	73				
DP040	INDICTOR	A	VAR		405	405				
DO041	UPGRADE	A	VAR		451	1,410				
	TOTAL PROGRAM			6,699		15,144				

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE Secure Voice Systems 33341000 52DP						
COST CODE	ELEMENT OF COST FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
DP001	EDRZ FY 96	ITT, Ft. Wayne, IN	FFP	US ARMY	Apr-96	Apr-98	997	\$1,502	YES	NO	
DP003	SINCGARS FY 96 FY 97	ITT, Ft. Wayne, IN UNKNOWN	FFP UNKNOWN	US ARMY US ARMY	Apr-96 Mar-97	Apr-98 Apr-98	3,606 2,040	\$931 \$950	YES YES	NO NO	
DP013	STE FY 97	UNKNOWN	IDIQ	DIRNSA	Jun-97	Jun-98	4,716	\$2,400	YES	NO	
DP040	INDICTOR FY 97	UNKNOWN	IDIQ	DIRNSA	Jan-97	Jan-98	405	\$1,000	YES	NO	
DP041	UPGRADE FY 97	UNKNOWN	UNKNOWN	SPAWAR	Mar-97	Apr-98	451	\$3,125	YES	NO	

UNCLASSIFIED
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REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE Secure Voice Systems 33341000 52DP					
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY % AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY) PROCUREMENT	BALANCE	PHASING RATIONALE	
DP001 EDRZ	2,947		1,425	1,522					Complete	
DP003 SINCGARS	27,357		14,611	10,706	2,040				Complete	
DP013 STE	70,000			244	4,716			65,040	Outyear Funded	
DP040 INDICTOR	1,520				405			1,115	Outyear Funded	
DP041 UPGRADE	26,000				451			25,549	Outyear Funded	
MEMO ENTERED										
ITEM #1 USMC	DP001 EDRZ 2,947		ITEM #2 USMC	DP003 SINCGARS 27,357		ITEM #3 USN	DP013 STE 70,000			
			COMSEC SETS EDRZ BOARDS KGV-10s							
	TOTAL I/O	2,947		TOTAL I/O	27,357		TOTAL I/O	70,000		
ITEM #4 USMC	DP040 INDICTOR 1,520		ITEM #5 USN	DP041 UPGRADE 25,000	USMC 1,000	ITEM #6				
	TOTAL I/O	1,520		TOTAL I/O	26,000		TOTAL I/O			

**UNCLASSIFIED
CLASSIFICATION**

BUDGET ITEM JUSTIFICATION SHEET					DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIP			Secure Data Systems 33341200 52DQ					
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$5.9	\$14.2						
<p>PROGRAM COVERAGE The Secure Data Systems Program provides Navy ships, shore sites, aircraft, and Marine Corps with secure record and data communication capabilities. Secure Data Systems consist of the following equipments:</p> <ul style="list-style-type: none"> o Modular Devices: Provide tactical high speed encryption of telemetry data on Navy and Air Force ranges; high speed encryption for missile telemetry; frequency hopping modules for tactical radio systems; and encryption for strategic communications receivers. o COMSEC Equipment Provides standard and special purpose cryptographic devices for high speed, strategic trunk Wide Area Network (WAN) interconnection encryption. o Network Security Systems Provide products to secure Navy 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 FORTEZZA/FORTEZZA+ card which provides writer to reader security for LANs, the Network Encryption System (NES) which provides in line encryption for classified data between Wide Area Networks (WANs), and Firewall components which provide protection for networks from unauthorized users. <p>(This program transfers to the Information Systems Security Program (ISSP), NARM 33341500, in FY98.)</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENT Navy procures this family of equipments in accordance with NSA direction, JCS mandated and Joint INFOSEC modernization requirements, and internally generated Navy implementation phasing plans.</p>								

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Secure Data Systems	33341200 52DQ
EXPLANATION OF PROGRAM CHANGE N/A		
INSTALLING AGENT: The Network Security System (NSS) equipments will be installed by the In-Service Engineering Activity (ISEA).		
MODIFICATION SUMMARY: Listed below are costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs.		
<u>Equipment</u>	<u>FY96</u>	<u>FY97</u>
NSS	4.3	8.5

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ITEM NO. PAGE NO.
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Exhibit P-40

UNCLASSIFIED
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UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Secure Data Systems 33341200			52DQ		
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
DQ019	MODULAR DEVICES	A			VAR	3,817				
DQ021	COMSEC EQPT	A			VAR	400				
DQ050	ANCILLARIES	A	VAR	480	VAR	692				
DQ055	PRODUCTION SUPPORT	A	VAR	1,087	VAR	867				
DQ061	KG-45 REPLACEMENT (KG-65)									
DQ070	NSS	A	VAR	1,681	VAR	5,349				
DQ666	TRAINING SUPPORT	A	VAR	20	VAR	20				
DQ776	INSTALLATIONS	A	VAR	2,622	VAR	3,060				
	TOTAL PROGRAM			5,890		14,205				

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Exhibit P-5
UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Secure Data Systems 33341200 52DQ							
COST CODE	ELEMENT OF COST FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE	
DQ061	KG-45 Rpl (KG-65) FY95	Group Tech, Tampa, FL	FFP	SPAWAR	Sep-95	Sep-97	150	\$5,180	YES	NO		
D. REMARKS												

MODIFICATION TITLE: Network Security Systems

MODELS OF SYSTEMS AFFECTED: NA

DESCRIPTION/JUSTIFICATION: Provide products to secure Navy information systems. Specific products include SMGs, FORTEZZA/FORTEZZA+ Cards, and NES.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		T C	Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
RDT&E																				
PROCUREMENT																				
Kit Quantity	VAR	4.4	VAR	1.7	VAR	5.3													VAR	11.4
Installation Kits																				
Installation Kit Nonrecurring																				
Equipment																				
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
(PY) Equip	VAR	0.3																	VAR	0.3
FY96 Equip			VAR	2.6															VAR	2.6
FY97 Equip					VAR	3.1													VAR	3.1
FY98 Equip																				
FY99 Equip																				
FY00 Equip																				
FY01 Equip																				
FY02 Equip																				
FY TC Equip																				
Total Installation Cost		0.3		2.6		3.1														6.0
Total Procurement Cost		4.7		4.3		8.4														17.4

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MOS

PROCUREMENT LEADTIME: 3 MOS

CONTRACT DATES:

FY 1996:

FY 1997:

FY 1998:

DELIVERY DATE:

FY 1996:

FY 1997:

FY 1998:

P Y		FY 96		FY 97		FY 98		FY 99
	1	2 3	4	1	2 3	4	1	2 3 4

INSTALLATION SCHEDULE:

INPUT

OUTPUT

	FY 00		FY 01		FY 02		Total
	1	2 3	4	1	2 3	4	Total

INSTALLATION SCHEDULE:

INPUT

OUTPUT

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CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE Secure Data Systems 33341200 52DQ					
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE
DQ061 KG-45 Replacement (KG-65)	550			550					Complete
MEMO ENTERED									
ITEM #1 DQ061 KG-45 Replacement (KG-65) USN 550			ITEM #2			ITEM #3			
TOTAL I/O _____			TOTAL I/O _____			TOTAL I/O _____			
ITEM #4			ITEM #5			ITEM #6			
TOTAL I/O _____			TOTAL I/O _____			TOTAL I/O _____			

BUDGET ITEM JUSTIFICATION SHEET						DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE Information Systems Security Program (33341500 52**				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)			\$31.7	\$56.4	\$78.7	\$69.9	\$71.8	\$73.5
<p>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. The following specific efforts will be funded under this program:</p> <p>Secure Voice : The Secure Voice Program procures equipments to secure voice communications. Equipments to be procured in this line in FY 98 and FY 99 include Secure Terminal Equipment (STE), Advanced Narrowband Digital Voice Terminal (ANDVT) upgrades, AIRTERM (KY-100), ancillary devices for these equipments and associated production 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 replaces shipboard TA-970 (SA-2112). 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. Procurement of ancillary devices will include cables, STE gateways and COMSEC custodian devices. In FY 98 SINGARS COMSEC (RT-1523C) will be procured for the Marine Corps.</p> <p>Secure Data: The Secure Data program procures equipment to secure record and data communications.. Equipments to be procured in this line in FY 98 and FY 99 include COMSEC equipment, Modular Devices, Network Security Systems, ancillary devices and associated production support efforts. The COMSEC equipment will procure standard and special purpose cryptographic devices for high speed, strategic trunk Wide Area Network (WAN) interconnection encryption. Modular Devices will procure hardware to provide tactical high speed encryption of telemetry data on Navy and Air Force ranges; high speed encryption for missile telemetry; frequency hopping modules for tactical radio systems; and encryption for strategic communications receivers. The Network Security Systems 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 FORTEZZA/FORTEZZA+ card which provides writer to reader security for LANs, the Network Encryption System (NES) which</p>								

P-1 SHOPPING LIST
ITEM NO. PAGE NO.
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Exhibit P-40

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 1997																												
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE																												
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT		Information Systems Security Program (3341500 52**																												
<p>provides transmission encryption for packetized data among Wide Area Networks (WANs), and Firewall components which provide protection for networks from unauthorized users. Various ancillary devices will also be procured in this line to integrate NSS equipment systems.</p> <p>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 program to meet multiple objectives, which include 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 FY 98 and FY 99 procurements include the Local Management Device (LMD)/ Local COMSEC Management System (LCMS) upgrade, Benign Key, Single Point Key, associated ancillaries and production support. The LMD is a commercial off the shelf computer that runs Local COMSEC Management System (LCMS) software which controls the Key Processor (KP)s, and provides the COMSEC manager with improved security and enhanced management capabilities. The LCMS software upgrades ensure compatibility with revised NSA EKMS standards for interoperability with Tier 1 and the central facility. The Benign Key loads the cryptographic key into an end equipment in such a way that the unencrypted key is never available to personnel, eliminating the humint threat. The Key Processor Equipment will perform cryptographic key management functions including encryption, decryption, public key encryption and cryptographic signature operations.</p> <p>This program consolidates OPN P-1 Line Items Secure Voice (BLI 33341000), Secure Data (BLI 33341200) and Key Management Systems (BLI 33348600).</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:The procurement profile has been phased in accordance with internally generated 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>MODIFICATION SUMMARY: Listed below are costs (i.e. hardware/installation) for equipment being procured in this line item that have associated installation costs budgeted:</p> <table border="1"> <thead> <tr> <th><u>Equipment</u></th> <th><u>FY96</u></th> <th><u>FY97</u></th> <th><u>FY98</u></th> <th><u>FY99</u></th> <th><u>FY00</u></th> <th><u>FY01</u></th> <th><u>FY02</u></th> <th><u>FY03</u></th> </tr> </thead> <tbody> <tr> <td>KPEs</td> <td></td> <td></td> <td>0.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>NSS</td> <td></td> <td></td> <td>13.5</td> <td>20</td> <td>22.1</td> <td>20.7</td> <td>23.1</td> <td>21.7</td> </tr> </tbody> </table>				<u>Equipment</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	KPEs			0.5						NSS			13.5	20	22.1	20.7	23.1	21.7
<u>Equipment</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>																						
KPEs			0.5																											
NSS			13.5	20	22.1	20.7	23.1	21.7																						

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Information Systems Security (ISSP) 33341500 52**					
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
**100	Secure Voice	A					VAR	9,197	VAR	22,368
**200	Secure Data	A					VAR	14,990	VAR	22,246
**300	Key Management	A					VAR	5,000	VAR	6,750
**666	Initial Training	A					VAR	90	VAR	90
**776	Installation (Shore)	A					VAR	2,390	VAR	4,955
	TOTAL PROGRAM			0		0		31,667		56,409

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE							
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Information Systems Security (ISSP) 33341500 52**							
COST CODE	ELEMENT OF COST FISCAL YEAR		CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
**100	SINCGARS	FY 98	UNKNOWN	UNKNOWN	US ARMY	Mar-98	Mar-99	1,827	\$963	YES	NO	
**100	STE	FY98 FY99	UNKNOWN UNKNOWN	IDIQ IDIQ	DIRNSA DIRNSA	Jan-98 Jan-99	Jan-00 Jan-01	650 4,673	\$3,541 \$3,445	YES YES	NO NO	
**100	INDICTOR	FY98	UNKNOWN	IDIQ	DIRNSA	Jan-98	Jan-99	200	\$1,000	YES	NO	
**100	UPGRADE	FY 98 FY 99	UNKNOWN UNKNOWN	FFP FFP	DIRNSA DIRNSA	Mar-98 Mar-99	Mar-99 Mar-00	303 823	\$7,000 \$5,103	YES YES	NO NO	
**200	COMSEC EQPT	FY98 FY99	UNKNOWN UNKNOWN	UNKNOWN UNKNOWN	DIRNSA DIRNSA	Jan-98 Jan-99	Jan-99 Jan-00	50 72	\$17,800 \$20,861	YES YES	NO NO	
**300	BENIGN KEY	FY99	UNKNOWN	FFP	DIRNSA	Mar-99	Mar-00	2,000	\$1,000	YES	NO	
**300	SPK	FY 98 FY99	UNKNOWN UNKNOWN	UNKNOWN UNKNOWN	NISE-EAST NISE-EAST	Dec-97 Dec-98	Aug-00 Aug-01	111 128	\$18,018 \$17,969	YES YES	NO NO	
**300	LMD	FY 98 FY 99	UNKNOWN UNKNOWN	UNKNOWN UNKNOWN	NISE-EAST NISE-EAST	Mar-98 Mar-99	Mar-99 Mar-00	200 100	\$10,000 \$10,000	YES YES	NO NO	
D. REMARKS												

MODIFICATION TITLE: KPE
 MODELS OF SYSTEMS AFFECTED: None
 DESCRIPTION/JUSTIFICATION: Key Processor Equipment (KPE) (KOK-22) generates electronic cryptographic variables
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
 FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		T C		Total		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment	593	10.3																			10.3
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Equip																					0 0.0
FY96 Equip							593	0.5													593 0.5
FY97 Equip																					
FY98 Equip																					
FY99 Equip																					
FY00 Equip																					
FY01 Equip																					
FY02 Equip																					
FY TC Equip																					
Total Installation Cost		0.0		0.0		0 0.0	593 0.5		0 0.0												593 0.5
Total Procurement Cost		10.3		0.0		0.0	0.5		0.0												(10.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 mos. PROCUREMENT LEADTIME: 27 mos.

CONTRACT DATES: FY 1996: 12/95 FY 1997: N/A FY 1998: N/A

DELIVERY DATE: FY 1996: 3/98 FY 1997: N/A FY 1998: N/A

INSTALLATION SCHEDULE:	P Y	FY 96				FY 97				FY 98				FY 99			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

INPUT 148 148 148 149

OUTPUT 148 148 148 149

INSTALLATION SCHEDULE:	P Y	FY 00				FY 01				FY 02				Total
		1	2	3	4	1	2	3	4	1	2	3	4	

INPUT 593

OUTPUT 593

FY98 funds will be used for shore installations.

UNCLASSIFIED
CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES								A. DATE February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE Information Systems Security (ISSP) 3341500 52**							
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE		
**100 SINGGARS	29,184		14,611	10,706	2,040	1,827			Complete		
**100 STE	91,215			244	4,716	650	4,673	80,932	Outyear Funded		
**100 INDICTOR	1,520				405	200		915	Outyear Funded		
**100 UPGRADE	26,000				451	303	823	24,423	Outyear Funded		
**200 COMSEC EQUIPMENT	183					50	72	61	Outyear Funded		
**300 BENIGN KEY	30,000			1,056	8,430		2,000	18,514	Outyear Funded		
MEMO ENTERED											
ITEM #1 USMC	**100 SINGGARS 29,184	ITEM #2 USN		**100 STE 91,215	ITEM #3 USMC		**100 INDICTOR 1,520				
TOTAL I/O		TOTAL I/O		TOTAL I/O		TOTAL I/O					
29,184		91,215		1,520							
ITEM #4 USN	**100 UPGRADE 25,000	USMC	1,000	ITEM #5 USN	**200 COMSEC EQPT 137	USMC	46	ITEM #6 USN	**300 BENIGN KEY 25,000	USMC	5,000
TOTAL I/O		TOTAL I/O		TOTAL I/O		TOTAL I/O					
26,000		183		30,000							

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BUDGET ITEM JUSTIFICATION SHEET					DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMEN				Key Management Systems 33348600 521X				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	11.7	12.3						
<p><u>NARRATIVE DESCRIPTION/JUSTIFICATION</u> The term "Key Management" describes a family of equipments which are designed to replace the current system of physically distributing hard copy (paper) COMSEC keying material. The current system is manpower intensive, slow, and provides only limited protection against theft or compromise. The Key Management Program will provide an automated computer system that will generate, manage, protect, and electronically distribute COMSEC keying material of all classifications. Equipments for procurement in this program are:</p> <ul style="list-style-type: none"> o The KEY PROCESSOR EQUIPMENT(KPE) (KOK-22) will perform cryptographic key management functions including encryption, decryption, public key encryption and cryptographic signature operations. o The BENIGN KEY loads cryptographic key into an end equipment in such a way that the unencrypted key is never available to personnel. o SINGLE POINT KEY (SPK) permits remote keying of fixed plant crypto from a PC. Eliminates manual (hand) fill by operator. <p>(This program transfers to the Information Systems Security Program (ISSP), BLI 341500, in FY98.)</p> <p><u>JUSTIFICATION OF BUDGET YEAR REQUIREMENT</u> The procurement profile has been phased in accordance with internally generated Navy Marine Corps, and Coast Guard implementation plans and availability of NSA procured key management items.</p> <p><u>EXPLANATION OF PROGRAM CHANGE</u> N/A</p> <p><u>INSTALLING AGENT:</u> The Key Processor Equipment (KPE) will be installed by the In-Service Engineering Activity (ISEA). Funding is required to perform installations in advance of equipment delivery. This is a common practice for systems/equipment when attempting to meet a planned fleet wire cutover date. The installation of all mounts, wiring, racks, patch panels and Intermediate Distribution Frames (IDFs) can be performed in advance so that the site is ready for</p>								

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BUDGET ITEM JUSTIFICATION SHEET (Continuation)**DATE**

February 1997

APPROPRIATION/BUDGET ACTIVITY**P-1 ITEM NOMENCLATURE**

OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

Key Management Systems 33348600 521X

System Operation Verification Testing (SOVT) and cutover in a very short timeframe to shorten downtime at the site during transition from old to new equipments. This procedure was used in the KW-46/KG-84 and ANDVT system cutovers. It is accepted fleet-wide by users as the only way to perform cutovers without taking down the communication path.

Note: Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:

<u>Equipment</u>	<u>FY96</u>	<u>FY97</u>
KPEs	9.3	1.4

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UNCLASSIFIED
CLASSIFICATION

UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Key Management Systems 33348600			521X		
COST CODE	ELEMENT OF COST	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
1X013	KOK-22 (KPE)	A	634	8,837						
1X015	PRODUCTION SUPPORT	A	VAR	540	VAR	509				
1X016	ANCILLARIES	A	VAR	723	VAR	1,180				
1X018	BENIGN KEY	A	1056	1,056	8430	8,430				
1X019	SPK	A			86	728				
1X666	TRAINING SUPPORT	A	VAR	150	VAR	20				
1X777	INSTALLATIONS	A	VAR	438	VAR	1,431				
	TOTAL PROGRAM			11,744		12,298				

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UNCLASSIFIED
CLASSIFICATION

WEAPON SYSTEM PROCUREMENT HISTORY AND PLANNING										A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE						
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					Key Management Systems 33348600 521X						
COST CODE	ELEMENT OF COST FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQUIRED	IF YES, WHEN AVAILABLE
1X013	KOK-22 (KPE) FY 96	Lockheed Martin, Camden NJ	OPTION	DIRNSA	Apr-96	Mar-98	634	\$13,938	YES	NO	
1X018	BENIGN KEY FY96 FY97	Lockheed Martin, Camden NJ UNKNOWN	COMP/FFP COMP/FFP	US ARMY DIRNSA	Sep-96 Mar-97	Jan-98 Jan-99	1,056 8,430	\$1,000 \$1,000	YES YES	NO NO	
1X019	SPK FY 97 \	UNKNOWN	UNKNOWN	SPAWAR	Mar-97	Aug-98	86	\$8,417	YES	NO	
D. REMARKS											

MODIFICATION TITLE: KPE
 MODELS OF SYSTEMS AFFECTED: None
 DESCRIPTION/JUSTIFICATION: Key Processor Equipment (KPE) (KOK-22) generates electronic cryptographic variables
 DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
 FINANCIAL PLAN: (\$ in millions)

	P Y		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		T C		Tot al		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kit Nonrecurring																					
Equipment	1,045	19.5	634	8.8																1,679	28.3
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
(PY) Equip				0.4	346	1.4														346	1.8
FY95 Equip																					
FY96 Equip																					
FY97 Equip																					
FY98 Equip																					
FY99 Equip																					
FY00 Equip																					
FY01 Equip																					
FY TC Equip																					
Total Installation Cost		0.0		0.4	346	1.4	0	0.0	0	0.0										346	1.8
Total Procurement Cost		19.5		9.2		1.4		0.0		0.0										0	30.1

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 MOS. PROCUREMENT LEADTIME: 27 MOS.

CONTRACT DATES:

FY 1996: 12/95 FY 1997: N/A FY 1998: N/A

DELIVERY DATE:

FY 1996: 3/98 FY 1997: N/A FY 1998: N/A

INSTALLATION SCHEDULE:

PY	FY 96				FY 97				FY 98				FY 99			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT					86	86	87	87	148	148	148	149				
OUTPUT					86	86	87	87	148	148	148	149				

INSTALLATION SCHEDULE:

PY	FY 00				FY 01				FY 02				Total
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT													939
OUTPUT													939

FY96 funds will be used for long lead items (digital patch panels, cables and connectors, and shipboard foundations).
 Difference in quantity being installed and I/O is quantities being procured for USMC, USCG and pipeline equipments.

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CLASSIFICATION

REQUIREMENTS STUDY - NOT INSTALLED NONCONSUMABLES							A. DATE February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				C. P-1 ITEM NOMENCLATURE Key Management Systems 33348600 521X						
ITEM	TOTAL I/O REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 AND PRIOR FUNDS	PLANNED BUDGET YEAR (FY97) PROCUREMENT	PLANNED BUDGET YEAR (FY98) PROCUREMENT	PLANNED BUDGET YEAR (FY) PROCUREMENT	BALANCE	PHASING RATIONALE	
1X013 KOK-22 (KPE)	1,679			1,679					Complete	
1X018 BENIGN KEY	30,000			1,056	8,430			20,514	Outyear Funded	
1X019 SPK	950				86			864	Outyear Funded	
MEMO ENTERED										
ITEM #1 1X013 KOK-22 (KPE) USN 1,299 USMC 240 USCG 140	ITEM #2 1X018 BENIGN KEY USN 25,000 USMC 5,000			ITEM #3 1X019 SPK USN 570 USMC 240 USCG 140						
TOTAL I/O 1,679	TOTAL I/O 30,000			TOTAL I/O 950						
ITEM #4	ITEM #5			ITEM #6						
TOTAL I/O	TOTAL I/O			TOTAL I/O						

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CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET					DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE Cryptologic Equipment 521V 350100				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (in millions)	\$5.8	\$1.3	\$7.1	\$22.8	\$20.3	\$20.0	\$20.8	\$21.4
<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 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. Ancillary equipment such as special maintenance tools and installation gear is also procured. 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. FY 95 and FY 96 funds procured the upgrade of AN/SSQ-80A(V) systems to Advanced Cryptologic Carry-On Exploitation (ACCES) with VXI-based Digital Signal Processing (DSP) capability and T-RDF systems with associated installation. FY 97- FY 99 will continue to procure ACCES and T-RDF systems with associated pregroup installations (pregroup installations are required on 27 CG-47 class ships and 21 DDG 51 class ships in order to utilize the T-RDF system as carry-on hardware during critical missions).</p> <p>CRYPTOLOGIC TRAINING EQUIPMENT: This program provides Computer Based Classroom Training systems interconnected by a system of Local Area Networks (LAN) and 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 to support both core cryptologic skills training and systems familiarization training. FY 96-99 funds will continue to modernize the NTTC Cryptologic Training Department infrastructure, CT "A" School classrooms and courseware equipment with state-of-the-art multimedia CBT hardware capable of supporting both national and Navy unique Cryptologic training worldwide.</p> <p>TRAINING TECHNOLOGY PROGRAM: 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 (FITC) 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 work-up training</p>								

P-1 SHOPPING LIST

Exhibit P-40

ITEM NO. **PAGE NO.**
121 1

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE																												
		February 1997																												
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE																													
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Cryptologic Equipment 521V 350100																													
<p>suites, high-quality video production suites and the use of advanced modeling and simulation techniques. Distribution via the Automated Electronic Classroom, feeder video facilities at each schoolhouse, video teletraining, and mobile training teams will necessitate infrastructure improvements at the schoolhouses. Program funding in FY 98 - FY 99 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 nearterm training requirements and recommend the equipment/system configuration.</p> <p>SIGNALS ANALYSIS LABORATORY: 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/processing centers for complex communications and electronic modulations. SALs require advanced signals processing equipment to keep pace with information technology explosion 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. 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 emitters. 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/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. FY 99 funding will be used for the purchase of RIPSAW II analysis workstations for the SALs (NAVSECGRUACTS Yokosuka, JA, Rota, SP, Whidley Island, WA) and a Configuration Control Model (CCM) located at COMNAVSECGRU, Ft. Meade, MD.</p> <p>INSTALLATION NON FMP: Installation of Cryptologic Training Equipment is done by SPAWARSSYSCOM Engineering Field Activities or by system integration contractors.</p> <p>INSTALLATION FMP: Installation of Transportable-Radio Direction Finding (T-RDF) prerooms are done by SPAWARSSYSCOM Engineering Field Activities or by system integration contractors. Fleet Electronic Support Personnel install the T-RDF systems.</p> <p style="text-align: center;">MODIFICATION SUMMARY</p> <p>Listed below are the costs (i.e. hardware and installation) for equipment being procured in this line item that have associated installation costs budgeted:</p> <table border="1"> <thead> <tr> <th>EQUIPMENT</th> <th>FY96</th> <th>FY97</th> <th>FY98</th> <th>FY99</th> <th>FY00</th> <th>FY01</th> <th>FY02</th> <th>FY03</th> </tr> </thead> <tbody> <tr> <td>Cryptologic Training Equipment</td> <td>2.9</td> <td>0.1</td> <td>1.0</td> <td>6.5</td> <td>5.2</td> <td>4.4</td> <td>4.5</td> <td>4.6</td> </tr> <tr> <td>Cryptologic Carry-On Equipment</td> <td>1.1</td> <td>0.7</td> <td>1.6</td> <td>4.1</td> <td>2.0</td> <td>2.0</td> <td>1.8</td> <td>0.0</td> </tr> </tbody> </table>				EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cryptologic Training Equipment	2.9	0.1	1.0	6.5	5.2	4.4	4.5	4.6	Cryptologic Carry-On Equipment	1.1	0.7	1.6	4.1	2.0	2.0	1.8	0.0
EQUIPMENT	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03																						
Cryptologic Training Equipment	2.9	0.1	1.0	6.5	5.2	4.4	4.5	4.6																						
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**UNCLASSIFIED
CLASSIFICATION**

WEAPON SYSTEM COST ANALYSIS							DATE: February 1997			
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					C. P-1 ITEM NOMENCLATURE Cryptologic Equipment 521V 350100					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
1V005	PRODUCTION SUPPORT	A		511		22		315		563
1V039	CRYPTOLOGIC CARRY-ON EQUIPMENT	A	VAR	2,162	VAR	1,079	VAR	2,541	VAR	11,311
1V040	CRYPTOLOGIC TRAINING EQUIPMENT	A	VAR	2,582	VAR	88	VAR	944	VAR	5,824
1V041	TRAINING TECHNOLOGY EQUIPMENT	A					VAR	2,625	VAR	2,911
1V042	SIGNALS ANALYSIS LAB	A					VAR		VAR	800
1V776	INSTALLATION NON-FMP	A		365		19		105		647
1V777	INSTALLATION FMP	A		140		72		592		760
	TOTAL PROGRAM			5,760		1,280		7,122		22,816

MODIFICATION TITLE: Cryptologic Carry-On Equipment (521V) (1V777)
 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 and its detachments as well as NAVSECGRU Cryptologic Readiness Groups worldwide to support both cryptologic skills and tactical systems familiarization training.

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

	PY		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment			VAR	1.0	VAR	0.6	VAR	1.0	VAR	3.4	VAR	1.2	VAR	1.2	VAR	1.2					VAR	9.6
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*			2	0.1	1	0.1	8	0.6	10	0.8	10	0.8	10	0.8	7	0.6					48	3.8
PRIOR YR EQUIP																						
FY 96 EQUIP			2	0.1																		2 0.1
FY 97 EQUIP					1	0.1																1 0.1
FY 98 EQUIP							8	0.6														8 0.6
FY 99 EQUIP									10	0.8												10 0.8
FY 00 EQUIP											10	0.8										10 0.8
FY 01 EQUIP													10	0.8								10 0.8
FY 02 EQUIP															7	0.6						7 0.6
FY 03 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST*				0.1		0.1		0.6		0.8		0.8		0.8		0.6						3.8
TOTAL PROCUREMENT COST				1.1		0.7		1.6		4.2		2.0		2.0		1.8						13.4

ADMINISTRATIVE LEADTIME: 2 MONTHS PROCUREMENT LEADTIME: 3 MONTHS

CONTRACT DATES: FY 1996: Various FY 1997: Various FY 1998: Various FY 1999: Various

DELIVERY DATES: FY 1996: Various FY 1997: Various FY 1998: Various FY 1999: Various

	PY	FY 96				FY 97				FY 98				FY 99				TOTAL				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT					2				1			2	2	2	2			2	3	3	2	
OUTPUT					2				1			2	2	2	2			2	3	3	2	
		FY 00				FY 01				FY 02				FY 03								
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
INPUT		2	3	3	2	2	3	3	2	2	2	2	1									48
OUTPUT		2	3	3	2	2	3	3	2	2	2	2	1									48

* Quantities Shown Reflect Ships

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY (OPN) BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT					P-1 ITEM NOMENCLATURE ELECTRONIC ENGINEERED MAINTENANCE BLI 3617			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$0.1	* \$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

*

This line procures major assemblies to support the Continuous Maintenance Concept for surface ships,

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